



S m u l t r o n

A COMPLETE WIP GUIDE TO MML: MAPLESTORY 2 EDITION

How to go from being the audience to a composer

The reason for this guide is simple. While there are a lot of guides on MML coding out there - both good and less good ones, I feel like none of them really dug deep into the system and just touch the top of the iceberg. This guide will try to cover -everything- that has to do with music inside MapleStory 2.

This guide will focus on how MML is done in MapleStory 2.

While many parts might be applicable in other games, I won't take any responsibility for certain features not working and your song ending up sounding bad in another game.

This guide is written so that anyone - regardless of prior knowledge - can get into performing and coding.

This means a lot will be explained in a **really** simple way as this from my experience from teaching mml works the best. It is written so that hopefully - even my imaginary dog can understand it. Want a less pedagogic rundown? Don't hesitate to contact me and we'll get you sorted!

To help you filter what parts you need I have included color codes to determine the level of the things explained, my goal is to help players from basic up to advanced as long as they are willing to learn!

All text unless marked with the headings below is targeted to all readers.

Intermediate

You will learn basic MML and how to use 3rd party programs to convert from MIDI to MML.

Advanced

You will learn how to optimize codes to be shorter or even write your own code from scratch.

What we will learn from this guide:

- Basic introduction to the Music and MML feature
- Respect for other performers and players
- How to get started in MapleStory 2
- What instruments there are and how to obtain them
- How to perform solo and in groups
- How to create music scores
- How to get soundfonts to work in MapleStory 2
- Basic to Advanced Knowledge about MML

To be added:

- 3rd Party programs used to help along the way (3MLE)
- Knowledge on how to clean up codes made for other games to work in MapleStory 2
- Basic knowledge about MIDI, and how to convert MIDI to MML
- Knowledge on how to code for duets and group performances

CONTACT

Please contact me on Discord (Kavaju#4923)

Any suggestions, tips, questions and help to correct grammar and spelling is welcome! Or just say hi!

Also consider following and subscribing to me over at: [Youtube](#) & [Twitter](#)

SPECIAL THANKS

Big thanks to Neet, Fritte, Cronion and Zanktus for bearing with my madness while creating this.

A special shoutout and a bucket full of love for saintoneLIVE for always showing this project so much love and spreading it to his viewers, make you sure you give him a follow over at [Twitch!](#)

And you, thank YOU for reading this guide. You are awesome!

CHANGELOG

2018-07-19 Added missing trophies for Recorder and Celesta. Also added space for Queenstown and MS2MML

2018-07-20 Clarified that this is still a work in progress and promised parts are still missing... Added Changelog!

2018-07-20 Edited/added text to Queenstown, MS2MML, Reopening Composed Scores and Anti-MML-Piracy

2018-07-21 Cleaned up titles and headers so more subtitles show up in the outline. Added section for Tempo

2018-07-22 Added Volume and removed some info under "getting started" that was no longer relevant.

2018-07-26 Added section for Sustain as well as cosmetic updates here and there

2018-07-27 Added section for crafting

2018-08-19 I'm still alive, updated info to point to my new guild Smultron

2018-09-15 Added section for Chords and Tracks

2018-09-16 Rewrote the Soundfont section a bit and also added a subtitle to Chords and Tracks

2018-10-09 Started on the section 3MLE: INTRODUCTION and updated instrument list

2018-10-27 Made corrections, added Style Crate instruments and finished the 3MLE introduction section

WHAT IS THIS MML THING AND CAN I EAT IT?

MML is what makes you able to play music on a wide variety of instruments in games like Mabinogi, MapleStory2 and Archeage to name a few. The music is player made and that roughly translates to - you can make any music you want. MML is often the most versatile and broad feature in these games thanks to this, you are the one in control. The games just give us a few rules and how you play within those rules are up to you.

MML stands for Micro Music Language and is just that - a language that tells your computer when and how to play notes. I will explain how this is done in detail further down in this guide but for now think of it as a giant wall of text that we make the computer think is a music . I guess I could explain the history of MML as well, but I doubt it will make you a better coder to know it was made by a Japanese person some long time ago. I would however recommend you to do a quick search on it with your favourite search engine if you are interested to know more about its history, the guide will still be here when you are back and packed with knowledge.

Note: Can not be eaten.

THE DIFFERENT SIDES OF PERFORMERS (AND BASIC RESPECT TO OTHERS)

While many might think these few points are rather obvious - I'd like to bring these up.

Not everyone who perform a song made it themselves
Not everyone who perform a song found it on the internet

Some people spend hours on making their on unique MML codes to play - **we do not mock these people**

Some people spend 15 minutes on a MIDI conversion - **we do not mock these people**

Some people simply find a ready to go code and play it in game - **we do not mock these people**

Some people simply find a code from another game that doesn't fit well with this games MML rules making it sound like an abomination... **we link them this guide on how to fix it.**

What I'm trying to say is that - apart from the griefers who play unnatural high notes to destroy our ears - we all do this because we love the song or this feature. Not everyone can invest the time needed to create a good code and grab one already made, some people will just convert a quick MIDI to MML and some people spend hours upon hours to make sure the code sounds exactly like they want it to. Just as it's not ok to mock people doing "less work" than you - It's also not ok to mock people for doing harder work than you deem necessary. I'll explain the pros and cons with handwriting MML and doing the conversions later on in this guide!

DON'T BE AN ELITIST NO MATTER YOUR METHOD!

I also see a lack of respect for people already performing, let them finish their song before you start your own. If for some reason you can't hear the sound - make it your general rule that if you see someone on their instrument with a yellow bubble with notes in... wait or find a spot further away.

What we also want to spare people from is the autoplay for 8h while grinding up our musical levels and trophies, do these at your own house, **NOT** in the middle of the town.

DON'T BE AFRAID TO MUTE PEOPLE

Let's be real, not everyone who performs music in MapleStory 2 will fit your delicate ears.

There will be griefers.

There will be people with horrible scores.

There will be people using "Auto-Perform" for 8h straight in Tria

The normal human ear will grow tired of this eventually and simply mute all instruments, but for us who want to hear it - just not from specific individuals I present to you the best gift sent by the devs:

By blocking someone you also mute their instruments



Normally when a player is performing you will see a yellow icon with a note bar in it. This means you will hear that player's music within close vicinity - unless you have muted all instruments from the options.

When you block a player, they will also be muted and the icon changes to a muted speaker icon.

This lets you know the player is still performing and you can do everyone a favour and scoot aside a bit before starting your own - by far superior music

No NEETs were damaged in the production of this guide. Not much at least.

♥♥♥ CONGRATULATIONS ♥♥♥

You are our 1000000 visitor
Get a free Practice Digital Piano TODAY

JUSTCLICKTHISLINKRIGH THEREANDGIVEUSYOURCREDITCARDANDFIRSTBORNCHILDNOSTRINGSATTACHEDPROMISEWELLMAYBEONEORSEVENWAITHOWMANYDOESAVIOLINHAVE??

GETTING STARTED

Jokes aside...

The game will be giving us some free stuff to help us along the way.

Level 22:

At this level we will be getting a "Maple Guide" quest. These quest teach you about the different things to do in the game. Upon accepting the quest you will be gifted a free Practice Digital Piano and a premade music score. This quest will show you how to summon your instruments and how to play scores.

Level 25:

At around level 25 (depending on your mad leveling skills) you will be given a free Practice Timpani from a main story quest.

Do I need to be rich?

No.. Not really. While it might be hard for you to swim in mesos at level 20, just keep doing your main story quests and buying empty scores will no longer feel like a blow to your wallet.

I won't turn this into a "How to earn meso guide" but a few world bosses and dungeons here and there will be enough to support your musical adventures.

That being said - most instruments will cost meret. It will be up to you to decide if it's worth to spend irl money on these. There are ways to earn meret in game as well, for example selling designs to other players - however this is no something this guide will touch upon either.

MEET STEVEN...STEFAN

Should you wish to purchase basic instruments, achievement awards and empty music paper, **Stefan** is your go to guy! Stefan can be found in **Tria**, from the entrance run straight into the city and then turn to the right when you see stairs leading down. On the minimap you want to look for **Henry's General Hospital** and **Troy Inn**.



Complete list of Stefan's wares for sale:

Instruments:

Practice Digital Piano	70000 Mesos
Practice Acoustic Guitar	70000 Mesos
Practice Clarinet	250000 Mesos
Practice Grand Harp	250000 Mesos
Practice Timpani	250000 Mesos

Music Score:

Blank Music Score (10 Performances)	20000 Mesos	
Blank Music Score (20 Performances)	40000 Mesos	
Blank Intermediate Music Score (10 Performances)	50000 Mesos	
Blank Intermediate Music Score (20 Performances)	100000 Mesos	
Blank Advanced Music Score (10 Performances)	125000 Mesos	Unlocks at Maestro
Blank Advanced Music Score (20 Performances)	250000 Mesos	Unlocks at Maestro
MapleStory 2 OST #1	6700 Mesos	
MapleStory 2 OST #2	8200 Mesos	
MapleStory 2 OST #3 (Duet) (Piano or Guitar)	9900 Mesos	
MapleStory 2 OST #4	7700 Mesos	
MapleStory OST #1	8600 Mesos	
MapleStory OST #2	6000 Mesos	
MapleStory OST #3 (Duet) (Piano or Guitar)	6100 Mesos	
Bach - Invention (Duet) (Clarinet or Harp)	3700 Mesos	
Debussy - Clair de Lune	13300 Mesos	

Outfits:

Musician Wig	4000000 Mesos	Unlocks at Intermediate
Starry Guitar Case	4000000 Mesos	Unlocks at Expert

CRAFTING

CRAFTING SHEETS

If you have leveled up your handicraft to rank 3 you can craft empty music scores. Currently you can only craft the 5k character scores with 20 uses.

Item	Material	Material	Cost
Blank Intermediate Music Score (20)	Pigskin x80	Opal x160	10000 Mesos

Getting the materials

Pig Tails can be gathered at Rank 3 Ranching. You get these by placing a Pig Pen in your home. Pig Tails can be turned into **Pigskins** at Handicraft Rank 3.

Opals can be gathered from Tin Veins at Mining Rank 2, no further processing will be needed. Tin veins can be found in Queenstown.

CRAFTING FOOD BUFFS

You can craft various foods to boost your experience gain while performing.

Item

Pine Mushroom Stew (+50%, 120 Min)

Cooking Rank 4

X8 Prepped Pine Mushroom
X8 Rice Flour
X32 White Bloom Dust

Medicinal Mushroom Tea (+100% 60 Min)

Cooking Rank 8

X9 Prepped Medicinal Mushroom
X9 Prepped Orange
X9 Prepped Pumpkin
X72 Red Bloom Dust

Agaric Mushroom Kebab (+200% 30 Min)

Cooking Rank 12

X10 Prepped Agaric Mushroom
X10 Prepped Tomato
X10 Prepped Green Onion
X10 Prepped Apple
X150 Green Blossom Dust

Cooking food buffs involve more raw materials and steps than for crafting the empty scores, thus I will not provide the details for these. If you are interested in making these yourself I would suggest you to look in the Life Skill guide in game or look up a proper cooking guide.

COMPLETE INSTRUMENT LIST

Instrument	How	Note	GM Code (MIDI)
Practice Digital Piano	Stefan, Lvl 22 Guide Quest	70000 Mesos	01 Grand Piano
Practice Acoustic Guitar	Stefan	70000 Mesos	25 Nylon String Guitar
Practice Clarinet	Stefan	250000 Mesos	72 Clarinet
Practice Grand Harp	Stefan	250000 Mesos	47 Orchestral Harp
Practice Timpani	Stefan, Lvl 25 Main Story Quest	250000 Mesos	48 Timpani
Arlano Classic Acoustic Bass	Meret Shop	500 Meret	33 Acoustic Bass
Arlano Classic Cello	Meret Shop	500 Meret	43 Cello
Arlano Classic Clarinet	Meret Shop	500 Meret	72 Clarinet
Arlano Classic Guitar	Meret Shop	500 Meret	25 Nylon String Guitar
Arlano Classic Harmonica	Meret Shop	500 Meret	23 Harmonica
Arlano Classic Harp	Meret Shop	500 Meret	47 Orchestral Harp
Arlano Classic Harpsichord	Meret Shop	500 Meret	07 Harpsichord
Arlano Classic Oboe	Meret Shop	500 Meret	69 Oboe
Arlano Classic Ocarina	Meret Shop	500 Meret	80 Ocarina
Arlano Classic Pan Flute	Meret Shop	500 Meret	76 Pan Flute
Arlano Classic Piano	Meret Shop	500 Meret	01 Grand Piano
Arlano Classic Pizzicato Violin	Meret Shop	500 Meret	46 Pizzicato Strings
Arlano Classic Saxophone	Meret Shop	500 Meret	66 Alto Sax
Arlano Classic Timpani	Meret Shop	500 Meret	48 Timpani
Arlano Classic Trombone	Meret Shop	500 Meret	58 Trombone
Arlano Classic Trumpet	Meret Shop	500 Meret	57 Trumpet
Arlano Classic Vibraphone	Meret Shop	500 Meret	12 Vibraphone
Arlano Classic Violin	Meret Shop	500 Meret	41 Violin
Arlano Classic Xylophone	Meret Shop	500 Meret	14 Xylophone
Purio Bass Guitar	Meret Shop	500 Meret	34 Fingered Bass
Purio Electric Guitar	Meret Shop	500 Meret	30 Overdrive Guitar
Purio Electric Piano	Meret Shop	500 Meret	05 Electric Piano 1
Purio Pick Bass	Meret Shop	500 Meret	35 Picked Bass
Purio Steel Drum	Meret Shop	500 Meret	115 Steel Drums
Purio Tom-toms	Meret Shop	500 Meret	118 Melodic Tom
Fire Axe Bass Guitar	Style Crate (Oct 2018)	7 Style Coins	34 Fingered Bass
Magic Broom Electric Guitar	Style Crate (Oct 2018)	7 Style Coins	30 Overdrive Guitar
Pumpkin Drums	Style Crate (Oct 2018)	7 Style Coins	118 Melodic Tom
Celesta	Not yet released		09 Celesta
Recorder	Not yet released		75 Recorder

PERFORMING SOLO AND IN A GROUP

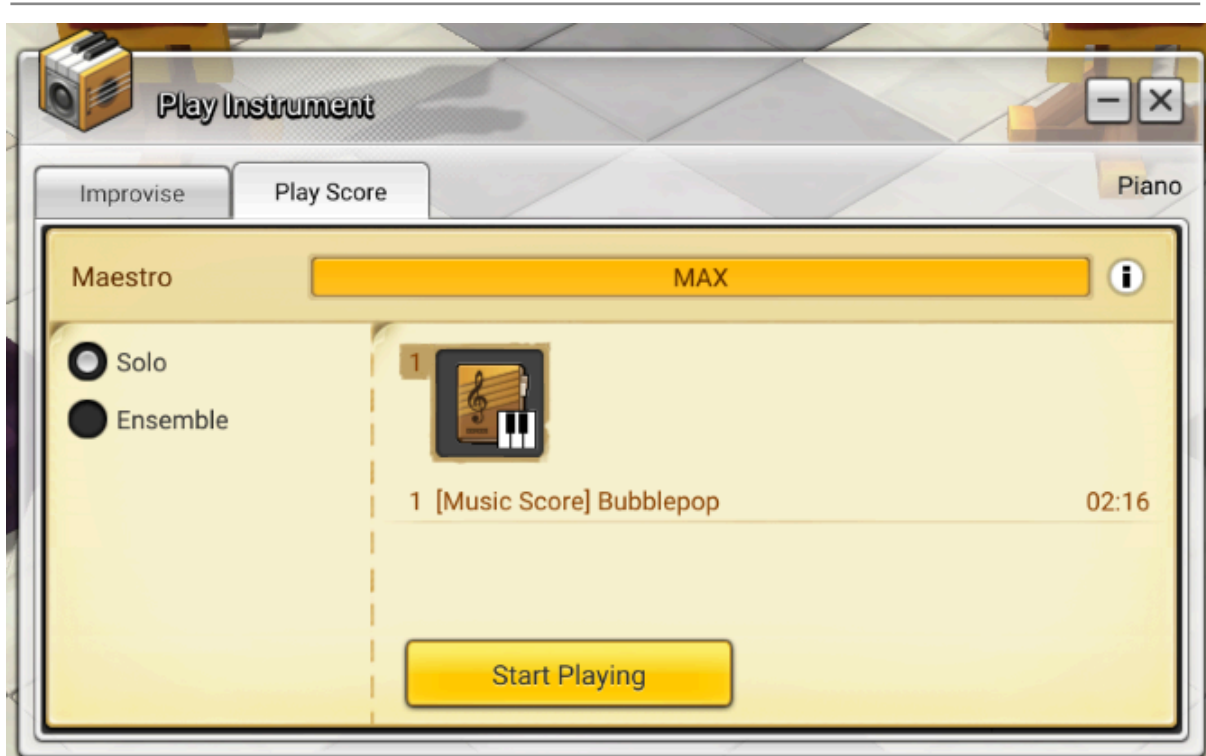
Perform Solo

Now that we have everything ready, it's time to play.

Simply go to your inventory, head to the Fishing/Music tab and double click your instrument of choice.

A pop up called "Play Instrument" should have come up and from here it's pretty straight forward.

Click the tab "Play Score" and from your inventory, select the score you wish to play. All you have left to do now is to click the yellow button that says "Start Playing"



The scores have limited times they can be played so keep this in mind. The most usual is either 10 or 20 times. After you play the allowed amount of time the icon will get grayed out and a cross over it. If you wish to perform the same song again, a new copy will have to be made.

While playing solo you can enable "Auto-Perform". This lets you repeat the song repeatedly for a set amount of time. This can be useful for grinding up to master or to get trophies but **it costs meret!**

I can't recommend this way - if you just keep playing you will get there eventually but if you REALLY need those 10000 character scores quick - go for it!

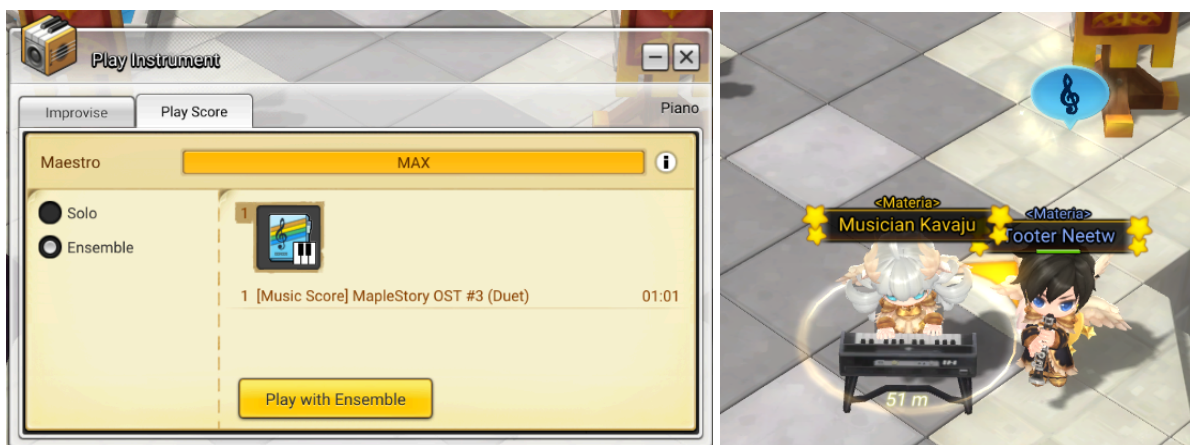
If you do, please do this in your own home where people won't have to listen to the Benny Hill theme for 8 hours straight.

Perform in a group

To perform in a group is really easy and you won't have to worry about synchronizing at all, the game does this for us.

Follow these steps

- Make a party with everyone you wish to perform with
- In the "Play Score" tab, everyone should select "Ensemble"
- Make all the members (**including the leader**) load the score they wish to play
- All members (**excluding the leader**) should now press "Join Ensemble"
- When all members are ready the leader press "Play with Ensemble"



When a party member is ready for ensemble a blue icon will show up above their head!

Level Up By Performing

While performing you gain experience and progress towards trophies.

You can earn experience for up to 5 minutes per performance and you get Performance Mastery based on the level of the score playing 100/200/300.

What you gain while playing:

Character EXP - Gain experience to level up your character

Performance Mastery - This counts towards your overall Musical experience

Instrument Mastery - This counts towards your experience with a specific instrument to unlock trophies

Performance mastery

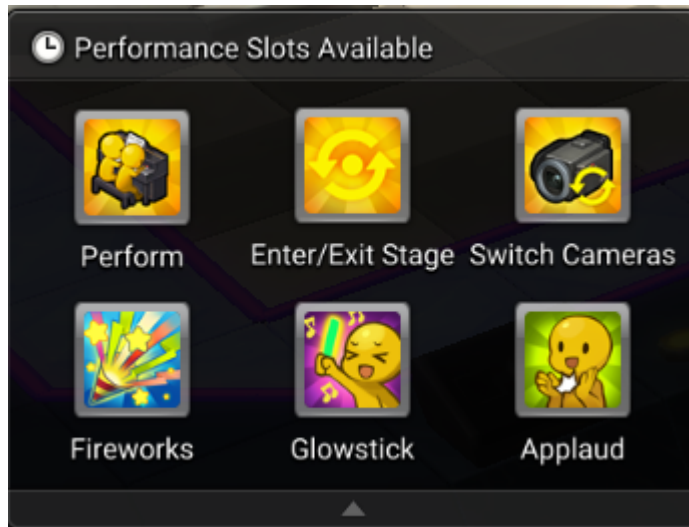
Level	EXP	Unlocks
Beginner	0	
Intermediate	1800	Musician Wig
Expert	3600	Starry Guitar Case
Master/Maestro	5400	Blank Advanced Music Score, Conducting Ducky

Each level also unlocks animations that are played randomly while performing.

QUEENSTOWN

If you head northeast in Tria, you'll be able to enter a map called Queenstown.

What makes this map special is the fact that it holds a big stage and only one player/group can perform at any given time. As you enter - you'll notice you have a new pop up with added controls/actions.



Perform: Press this to queue yourself or your group to be the next performer/s

Enter/Exit stage: When it's your turn, press this to enter/exit the stage

Switch Cameras: Switch the camera angle while performing or watching from the stands

Fireworks: Special animation while watching

Glowstick: Special animation while watching

Applaud: Special animation while watching

Use your time wisely

When you enter the stage you have 10 minutes of fame to do what you wish, when playing music, only your music can be heard throughout the map. When your time is up, the game will remove you from the stage, allowing the next performer to enter.

There is no limit to how many times you can queue up, but it is on a 'first come, first served' basis.

If there are a lot of players active on the map, there might be some downtime between your performances.

Don't Worry though, this is most often very enjoyable and social, so don't forget to take out your glowstick and show support for your fellow music friends!

Perform as a group

This is not very different on how you would perform on a regular map. Bring all your members into a party and press "Perform". When it's your turn, simply press "Enter/Exit Stage" and your group will be summoned to the stage. Group performance is also limited to 10 minutes.

TROPHIES

Trophy	Details	Unlocks
I A Musician with a dream	Raise Performance mastery to 100	
II A Musician with a dream	Raise Performance mastery to 1000	
III A Musician with a dream	Raise Performance mastery to 3000	
IV A Musician with a dream	Raise Performance mastery to 5000	
V A Musician with a dream	Raise Performance mastery to 10000	Title "Musician"
VI A Musician with a dream	Raise Performance mastery to 100000	
VII A Musician with a dream	Raise Performance mastery to 300000	Title "Virtuoso"
VIII A Musician with a dream	Raise Performance mastery to 500000	
IX A Musician with a dream	Raise Performance mastery to 1000000	Title "Maestro"
I A Musician Possessed	Collect 3 Instrumentalist trophies	Treble Clef Face Paint *
I Blank Music Score (10 Performances)	Acquire Blank Music Score (10 Performances)	A Guide to Music x1
I Intermediate Musician	Perform consistently to become an intermediate musician	Musician Wig *
I Expert Musician	Perform consistently to become an advanced musician	Starry Guitar Case *
I Master Musician	Perform consistently to become a professional musician	Conducting Ducky *
I Play MapleStory OST	Perform the Maplestory theme music Score	Title "Hardcore Mapler"
I Big Debut	Completed your first ensemble performance	Emote "High Five"
I The Key to the Melody	Accepted the music quest "Music to My Ears"	
I Acoustic Bass	Raise Acoustic Bass Performance mastery to 300	
II Acoustic Bass	Raise Acoustic Bass Performance mastery to 6000	
III Acoustic Bass	Raise Acoustic Bass Performance mastery to 30000	Title "Stable"
IV Acoustic Bass	Raise Acoustic Bass Performance mastery to 60000	
V Acoustic Bass	Raise Acoustic Bass Performance mastery to 100000	Title "Acoustic Bassist"
I Bass Guitarist	Raise Bass Guitar Performance mastery to 300	
II Bass Guitarist	Raise Bass Guitar Performance mastery to 6000	
III Bass Guitarist	Raise Bass Guitar Performance mastery to 30000	Title "Bold"
IV Bass Guitarist	Raise Bass Guitar Performance mastery to 60000	
V Bass Guitarist	Raise Bass Guitar Performance mastery to 100000	Title "Bassist"
I Celesta Player	Raise Celesta Performance mastery to 300	
II Celesta Player	Raise Celesta Performance mastery to 6000	
III Celesta Player	Raise Celesta Performance mastery to 30000	Title "Celesta Player"
IV Celesta Player	Raise Celesta Performance mastery to 60000	
V Celesta Player	Raise Celesta Performance mastery to 100000	Title "Celesta Master"
I Cellist	Raise Cello Performance mastery to 300	
II Cellist	Raise Cello Performance mastery to 6000	
III Cellist	Raise Cello Performance mastery to 30000	Title "Admirable"
IV Cellist	Raise Cello Performance mastery to 60000	
V Cellist	Raise Cello Performance mastery to 100000	Title "Cellist"
I Clarinetist	Raise Clarinet Performance mastery to 300	
II Clarinetist	Raise Clarinet Performance mastery to 6000	
III Clarinetist	Raise Clarinet Performance mastery to 30000	Title "Heart-melter"
IV Clarinetist	Raise Clarinet Performance mastery to 60000	
V Clarinetist	Raise Clarinet Performance mastery to 100000	Title "Clarinetist"
I Electric Guitarist	Raise Electric Guitar Performance mastery to 300	
II Electric Guitarist	Raise Electric Guitar Performance mastery to 6000	
III Electric Guitarist	Raise Electric Guitar Performance mastery to 30000	Title "Zinger"
IV Electric Guitarist	Raise Electric Guitar Performance mastery to 60000	
V Electric Guitarist	Raise Electric Guitar Performance mastery to 100000	Title "Melodic Shock"

Trophy	Details	Unlocks
I Electric Pianist	Raise Electric Piano Performance mastery to 300	
II Electric Pianist	Raise Electric Piano Performance mastery to 6000	
III Electric Pianist	Raise Electric Piano Performance mastery to 30000	Title "Jaunty"
IV Electric Pianist	Raise Electric Piano Performance mastery to 60000	
V Electric Pianist	Raise Electric Piano Performance mastery to 100000	Title "Electric Pianist"
I Guitarist	Raise Guitar Performance mastery to 300	
II Guitarist	Raise Guitar Performance mastery to 6000	
III Guitarist	Raise Guitar Performance mastery to 30000	Title "Free Spirit"
IV Guitarist	Raise Guitar Performance mastery to 60000	
V Guitarist	Raise Guitar Performance mastery to 100000	Title "Guitarist"
I Harmonica	Raise Harmonica Performance mastery to 300	
II Harmonica	Raise Harmonica Performance mastery to 6000	
III Harmonica	Raise Harmonica Performance mastery to 30000	Title "Corny"
IV Harmonica	Raise Harmonica Performance mastery to 60000	
V Harmonica	Raise Harmonica Performance mastery to 1000000	Title "Harmonica Master"
I Harpist	Raise Harp Performance mastery to 300	
II Harpist	Raise Harp Performance mastery to 6000	
III Harpist	Raise Harp Performance mastery to 30000	Title "Stringy"
IV Harpist	Raise Harp Performance mastery to 60000	
V Harpist	Raise Harp Performance mastery to 100000	Title "Harpist"
I Harpsichord Player	Raise Harpsichord Performance mastery to 300	
II Harpsichord Player	Raise Harpsichord Performance mastery to 6000	
III Harpsichord Player	Raise Harpsichord Performance mastery to 30000	Title "Detailed"
IV Harpsichord Player	Raise Harpsichord Performance mastery to 60000	
V Harpsichord Player	Raise Harpsichord Performance mastery to 100000	Title "Harpsichordist"
I Oboe Player	Raise Oboe Performance mastery to 300	
II Oboe Player	Raise Oboe Performance mastery to 6000	
III Oboe Player	Raise Oboe Performance mastery to 30000	Title "Melodic"
IV Oboe Player	Raise Oboe Performance mastery to 60000	
V Oboe Player	Raise Oboe Performance mastery to 100000	Title "Oboist"
I Ocarinist	Raise Ocarina Performance mastery to 300	
II Ocarinist	Raise Ocarina Performance mastery to 6000	
III Ocarinist	Raise Ocarina Performance mastery to 30000	Title "Bright"
IV Ocarinist	Raise Ocarina Performance mastery to 60000	
V Ocarinist	Raise Ocarina Performance mastery to 100000	Title "Ocarinist"
I Pan Flutist	Raise Pan Flute Performance mastery to 300	
II Pan Flutist	Raise Pan Flute Performance mastery to 6000	
III Pan Flutist	Raise Pan Flute Performance mastery to 30000	Title "Innocent"
IV Pan Flutist	Raise Pan Flute Performance mastery to 60000	
V Pan Flutist	Raise Pan Flute Performance mastery to 100000	Title "Pan Flutist"
I Pianist	Raise Piano Performance mastery to 300	
II Pianist	Raise Piano Performance mastery to 6000	
III Pianist	Raise Piano Performance mastery to 30000	Title "Sweetie"
IV Pianist	Raise Piano Performance mastery to 60000	
V Pianist	Raise Piano Performance mastery to 100000	Title "Pianist"

Trophy	Details	Unlocks
I Pick Bassist	Raise Pick Bass Guitar Performance mastery to 300	
II Pick Bassist	Raise Pick Bass Guitar Performance mastery to 6000	
III Pick Bassist	Raise Pick Bass Guitar Performance mastery to 30000	Title "Popular"
IV Pick Bassist	Raise Pick Bass Guitar Performance mastery to 60000	
V Pick Bassist	Raise Pick Bass Guitar Performance mastery to 100000	Title "Pick Bassist"
I Pizzicato Violin	Raise Pizzicato Violin Performance mastery to 300	
II Pizzicato Violin	Raise Pizzicato Violin Performance mastery to 6000	
III Pizzicato Violin	Raise Pizzicato Violin Performance mastery to 30000	Title "Plucky"
IV Pizzicato Violin	Raise Pizzicato Violin Performance mastery to 60000	
V Pizzicato Violin	Raise Pizzicato Violin Performance mastery to 100000	Title "Pizzicato Master"
I Recorder Player	Raise Recorder Performance mastery to 300	
II Recorder Player	Raise Recorder Performance mastery to 6000	
III Recorder Player	Raise Recorder Performance mastery to 30000	Title "Recorder Player"
IV Recorder Player	Raise Recorder Performance mastery to 60000	
V Recorder Player	Raise Recorder Performance mastery to 100000	Title "Recorder Master"
I Saxophonist	Raise Saxophone Performance mastery to 300	
II Saxophonist	Raise Saxophone Performance mastery to 6000	
III Saxophonist	Raise Saxophone Performance mastery to 30000	Title "Soulful"
IV Saxophonist	Raise Saxophone Performance mastery to 60000	
V Saxophonist	Raise Saxophone Performance mastery to 100000	Title "Saxophonist"
I Steel Drummer	Raise Steel Drum Performance mastery to 300	
II Steel Drummer	Raise Steel Drum Performance mastery to 6000	
III Steel Drummer	Raise Steel Drum Performance mastery to 30000	Title "Ringer"
IV Steel Drummer	Raise Steel Drum Performance mastery to 60000	
V Steel Drummer	Raise Steel Drum Performance mastery to 100000	Title "Steel Drummer"
I Timpanist	Raise Timpani Performance mastery to 300	
II Timpanist	Raise Timpani Performance mastery to 6000	
III Timpanist	Raise Timpani Performance mastery to 30000	Title "Boom Boom Pow"
IV Timpanist	Raise Timpani Performance mastery to 60000	
V Timpanist	Raise Timpani Performance mastery to 100000	Title "Percussionist"
I Tom-Tom Drummer	Raise Tom-Tom Performance mastery to 300	
II Tom-Tom Drummer	Raise Tom-Tom Performance mastery to 6000	
III Tom-Tom Drummer	Raise Tom-Tom Performance mastery to 30000	Title "Ba-dum"
IV Tom-Tom Drummer	Raise Tom-Tom Performance mastery to 60000	
V Tom-Tom Drummer	Raise Tom-Tom Performance mastery to 100000	Title "Passionate Drummer"
I Trombonist	Raise Trombone Performance mastery to 300	
II Trombonist	Raise Trombone Performance mastery to 6000	
III Trombonist	Raise Trombone Performance mastery to 30000	Title "Babbly"
IV Trombonist	Raise Trombone Performance mastery to 60000	
V Trombonist	Raise Trombone Performance mastery to 100000	Title "Trombonist"
I Trumpeter	Raise Trumpet Performance mastery to 300	
II Trumpeter	Raise Trumpet Performance mastery to 6000	
III Trumpeter	Raise Trumpet Performance mastery to 30000	Title "Rockstar"
IV Trumpeter	Raise Trumpet Performance mastery to 60000	
V Trumpeter	Raise Trumpet Performance mastery to 100000	Title "Trumpeter"

Trophy	Details	Unlocks
I Vibraphonist	Raise Vibraphone Performance mastery to 300	
II Vibraphonist	Raise Vibraphone Performance mastery to 6000	
III Vibraphonist	Raise Vibraphone Performance mastery to 30000	Title "Ambidextrous"
IV Vibraphonist	Raise Vibraphone Performance mastery to 60000	
V Vibraphonist	Raise Vibraphone Performance mastery to 100000	Title "Vibraphonist"
I Violinist	Raise Violin Performance mastery to 300	
II Violinist	Raise Violin Performance mastery to 6000	
III Violinist	Raise Violin Performance mastery to 30000	Title "Frenzied"
IV Violinist	Raise Violin Performance mastery to 60000	
V Violinist	Raise Violin Performance mastery to 100000	Title "Violinist"
I Xylophone Savant	Raise Xylophone Performance mastery to 300	
II Xylophone Savant	Raise Xylophone Performance mastery to 6000	
III Xylophone Savant	Raise Xylophone Performance mastery to 30000	Title "Ding-donger"
IV Xylophone Savant	Raise Xylophone Performance mastery to 60000	
V Xylophone Savant	Raise Xylophone Performance mastery to 100000	Title "Xylophonist"

* **Note:** Unlocked for purchase

CREATING A MUSIC SCORE

In this step I will only explain how to create a Music Score with a code you already obtained.

These codes can be found all over the internet but you will have to search for these on your own since I don't know any sites. I can however give you some recommendations on what to look for:

MapleStory 2 MML

Mabinogi MML

ArcheAge MML

Note! When taking codes from another game there is **NO GUARANTEE** they will sound good in Maple. Try these out and if they sound bad, try another code. This guide will explain later how to clean these codes up.

First of all we need an empty music score. To find these we head back to Stefan in Tria.

To know which ones we need, you need to know how many characters the code is using.

Blank Music Score	3000 characters
Blank Intermediate Music Score	5000 characters
Blank Advanced Music Score	10000 characters

Characters refer to all the letters and symbols we'll be using to tell the game when and how to play the notes. More complex songs and codes will need a better Music Score. There are several ways of counting how many characters the codes have, the compose window in MS2 shows how many characters in total it is. The problem is that the count stops at the sheet limit, so we won't know from a Basic Score if we need to buy an Intermediate or Advanced score. For this you can either count characters in 3ml if you have been coding yourself or use websites such as wordcounter.net

For the sake of trying...

And for the sake of not having to listen to MapleStory 2 OST #1 again, I'm going to share one of the first codes I ever did some 4-5 years ago. The song is called Fox Rain and was featured in a Korean Tv-show called "My girlfriend is a gumiho". The code is slightly below 1000 characters but play for 2 minutes, so don't be fooled by the low count! For this code you will need a Blank Music Score.

Melody

```
T14751rV10>d.a8aagfg2ee2d8c8defg2fa1fga.a8aagfefgf1fdefga2.V8b+V7aV6gV12<d.a8aagfg2ee2d8c8defg2f8a8a1fgaaaagfefgf1fdefgf1&f.c8d.a8aagfb+2gg2f8e8defg2b+a1fgaaaagfefgf2&f8a8gf.a8gfe8f8f2.fgaa2.gfeg2.f2&f8f8b+a+a+agfg2b+a2aagf+g2&g8a8gfe8f8fgfaagab+g1&g2d.a8aagfb+2gg2f8e8defg2b+a1fgaaaagfefgf2&f8a8gf.a8gfl8eff1&f2.fefef4a.r16f2fefef4a.r16f2fefga4fefga4fefga4b+.r16f2fefef4a.r16f2fefef4b+.r16a2fefga4fefga4fefga4b+4a1&a1
```

Harmony 1

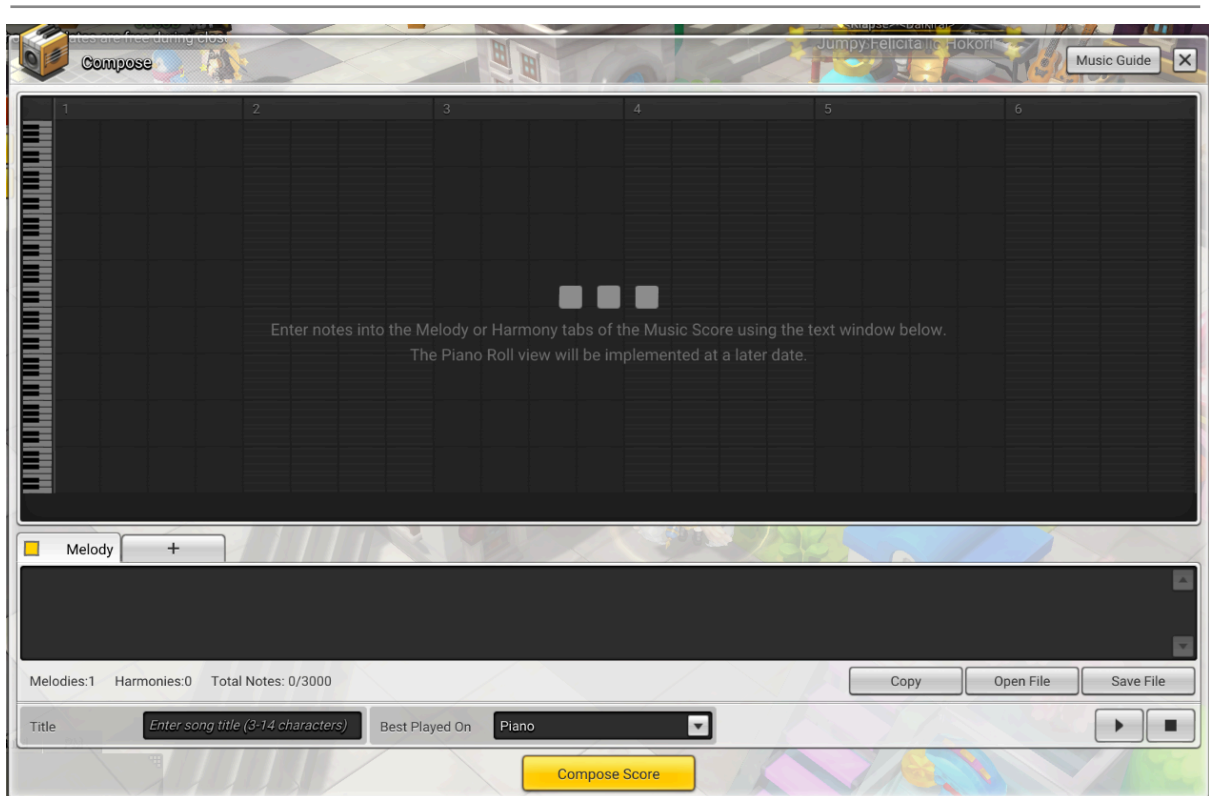
```
T147rV10l2<A+>a1<a>g1<g>f4<c>e4<f>ce<<a+>f1<a>g4d>f4<<g>a4c>e4<f>e1r4l2.<fa+aedgfcfa+eadgfc2V10<a+rargb+fra+a+a>d<gb+ffea>dc<a+ra>ded+dc+<gg>c1&c2<a+a+agb+ffa+a+a>d<gb+ffV12a+a+agb+ffa+a+agb+ff&
```

Harmony 2

```
T147rV10l2<A+>a1<a>g1<g>f4<c>e4<f>ce<<a+>f1<a>g4d>f4<<g>a4c>e4<f>e1r4l2.<fa+aedgfcfa+eadgfc2V10<a+rargb+fra+a+a>d<gb+ffea>dc<a+ra>ded+dc+<gg>c1&c2<a+a+agb+ffa+a+a>d<gb+ffV12a+a+agb+ffa+a+agb+ff&
```

Note: This code has an "S1" in the melody part, this means that the sound will get a sustain - a fuller sound that keeps on playing the notes for a while after it's been played. This sounds good on most instruments but not if you plan on playing it on instruments like the clarinet or the violin. Simply delete the "S1" from the melody if you prefer to play it on instruments like that. **I marked it out with highlights and bold for you!**

To start off, double click your Blank Music Score of choice and it should bring you a pop up looking like this:



Let's go over what everything in this window does

Music Guide: This Gives you a basic rundown of how the MML works in Maple. This will also be covered later.

Piano Roll: Currently not implemented.

Melody: This is where we paste the first columns of code, do this in the gray box below!

Tab "+": Press this to open up a Harmony tab

Gray Box: Text Field! This is where the code goes.

Melodies: Counter for how many melody tabs you have. Will always be one.

Harmonies: Counter for how many harmony tabs you have. You can have 9 of these

Total Notes: Shows how many of the allowed characters you used. You won't be able to type more if at max.

Note! It can be hard to see what tab you have selected. It will be slightly bigger than the rest but make a habit of always pressing the tab you wish to edit regardless.

Copy: Copy the code of the current tab

Open File: Open a saved ms2mml file

Save File: Saves the current code as an ms2mml file. Useful so you don't have to copy paste code every time.

Title: Type in the Title you wish to give the score. Can be between 3-14 Characters

Best Played On: Select what instrument you prefer to play the score on so you don't have to remember it

Note! Use this to preview how the song will sound on different instruments. Select an instrument and press play!

Play, Pause, Stop: Media controls to preview the code.

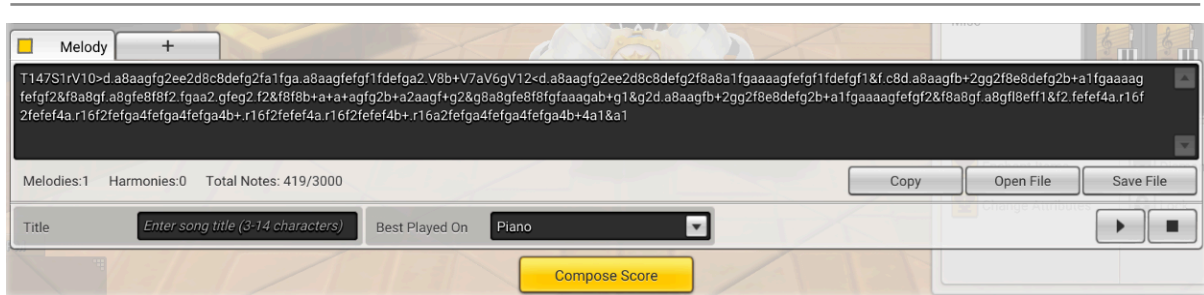
Compose Score: Finalise your edits and make your Blank Music Scores into a Music Score.

Lets try using the code i gave you and create a sheet.

1. Copy the code into the melody tab

Melody

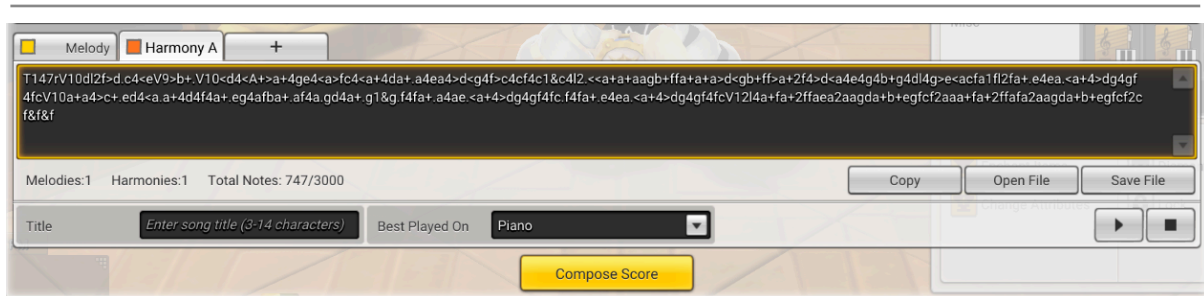
T147S1rV10>d.a8aagfg2ee2d8c8defg2fa1fga.a8aagfefgf1fdefga2.V8b+V7aV6gV12<d.a8aagfg2ee2d8c8defg2f8a8a1fgaaaagfefgf1fdefgf1&f.c8d.a8aagfb+2gg2f8e8defg2b+a1fgaaaagfefgf2&f8a8gf.a8gfe8f8f2.fgaa2.gfeg2.f2&f8f8b+a+a+agfg2b+a2aagf+g2&g8a8gfe8f8fgfaagab+g1&g2d.a8aagfb+2gg2f8e8defg2b+a1fgaaaagfefgf2&f8a8gf.a8gfl8eff1&f2.fefef4a.r16f2fefef4a.r16f2fefga4fefga4fefga4b+.r16f2fefef4a.r16f2fefef4b+.r16a2fefga4fefga4fefga4b+4a1&a1.



2. Press the tab with the + sign and repeat with this code

Harmony 1

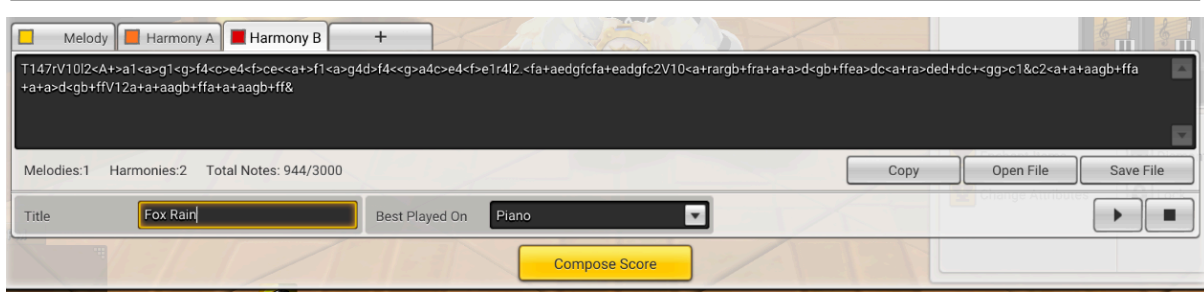
T147rdl2f>d.c4<eV9>b+.V10<d4<A+>a+4ge4<a>fc4<a+4da+.a4ea4>d<g4f>c4cf4c1&c4l2.<<a+a+agb+ffa+a+a>d<gb+ff>a+2f4>d<a4e4g4b+g4dl4g>e<acfa1fl2fa+.e4ea.<a+4>dg4gf4fcV10a+a4>c+.ed4<a.a+4d4f4a+.eg4afba+.af4a.gd4a+.g1&g.f4fa+.a4ae.<a+4>dg4gf4fc.f4fa+.e4ea.<a+4>dg4gf4fcV12l4a+fa+2ffaea2aagda+b+egfcf2aaa+fa+2ffafa2aagda+b+egfcf2cf&f&f



3. And again, press the tab with the + sign and paste in this last code.

Harmony 2

T147r12<A+>a1<a>g1<g>f4<c>e4<f>ce<<a+>f1<a>g4d>f4<<g>a4c>e4<f>e1r4l2.<fa+aedgfcfa+eadgfc2V10<a+rargb+fra+a+a>d<gb+ffea>dc<a+ra>ded+dc<gg>c1&c2<a+a+agb+ffa+a+a>d<gb+ffv12a+a+agb+ffa+a+agb+ff&f



4. Now you can give the score a name, a preferred instrument and press “Compose Score”.

Now you can play it!

SAVING AS MS2MML FILES

Since we are limited to how many times we can perform each score, we will sooner or later run into the need to recreate our scores. This is made easy thanks to our ability to save down our code as MS2MML files.

While in the “Compose” interface press “Save File”

Simply select where on your computer you wish to save the file and the next time you wish to recreate the song simply press “Open File”

This will load in the song just as you saved it - no need to copy paste all tracks all the time!

REOPENING COMPOSED SCORES

A nice feature is that you can reopen any score you created yourself - this is useful for scatterbrains who forgot to save their code in other ways. To open up a completed score simply double click it in your UI and it brings up the composer window.

Note that you can not edit and re-save any parts of the score!

This is however useful if you wish to go back and save old scores into MS2MML files.

ANTI-MML-PIRACY

Don't be scared of sharing your hard work with friends and fans.
Your sheet is protected by the game's own anti-mml-piracy system.

Only the composer of the song can reopen the sheet and look at/save the code!

Others who attempt this will be greeted by a big red and angry text telling them that they are not the composer. They will be able to play the song - but not steal it.

Each score will also list who created the score when looking at the tooltip making it easy to figure out the creator. This does not however stop people from just playing a song and claiming they made it themselves in chat. If you are unsure, you can always ask the player to link the score in chat.

This system does not work for codes found on the internet - only share within the game if you are scared of people claiming your work as their own! To share with people on other servers, simply make an alt and create the sheet on their server.

NO BUCCANEERING

This should not need to be said - but I'll say it either way.

This is not the seven seas. If someone is kind enough to share their work with you - give them credit when someone asks about the music. If you found it on a site but don't remember the uploader - just refer to the site!

DO NOT PUT UP CODES ON THE PLAYER MERET MARKET THAT YOU DID NOT MAKE YOURSELF

Seriously - don't!

FAQ ON CREATING A SHEET

How to make simple fixes without knowing MML

I found a code but the volume is really low or too high!

The volume is controlled by the letter V and a number between 0-15 with 15 being the highest volume. Some games use different values. If your code has a V120 - Maple will simply play the standard, V8. Scan the code for any V's you can find and change as you prefer. Note that there can be a lot of volume changes! To make this easier you can paste the code into a text editor and search for all the V's with Ctrl + F.

Kavaju recommends the standard V8 or V10. Local rockstar on ch1. recommends V15.

The music is weird and sounds like a bass or super high and squeaky

The octave of the song might be off. The octave is controlled by O and a number between 1-8.

Imagine a piano, 1 is the far left on the piano where you have all the low bass notes, 8 being the far right of the piano with all the light and high notes. Experiment and change O up and down until it sounds like you want it to. The octave can also be changed with < and >, these can be harder to edit in a text editor. < brings the octave down and > brings it up. Changes will have to be made in Melody and all Harmony tracks!

To make this easier you can paste the code into a text editor and search for all the O's with Ctrl + F.

If the code begins with an O and the rest is <> just change the O and don't worry about the rest.

If the song is to low and begins with an < delete it and test again

If the song is to high and begins with an > delete it and test again

The music sounds good but it's a little slow or too fast!

The speed of the song, or rather the tempo of the song is controlled by the letter T and a value between 32 and 255 - the higher the number, the faster it goes! Try experimenting around with changing the T value, however, all the T's has to match! If you change T90 to T100 in melody you **HAVE** to do the same in all your harmony tracks. Note that there can be tempo changes within the song, the same applies to those, the T must always match at those changes. To make this easier you can paste the code into a text editor and search for all the T's with Ctrl+F.

The music sounds like a mess! None of the notes play at the same time!

The code might have come from a game that has different rules. Check the beginning of the Melody and all your harmony tracks and see that they all have a matching T number in the beginning, for example T100.

If only your Melody has this but not your harmony tracks - type in the same T+number in the beginning of your Harmony tracks, yes, all of them.

If the song starts off fine but desyncs in the middle I recommend using a 3rd party program called 3mle to fix this. The guide will cover this later.

I found a code and it's a wall of text, how do I know what is Melody and Harmony?

Open up the code in a text editor and use CTRL + F and search for any "," (comma) marks.

This is commonly used in other games to separate the tracks, what we in Maple 2 call Melody and Harmony.

Take the code before the first , and put it in Melody, the code between the first and second , goes into Harmony A, the next bit into Harmony B etc. Most commonly you will only find 3 sections in these but always make sure.

None of the above helps to fix the music, it still sounds bad!

If these common and easy fixes didn't mend the code for you chances are the code was bad from the start or the fault is not easily fixed with just a text editor, I recommend finding another code or keep on reading on how to use 3mle to look for errors.

SOUNDFONTS AND HOW TO GET THEM TO WORK

This is completely optional and you can skip this part.

We can now create music scores and play them yet they all sound bland. The Piano sounds flat and boring and the violin sounds like a crying cat. The game lets us load soundfonts, a way to change how the instruments sound. To achieve this we need to tell windows to play different sounds than what the standard is. This is possible to do since MapleStory plays the sound samples from your computer rather than the game files.

Note:

Installation of a 3rd party program will be needed. This program is safe and tested.

This does not alter any files in your MapleStory 2 installation, this is allowed and won't get you banned.

Basic understanding of downloading and installing will be needed as I won't go into details.

I do not recommend changing all the sounds drastically. If you are coding on your own this will sooner or later make you code in a way so that the music sounds good for you and your soundfont but can sound odd and weird for the normal player without one. Enhance what's there but be careful and don't do anything too drastic!

To start off we will first have to download and install Coolsoft VirtualMIDISynth, you can find that here:

[Download](#)

Scroll down to "What now?" and press Download. Choose the latest build, it should be the one on top, and click the download link to download the exe. Install as instructed, a reboot of your system might be needed.

You will also need the midi mapper found here:

[Download](#)

The programs are just one step of what we need. To let the program change the sounds we need soundfonts. We are looking for a file format called .sf2 or .sfz.

First of all I will provide you with a copy of the basic windows sounds, when we add new sounds it won't always change all available sounds, adding this file will tell VirtualMIDISynth to play the default sound if you don't have another sound available.

You can download them here:

[Download](#)

Other than that, I really recommend using Keppy's Soundfont to turn the piano into a Steinway grand piano

You can download that here:

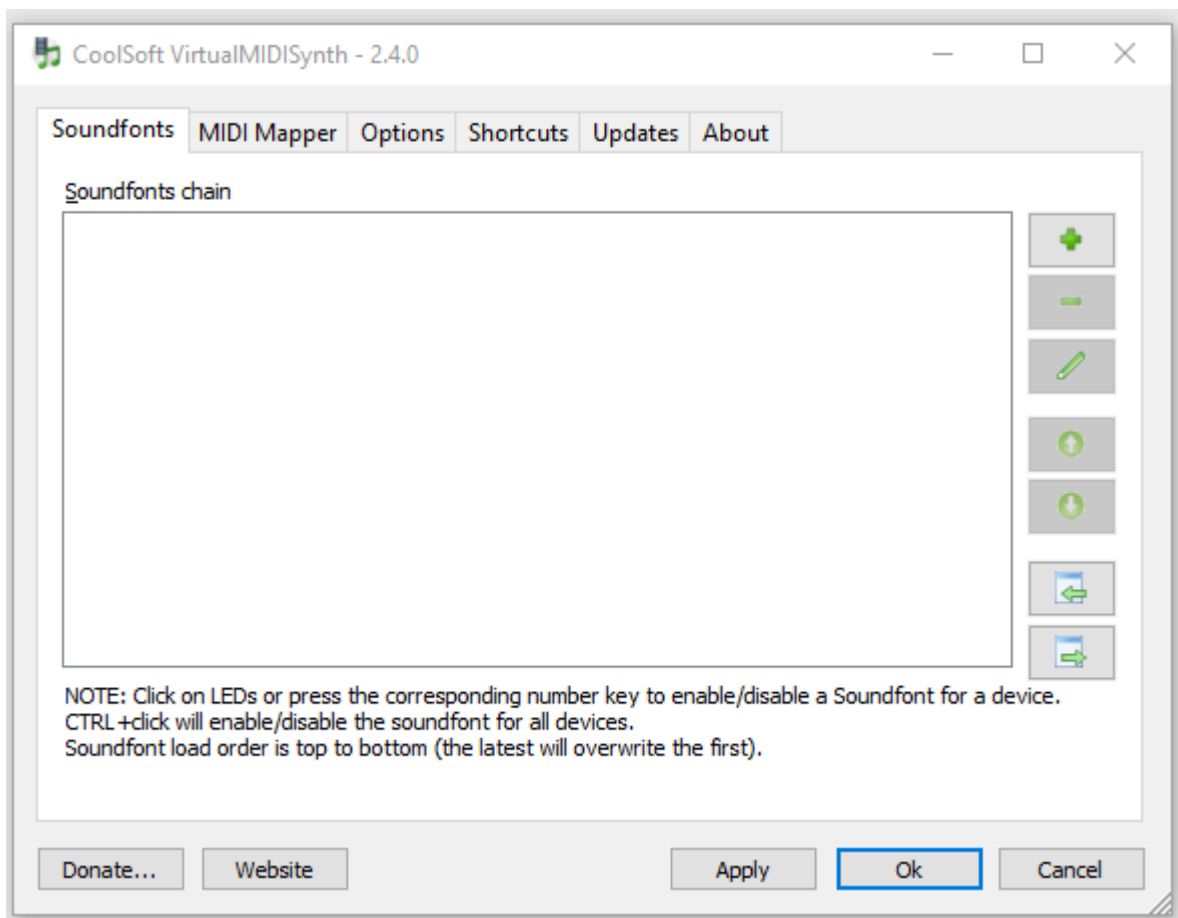
[Download](#)

Just press the green button and download as a zip. Extract where you want it to be, go into the samples folders and extract the files there to get the sounds to work. I recommend the Classic Grand.

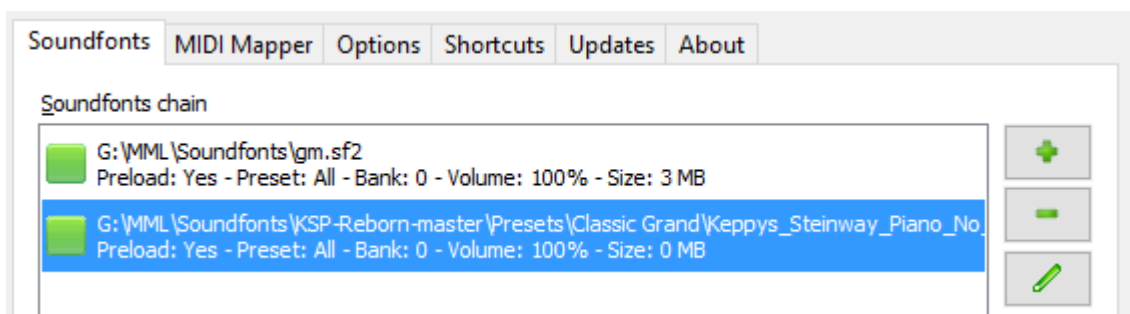
Place your files in a folder anywhere you want, I saved them in a folder called Soundfonts in the the same area I keep my codes and MIDI files but anywhere will do. Any other soundfonts you will have to hunt down on your own. Happy hunting!

Now let's open VirtualMIDISynth.

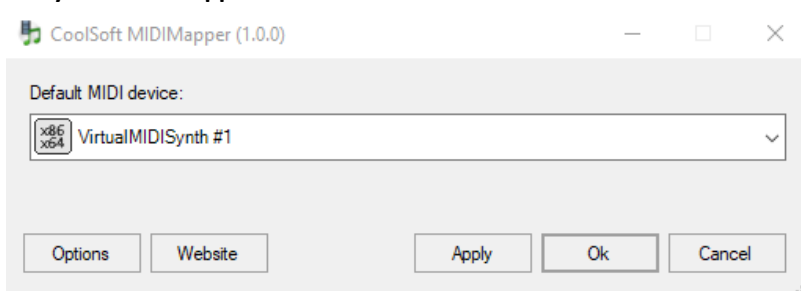
When first opened it should look something like this:



It should now look like this:



And your MIDI mapper should look like this



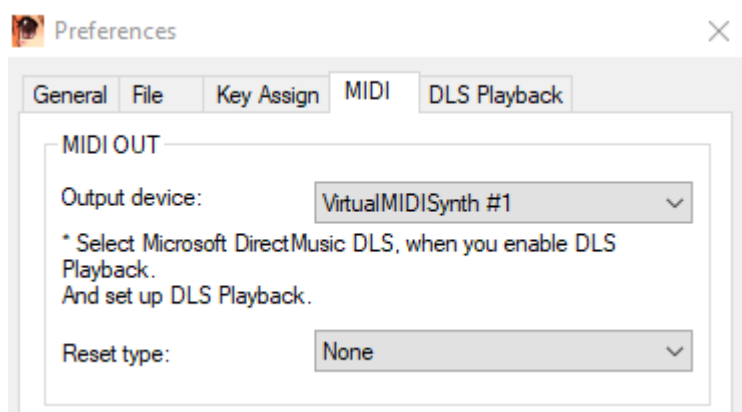
Getting it to work in MapleStory 2

All you have to do is start the game up. It reads in the soundfonts and you can easily edit which soundfonts to use by activating/deactivating them and press apply. If you are currently playing a song you will hear a short pause while the new sounds loads in but will not stop the performance.

Intermediate

How to get it to work in 3MLE

Go to "Settings" then "Preferences", in the tab "MIDI" select "VirtualMIDISynth #1" under output device.



Advanced

Don't forget the people without soundfonts!

When coding with a lot of soundfonts, just do your thing. But before bringing it into the game I would recommend you to do a proof listen to make sure it sounds decent with the standard sounds.

It might sound like a full beautiful, breathtaking orchestra on your end but like a group of cats fighting on a bagpipe for the players you perform it for and honestly that just makes the whole code useless unless only meant to record it onto a video. Then go nuts.

For codes meant to be playable, jump back and forth between soundfont and standard sounds and make alterations so it sounds good on both ends. This might mean instrument switching on some parts for groups performances. Make compromises.

My soundfont for cello sounds horrible on higher registers but absolutely breathtaking in its natural lower range. Before I used the violin for these ranges as well because the standard one could do this, however, with my soundfont my violin sounds horrible on the lower registers. This is all natural because this is what the instruments are meant for naturally, but what could have been a solo piece in standard soundfont now has to be a 2 man piece to fit my soundfont. However, it sounds good as a 2 man piece with the standard font as well so I roll with it that way.

Likewise I have a complex code I made a while ago with the standard instruments in mind it and it sound amazing for using the standard sounds, however - whenever I turn on my soundfonts and listen to it, I cry because it sounds horrible.

Don't forget to be weary of the volume differences the soundfont might have compared to the standard!

THE ART OF MML

This guide will from now on focus on getting you into intermediate level with optional advanced notes.

The most frequent comment I get in games when I tell people that they can also make music is “Oh. But I have no clue about music stuff”. I didn’t have that either when I started, we all have to start from somewhere. As such I will try my best to explain things as easy as possible and teach some theory along the way!

I find the piano to be the easiest to visualise so I’ll be using that as our visual guide and reference throughout the rest of the guide, this will make it easier when we start to work in 3mle since it uses the piano as it’s visual guide as well.

MML cheat sheet:

For a more detailed explanation, keep on reading.

Notes

C D E F G A B
R

Note Length

Duration	MML	Triplet
Whole note	1	3
Half note	2	6
Quarter note	4	12
Eighth note	8	24
Sixteenth note	16	
Thirty-second note	32	
Sixty-four note	64	

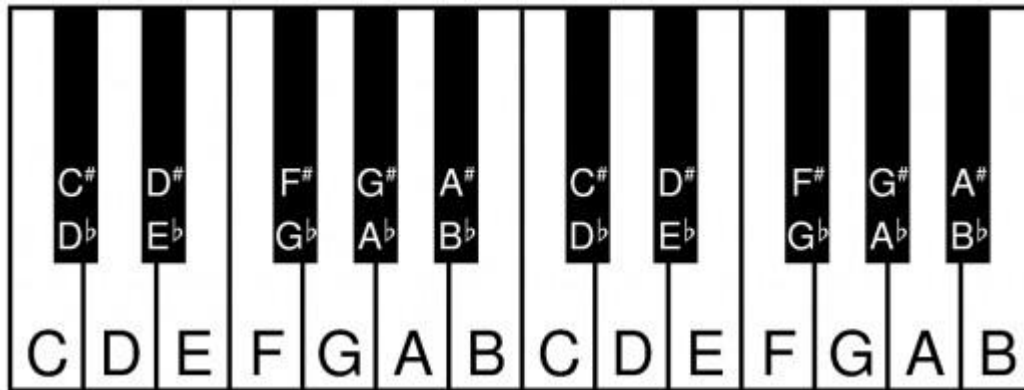
Effect	MML	Value	Standard
Tempo	T	32-255	120
Octave	O	1-8	4
Octave down	<		
Octave up	>		
Volume	V	0-15	8
Note Length	L	1-64	4
Sustain	S	0-1	0
Tie	&		
Dotted note	.		
Sharp	+ or #		
Flat	-		
Performance speed	P	32-255	120
Animations	M	0-5	Randomized between 1-5

The “invisible” standard code in the beginning of each track

T120O4V8L4S0P120

NOTES

All notes are called something to help us identify and explain to others what sound we want. The notes we have are **C D E F G A B**, this weird order is called the C Major in music theory. In MML these are also the letters we type to play the corresponding note, convenient!



C D E F G A B can all be played on the white keys on the piano but the piano also have black keys, these are called sharps and flats. To play the black keys in MML we most often use sharps, typed with "+" or "#". This gives us: **C+ D+ F+ G+ A+** or the alternative **C# D# F# G# A#**.

We can also reach the black keys using flats in MML this is done with "-":

D- E- G- A- B-

I **strongly** recommend using sharps. Why? Because it's really easy to remember and visualise as:

C C+ D D+ E F F+ G G+ A A+ B

While all black keys on a piano are sharps and flats, not all sharp and flats are black keys. To put it really simply a sharp or flat means to play the note before or after the mentioned note making it possible to land on a white key. This is not used in MML as much since it in most cases would end up costing you a lot of character space. On a sheet paper sharp (next) is marked with # and flat (previous) with b .

For moments when no note needs to be playing we use "R" for "Rest".

All modifications we will learn for the notes will be applicable to R as well.

Let play with a melody we all know, Twinkle twinkle little star. It would be written as:

CCGGAAGFFEEDDCGGFFEEDGGFFEEDCCGGAAGFFEEDDC

Advanced

Note how I did not give E a sharp above? This is because it's not needed to reach a black key but would instead land you on F and that's shorter to type as is. Optimization baby!

OCTAVES

Now we learned what notes we use, but that's just 12 of them. A piano can have up to 88!
The trick is that the notes repeat in intervals. C marks the start of each now interval and B the end.

In MML the octave is controlled by "O" for "Octave" and a number between 1-8 with 4 being the standard in Maple 2. Let us use the piano again, 1 is the far left on the piano where you have all the low bass notes, 8 being the far right of the piano with all the light and high notes.

O1 would bring us the deep bass sounds
O4 would bring us into the middle range sounds
O8 would bring us the lightest notes we can get

Another way to tell the octave with MML is the "<" and ">" signs. < brings it down and > brings it up. This is very convenient to save space if we only have to move one step at a time

With mixing the different notes and octaves we can create chords and make it sound as if we are playing with both left hand and right hand on the piano.

Keep in mind that the beginning of each track (Melody or Harmony) needs to be marked with an octave. If no mark is done Maple 2 will play the standard **O4**.

Kavaju's Octave Cheat Sheet!

Does the track start at O1? - Type it out as **O1**
Does the track start at O2? Type it out as **O2** or **<<**
Does the track start at O3? Type it out as **<**
Does the track start at O4? Don't type it out, it's the standard value
Does the track start at O5? Type it out as **>**
Does the track start at O6? Type it out as **O6** or **>>**
Does the track start at O7 or O8? Type it out as **O7** or **O8**
Unsure? Then use O# instead of <>!

Let's play with Twinkle twinkle little star again. Since it sounds good on the standard **O4** we do what?

Nothing

```
CCGGAAGFFEEDDCGGFFEEDGGFFEEDCCGGAAGFFEEDDC
```

Advanced

Since the notes repeat we can make use of the sharp and flat markers to save space. **C-** is a **B** one octave lower and **B+** is a **C** one octave higher! **B+** is shorter to type than **>C<**. Need over 3 letters? Use **<>**.

If I can choose between **O#** and **<<** or **>>** I choose differently depending on where in the code I am.

At the start of a track I would use **O#** and in the middle of the code **<<** or **>>**.

The reason for this is that if I can, I try to keep only one **O** marker for each of my tracks. Should I need to switch the octaves of an entire track I would only have to edit at one place and the rest would follow.

This means, if I have a lot of code to spare on my music score, I might even do something so silly as to use **>>>!** If I am strapped for space and need to squeeze my code as much as possible I always go for the option with less characters used.

CHORDS AND TRACKS

Chords

A chord is when multiple notes are played at the same time thus making their sounds simultaneously. In MML we achieve this by making sure 2 or more notes are being played at the same time in different tracks. A 3rd party program is usually used to get a visual image of where and how the notes are placed. This guide will cover how to use 3MLE in later chapters.

Tracks

In MapleStory 2 the tracks are named "Melody" and "Harmony". In this guide I refer to Melody and all Harmonies as tracks. It's simpler and shorter to type out that way. There is no difference between "Melody" and "Harmony" - what you write in Melody will work in any Harmony track as well. Think of "Melody" as a fancy name for "Track 1". You can have a total of 10 tracks per score.

Each track can only play one note at a time.

It can play several notes in a row, but never at the same time.

So to create chords as mentioned above, we need several tracks. When you add more tracks, they will all start to play at the same time and this is what we use to create our chords. For example if I want **C** and **D** to play at the same time I will have to type it out as:

Track 1: C

Track 2: D

Note that time will flow even if you don't need anything to play on that track at that specific time, if you were to skip putting out your rest marks, your track will end up playing all the notes after each other and ignoring your wish for it to wait. This applies no matter how many tracks you add. Let's say you want to play a chord of **C** and **D**, then have **Track 1** play four **A**'s and then a **C** and **D** chord again.

INCORRECT WAY

Track 1: C A A A C

Track 2: D D

CORRECT WAY

Track 1: C A A A A C

Track 2: D R R R R D

Tracks & Character limitations

Each empty score has a character limitation (2k, 5, 10k).

When using several tracks, they share the limitation so if you write 1200 characters on one track and 800 on another, you have used up 2000 characters in total. There is however no limitation inside the track, if you wish to have all 10k characters written in only one track, go ahead!

Tracks cannot communicate with each other.

Further down you will keep reading about different commands and the importance some of them have to being noted down on each individual track. This is because tracks cannot read minds... or other tracks.

Some commands do not follow these rules so try to remember these rules!

For each track make sure you have all the following:

Notes (!), Note lengths, Tempo, Volume, Octaves

Commands that does not need to be noted down on all tracks:

Animations, Performance Speed, Sustain

TEMPO

The tempo of the song is the value that decides how fast your song is going to sound.

Note lengths and tempo decide the overall flow of how your song is going to sound, so think of these two as a married couple - both need to live in harmony for the song to work.

Effect	MML	Value	Standard
Tempo	T	32-255	120
Performance speed	P	32-255	120

In MML you set the tempo with “**T**” for.. You guessed it; **Tempo**.

Your song can go as slow as 32 BPM (Beats per minute) or as fast as 255 BPM.

The standard value is 120 - should you type in any value lower or higher than the allowed - Maple will play the standard 120 BPM tempo.

The tempo is the value that usually messes up your song and makes it sound out of sync!

The tempo - unless it’s the standard value - needs to be written in the beginning of all the tracks.

Let me repeat that in bold, because this is so important.

If the tempo is not 120 - it needs to be written in the beginning of all the tracks!

Likewise, any **tempo changes** within the song **NEEDS** to be written on **ALL THE TRACKS!**

If your Melody track is set to T180 but you didn’t write anything in the rest of your tracks, they will play in T120.

The same goes with tempo changes within the song. If you do a tempo change at measure 32 in the harmony track to T90 all the other tracks need to have their tempo markers there as well - even if some tracks are only playing rests. Using programs like 3MLE will make it easier to find the exact spots to put your T’s.

Tempo Cheat Sheet

All tracks are starting with T120: Do nothing

All Tracks are starting with a non standard value: Type in the beginning of **ALL** tracks

Tempo Changes within the song: Type in the tempo change at the exact place on **ALL** tracks

Several tempo changes within the song: Type in the tempo change at the exact place on **ALL** tracks

But one of the tracks is just playing rests: Type in the tempo change at the exact place on **ALL** tracks

PERFORMANCE SPEED

Maplestory 2 has a pretty sweet feature that lets the animation of your character playing match the tempo of the song! This is written in MML with “**P**” for **Performance** and follows the same values as tempo; 32 - 255.

The difference is that you don’t need to place P’s on all your tracks! I put mine in the harmony track.

To make twinkle sound a bit slower - like a kid is playing it - let's set the tempo to T110. Match with P110.

T110P110CCGGAAGFFEEDDCGGFFEEDGGFFEEDCCGGAAGFFEEDDC

VOLUME

The volume of the song decides how loud or how intense your music will play and sound for others. In MML this is written out as “V” for **Volume/Velocity**.

Effect	MML	Value	Standard
Volume	V	0-15	8

If no value is set Maple will play the standard volume of 8.

One of the most frequent questions regarding MML is “how can I make the song louder?” and the answer to that is usually “Just type V15”. While this does make the song louder I can’t recommend this “fix” for a few reasons.

Make changes on all the tracks

Regardless if you pump up your volume to 15 or not, make sure you make your changes on appropriate tracks. Just like the tempo - the volume setting does not transfer between tracks. If you set Melody to V15 but not your harmony tracks - you’ll have one part of the score blasting out on full power and the rest of your tracks playing on a modest V8.

Sound Settings

It doesn’t matter if your instrument volume is set to max if you rock 30% on master volume.

If you wish to hear instruments loud and clear but not the general sounds of the game, lower everything else and keep both master and instrument volumes high. This way you’ll notice even V8 can ring out loud and clear.

Advanced

Song Dynamics

By using the V in a smart way, you can easier replicate the feel and flow of the original. A piano piece will sound richer and more alive if you learn how to use volume to your advantage.

The same goes for duets or multi-instrument songs. If all your instruments are blasting off at V15 it will sound like a mess. Listen to your favorite song really closely, you’ll hear a lot of sounds, some louder than others.

Equalizing

Our ears and brains usually perceive higher notes to sound louder than lower notes - even if played with the same volume. When coding a song it can therefore be really useful to take down the volume on parts with really high notes - this is especially true for instruments like the violin who tend to sound more screechy if you start to land on higher registers. By lowering the volume for those parts you can in most cases maintain a clear high note, still make it audible, but lessen the crying cat feeling.

If you don’t care about anything of the above and just want to be heard like a rockstar - go for v15.

NOTE LENGTH

Imagine that we have a ruler. The ruler is the song but instead of calling it centimeters we call each full point a **measure**. The song is made up of several measures after each other just like the ruler is made up of centimeters. The measures help us with - just that - measure the notes and align them to fit a rhythm.

The first length we have is a full note, this fills up the whole measure. We type this as 1.

The second length is the half note, this fills up half the measure. We type this as 2 (½).

The third length is the quarter note, this fills up a quarter of the measure. We type this as 4 (¼).

From here you will start to notice a pattern.

The number we write for the length can roughly be translated to “how much of the measure it fills up”

Duration	MML
Whole note	1
Half note	2
Quarter note	4
Eighth note	8
Sixteenth note	16
Thirty-second note	32
Sixty-four note	64

In MML we have two ways to type the note length out using the numbers.

The first one is to type it after each note. Let me use **C** and the **half note 2** as an example:

C2C2C2C2C2

As you can see this can end up taking a lot of space, to help with this we use “**L**” for “**Length**”.

The standard value for note length in Maple 2 is **4**.

Before a long series of notes with the same length, we simply type **L** and the value we want. This is only done once and the rest of the notes will follow that. Let me show you with the same example from above.

L2CCCCC

This works for any notes written after the **L**.

L2CCCCDDDD

And we can also combine the two ways.

L2CCCCD4CCCC

Keep on changing the **L** value when it’s shorter than writing each individual length. Don’t forget to combine when you need to!

L2CCCCCL4DDDC2DDDL2CCCC

Back to Twinkle twinkle little star again. It sounded weird until now because we never got the right note lengths. Ignoring the L4 in the beginning since it’s our standard - the code should now look like this:

T110P110CCGGAAG2FFEEDDC2GGFFED2GGFFED2CCGGAAG2FFEEDDC2

NOTE LENGTH - TIED NOTES

Sometimes you need your notes to play for a longer period of time than we have numbers for. To tie notes together we use "&". This makes the note the same duration as the two notes but without pressing the key two times.

C1C1 would play like this ____ ____

While **C1&C1** would play like this _____

Reminder! L works here as well The example above would be **L1C&C**

You can extend for how long you wish

L1C&C&C&C&C&C

And even mix the length used

C1&C4

Note! Remember that the note HAS to be the same or you break the tie! Don't tie **C** and **D** or forget your sharp signs in the middle, **C+&C&C+** means a broken tie!

NOTE LENGTH - DOTTED NOTES

If you wish to tie a note together with half its original length you can use a dotted note. This is done with "." and in really simple terms means "+ half of the length before"

C1&C2

Can therefore be written as

C1.

or if you had an **L1** before in the code as

C.

Advanced

Dotted and tied notes also work with the rest note, however, since no sound is made only use these techniques in terms of shortening the code. Further, dotted notes also work on **L** values! **L1.** can save you a lot of characters on longer periods of silence in a track.

NOTE LENGTH - TRIPLETS

Advanced

Since the whole concept of triplets can be confusing to learn and understand, I rate this whole part as **advanced**. I will try my best to explain it as simply as possible!

Triplets are like 3 in 1.

Like when you end up with triplets instead of 1 kid.

Or when your shampoo is also a conditioner and shower gel.

When you can fit 3 notes in the same span as 1, you got yourself a triplet!

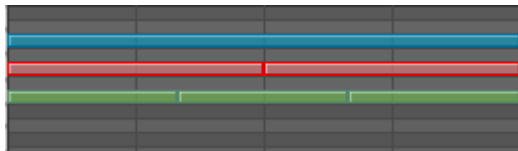
On a full note (1) you can fit two half notes.

Then how to fit 3? Just type 3 after your note!

How do I know? Math. To get the corresponding triplet, take the normal note and multiply by three, since you want to fit three inside that note.

Note Length

Duration	MML	Triplet
Whole note	1	3
Half note	2	6
Quarter note	4	12
Eighth note	8	24
Sixteenth note	16	
Thirty-second note	32	
Sixty-four note	64	



Blue: A1

Red: G2 (not triplets)

Green: F3 (triplets)

As for teaching you when to use triplets instead of the normal lengths I won't be able to offer much help. Most of the time MIDIS comes without these values and sound good enough that you won't consider the triplets. If you are composing based of a sheet, the sheet will tell you where you will use the triplets.

In the case the midi sound bad when importing to 3ML it can be due to it only using the normal lengths and only up to 64. In these cases I look at the "broken" part and pick 3 notes and try to figure out the normal length they would represent. When I have a general idea I try making the bad notes into the corresponding triplets. Hopefully I get it right on the first try, if not, rinse and repeat hoping you get it on the second.

Using triplets in MML is more of a trial and error of what works for specific parts rather than a bulletproof tactic.

SUSTAIN

In Maplestory 2 we can add sustain to our instruments.

In MML we type this out as “S” for **Sustain** and is by default turned off.

We only have two settings, 0 for off, 1 for on.

Effect	MML	Value	Standard
Sustain	S	0-1	0

What sustain does is that it let all your notes ring out even after you stopped playing them.

This is really useful when coding and to make the most natural use of it - code it where you would use the pedal when playing piano. Often a sheet will tell you when to use the pedal (read: sustain) but in the cases where it doesn't or you import a midi, we'll have to add sustain by ear.

Sustain is either on or off so learning when and how to use sustain will come with practice and is really hard to teach in text. I would recommend you to listen to a lot of synthesia tutorials, does it sound like the notes ring out/keeps playing like an echo? Sustain is on. Does the notes play very precise and does not have that flowy, echo feel to them? Sustain is off. When playing on a real piano, you rarely have sustain going for the whole song, keep on watching those tutorial videos and you'll learn when and where to put your S1 and S0's.

Recommended instruments for sustain

Piano (not including electrical piano)

Harp

Guitar

Vibraphone

Harpsichord

Advanced

All or nothing

Sustain is the only command related to sound that affects all tracks at once. This is not because the other tracks can read it, but rather, it puts your instrument as a whole in sustain mode. This means you cannot choose what notes have sustain on or off - ALL notes playing while sustain is on get the effect.

Even if longer periods of time will have sustain I recommend basing your sustain based on the bass line. When a new “section” is starting write “s0s1”; this breaks off the former sections sustain so your new notes does not get muddled with the sounds several measures ago.

The “Bug”

Why did I just give you the tip to basically waste characters to write s0s1 when sustain was needed the whole time? Because of the nature of sustain in MML and the “bug”.

While sustain does fade out after a while, it keeps on playing even if a new note is played. This means you can have several notes playing on the same track using the sustain effect. Now imagine if you have several tracks, with several notes on each, all playing with sustain. This is where the “bug” comes in. It's not so much a bug as a limitation to the system. At one point you will reach a limit to where new sounds won't be able to play. You'll notice some notes will start to “disappear”- the system does not have enough space to play that sound - because you flooded the system with old sounds.

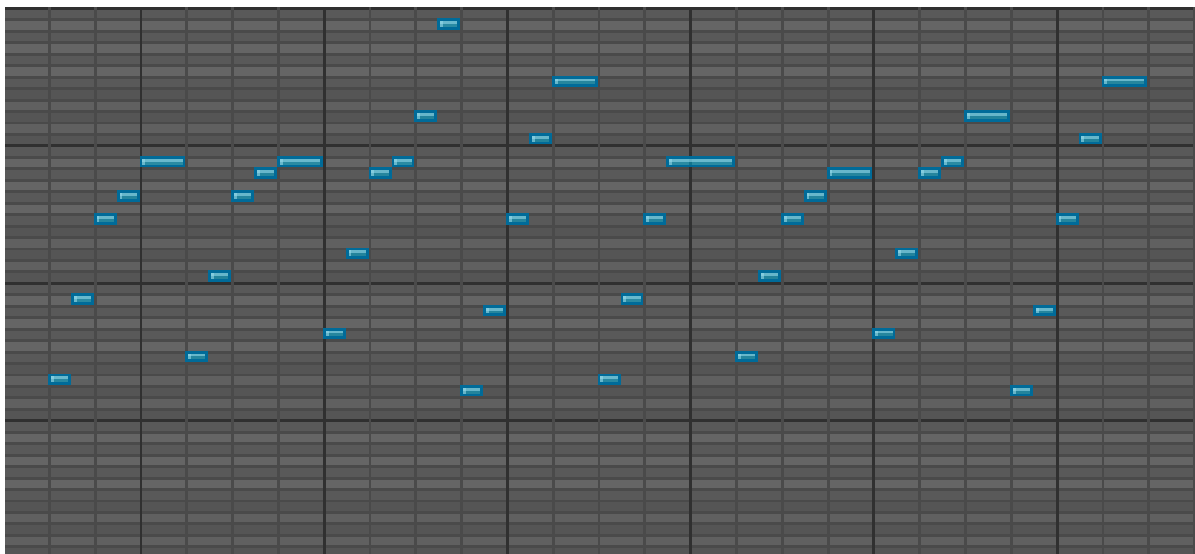
This is why I recommend you to waste characters by breaking and readding sustain at natural places.

SUSTAIN WITHOUT SUSTAIN

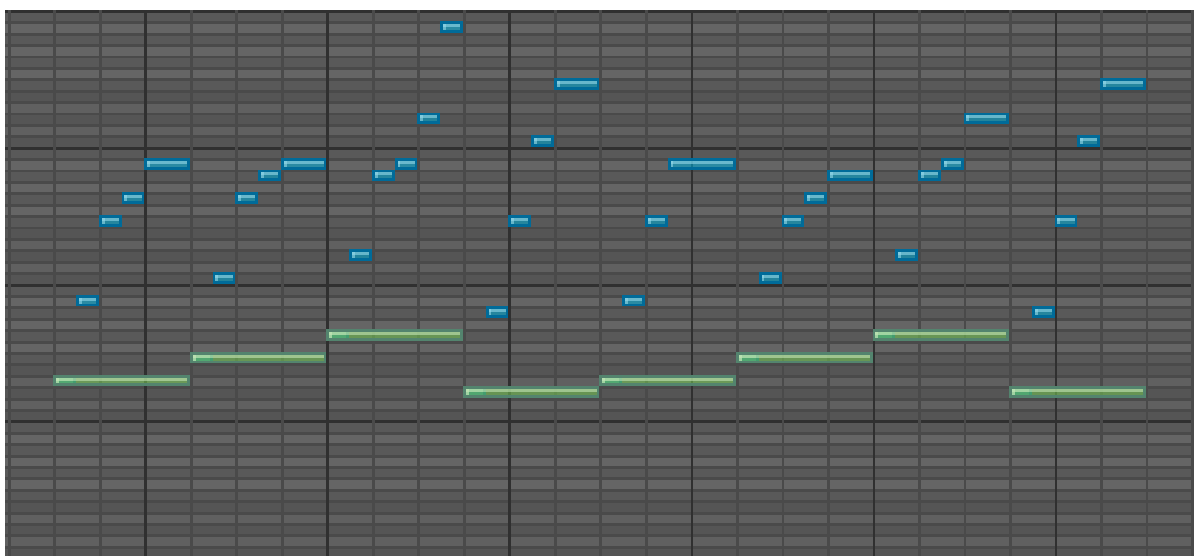
I just told you that sustain affects all tracks and that you can't select specific notes to add the effect on. But there is one lesson in life you can apply to this.

Fake it 'til you make it. Just make the notes longer.

Since Maple allow us to use several tracks we can move the notes we wish to sustain to another track and play them longer there. It's easier to show you.



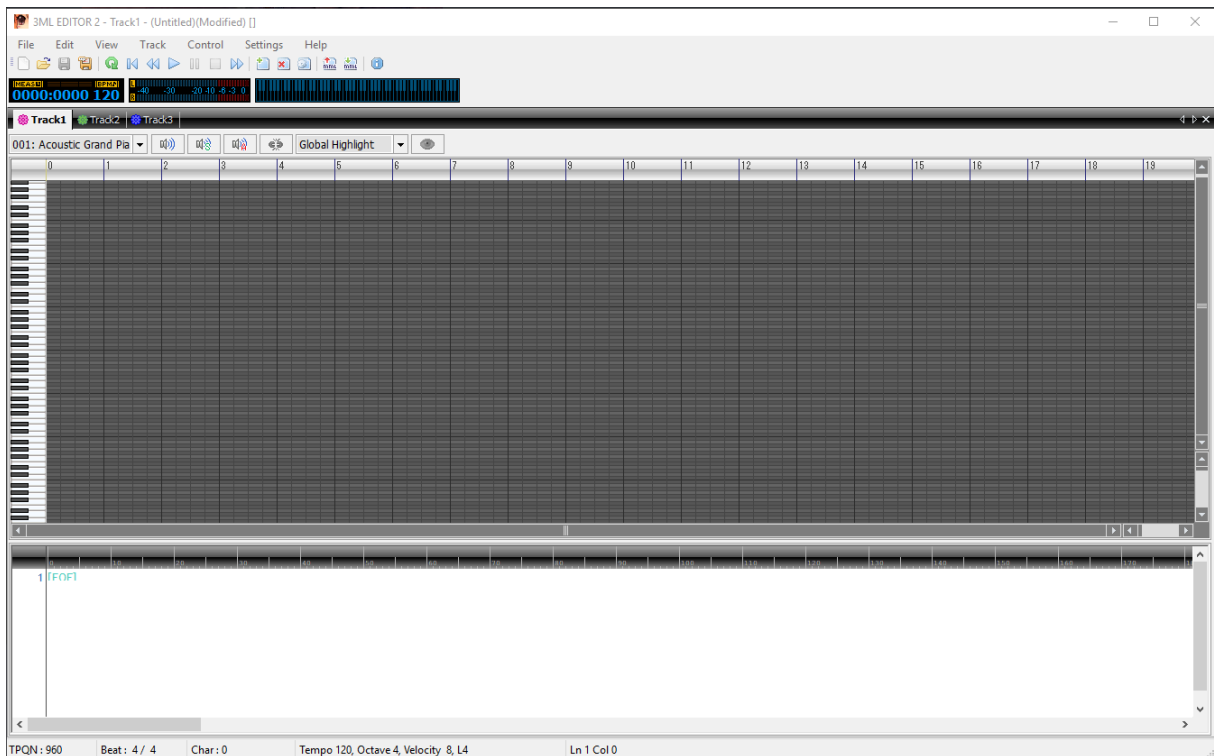
In the track above I wish to sustain the lowest note so the bassline sound rich and full. However in my other tracks (not shown) I have a lot of notes playing making the whole section sound muddy and awful when using the sustain. By making a new track I can elongate the lowest note making the illusion that it's sustained without messing up my other notes. Simple, but effective.



3MLE: INTRODUCTION

We finally reached the point in the guide where we dwell into 3MLE and start converting and coding. Before we do that, we need to get familiar with the program.

To start off, you need to download 3MLE, you can do that over at [MusicalNexus](https://musicalnexus.com/).



This is how it's going to look when you start it up. Don't worry about the small size of the picture for now, we'll get into all the details you need to know! This program will be your bread and butter no matter if you choose to code yourself or by converting midis. Getting familiar with its layout and tools will greatly help you along.

Top:

Here you will see what file you have open, general program menus, playback controls etc.

Middle:

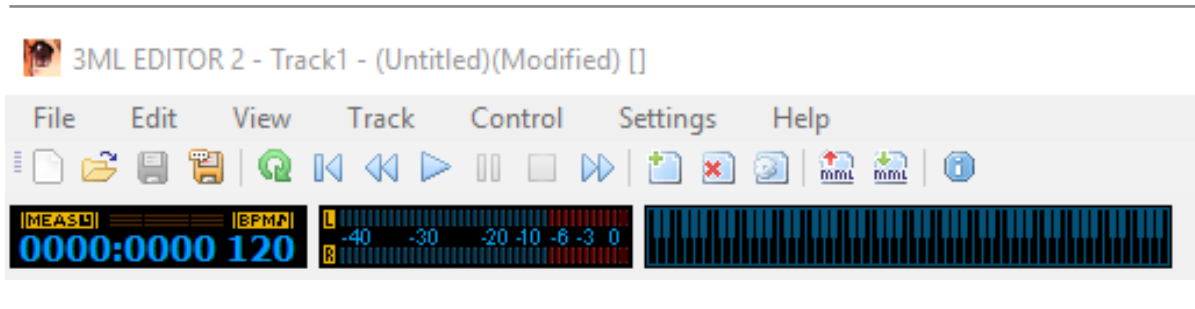
The piano roll, this is how your code looks like. Very useful for visualizing and finding errors.

Lower:

This area contains the MML code itself and works as any other text editor. What you write here will show up in the piano roll and control things like the tempo and volume of the song.

Let's zoom in and go through each section!

First of all let's take a look at the top of the screen.



Here you will find the usual things most programs have.

At the top of your screen you will see the name of the program, what project file you are currently working in and something that just might be able to save you later down the road. If your filename has **(Modified)** at the top of the screen it means you have unsaved changes. Keyrule: save often.

Under File, Edit, View, Track, Control, Setting and Help you will have access to everything 3MLE has to offer, I would however recommend to learn the short keys for features you use often. More on those later. For now, take a moment and look through these and get familiar with the menu and where things are hiding.

The row below has practical buttons for creating new projects, saving, playback controls etc.

As mentioned before, the goal is to use the short keys as much as possible, it is however very convenient to have these here to press.

Last but not least are our spaceship controls.

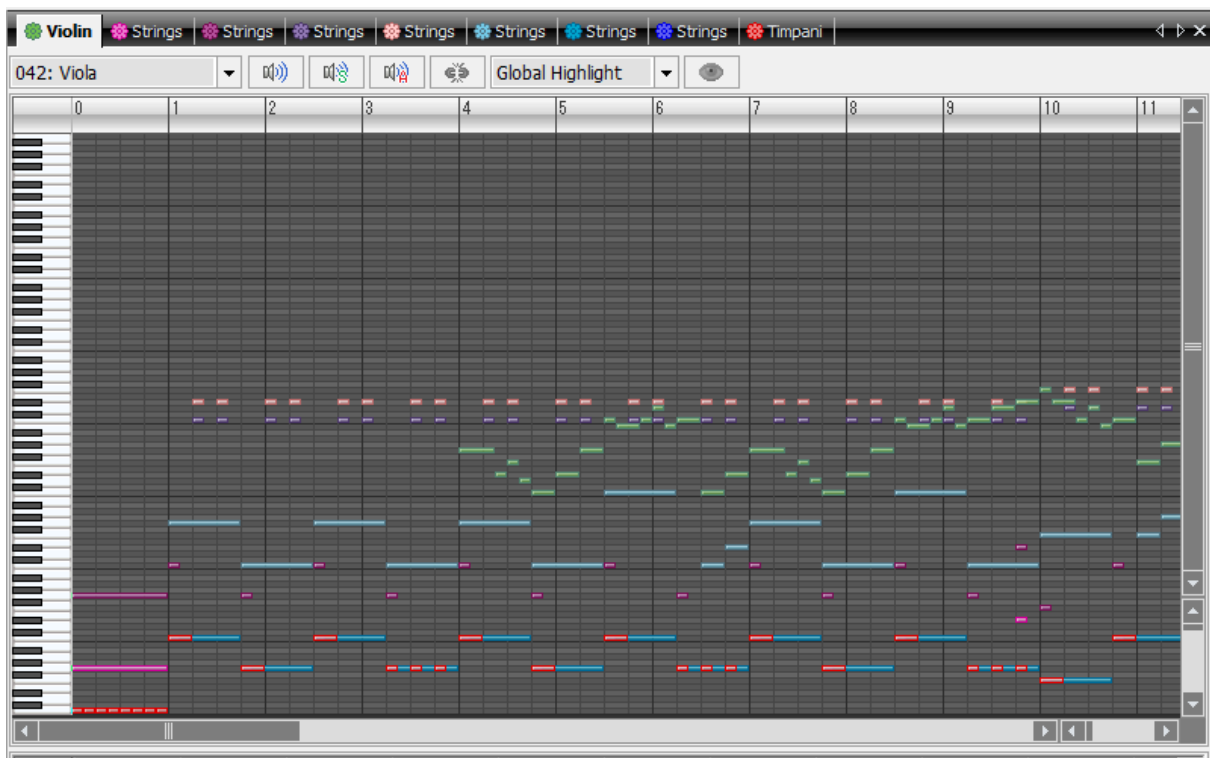
In the first you will be able to see what measure you have marked or is currently playing. You will also see what BPM (Tempo) your song is currently playing at. When paused it will always state 120 even if the measure is set to play at a different tempo.

The other two spaceships you won't look at as often and when you do, it's mostly because they light up and look cool. The middle one will show you the current level in decibel, it's a good tool to use if you're unsure if it's just the volume or your end or for everyone that's messed up. If you barely hear anything but the volume is close to the red bars? It's your volume settings being low, not the song itself! The last bar? It lights up depending on what notes are currently playing. Very pretty.

Good short keys to know:

CTRL + N	Open new project
CTRL + O	Open a saved project
CTRL + S	Save current project
F5	Play/Pause

Now let's take a look at the middle part.



First of we have the track tabs. Each one of these tabs represent a different track and each have their own text editor at the bottom of the screen. These can be named and are all color coded. The code I write in the green Violin tab is the green bars showing up in the piano roll.

For each tab we can select a sound from the drop down list on the second row. All instruments also have a GM code (the number seen before the instrument name), if you are unsure of what instrument to use in 3MLE you can reference the [complete instrument list](#) from this guide.

You can also mute, unmute and play solo on all tracks, group tracks together and sort how and what tracks you see highlighted or singled out.

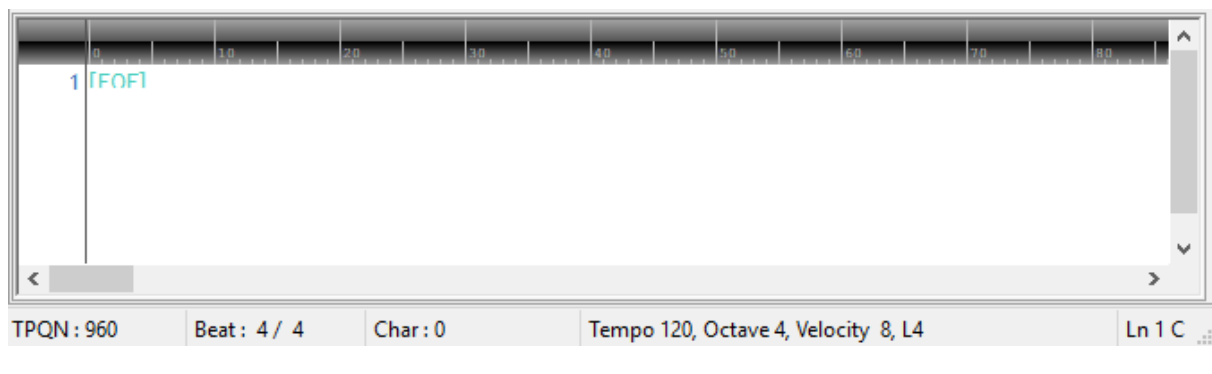
The ruler counts out what measure the notes are in and if you look closely the gray area is a grid. The grid going vertical counts out all the notes and octaves starting with O1 C in the bottom. Horizontally it will measure out the notelengths. Learn to eye measure this and your ability to spot errors (for non tempo-issues) will become +15.

Hovering over a note in the piano will give you it's information, for example: O4, V8, C4. Note that if you never optimized your code and still have the green comment section, you will see less information when hovering.

As you play your music a white bar will move across the screen to show you exactly where the notes you are hearing are. The current note will also be highlighted in the code area.

Which brings us to..

The lower part!



This part is really straight forward. The gray area is a character counter and the white area is where your text will go. You can change the font and size in the options. Change it so something that is easy to read, you will sooner or later have the need to scan the code itself for errors, don't make it harder for you than it has to be!

The blue "1" is a line counter. This can also act perfectly fine as a measure counter as well if you prefer to have your code split up to see better. I would recommend this over using the green measurement counter that tags along when you import MIDI files but I will explain that in more detail further down.

As you type some commands will change colors to be easily spotted. These are:

Tempo, **O**ctave, **V**olume, **L**ength, **N**#-notes

Commands **NOT** supported by 3mle are Performance speed, sustain and animations (m). These will only be noticeable in MapleStory2 and won't change it's color in the code. Important to know is that these commands will get wiped by the optimization command!

As said above, as you play music the white bar will move and show what notes in the piano roll are currently being played. The played note in the code will be marked, but this also works the opposite way. If your code is optimized you can select any part of the code and the white bar will show where on the piano roll the code is!

This does not work when you still have the green measurement comments left. It will only select one point in the measure (the exception is the first measurement, that works as intended). This will leave you clueless and having to count notes to figure out where. The optimized code is a messy wall of text, I agree, but 3mle can help you in other, better ways when you have done this. Your choice hero!

Good short keys to know:

CTRL + C	Copy
CTRL + V	Paste
CTRL + X	Cut (Copy + Delete)
CTRL + Z	Undo
CTRL + A	Mark all text
CTRL + F	Find
CTRL + R	Find & Replace
CTRL + T	Create a new track
F8	Optimize code in current track