Questions for development:

GOALS FOR MEETING:
1- Define feasibility for customization features
2- Understand logic for how a mathapp learns from its users

Customization means: Customizable features that the users can choose in their learning environment (e.g. font size, font color, background sounds, etc.) and learning methods.

FOLLOW UP/ NEXT STEPS:
Set up a meeting for each lead to attend

Design

- Is it possible to customize settings for "offline mode"?

Definitely, more than possible–offline support. The way it could be implemented would be a boolean value (true/false) indicating whether that feature is on or off for that user and it would be stored in local storage or async storage. Changes made to that feature would be updated in the local storage that will affect the font size, the font color, the background, the sounds, etc and then once a network connection is established a piece of code or logic would push and save those values to persist storage.

- Can we enable the downloading of specific lessons for offline access?

You can, but I wouldn't recommend it. That is always a consideration in how much data we should push on to the user based on their availability of system memory. We could request that data, the amount of system memory, from the device, and use it to manage how much data to push on the user, but the device's operating system already manages most of that. I wouldn't see the point just to tailor how much data to push on to the user for this one thing. Based on the user's progress, I think it would be better to push a certain amount of learning modules to the user. An advanced feature would be A.I. that learns and modifies what and the amount to push to the user or write code to automate some of that work.

- How caregiver password protection will work for parts of the settings? And how we intend to give the caregiver the option to release control to their learner little by little over time? (Not sure that's a big development hurdle.)

That is a good question. Never have I ever implemented a feature like this; I will have to do research…

- The 3 onboarding math learning needs questions that would inform the lesson structure for the learner. The feasibility of creating the next lessons for the learners. Which math topics have you covered recently in school/home? Which math topics are your strongest? Are there any specific math topics you'd like to get better at?

Of course, creating the logic on how the code pushes the next lessons based on those three variables (three onboarding math learning needs) is more than feasible. It would be a simple conditional statement, but can get complicated if need be and would require

a diagram or technical document; that is to say if the business logic needs to be more complicated it can be. I think I answered the last three question with the sentence before this one; I am thinking we would just need to distil those answers in a tag or coding system that would be a variable in the conditional logic or inform what learning module is pushed to the user…but also, I found this great video series so I have been reviewing my calculus and vectors; I am going to need it for courses I am about to take, but in either case I am always reviewing math topics; the basis of what I do. Statistics and discrete math, but I am pretty decent with most of since I am constantly reviewing it. Calculus and vector math is what I want to get better at.

Writing:

- Can we have a tutorial to show the gesture interaction? (Swipe, tap, or drag) Math buddy could pop in and show the user on the Marble screen example.

Yes, me thinking out load: it can be discovery or initial video tutorial to onboard the user and you want to display the gestures, so either a modal that pops up next to the item that flash to draw the attention of the user and display a video with the gesture or maybe just a video overlay with the background set to transparent a long with the user math buddy. There is a library called animate and can animate a SVG or just the CSS property transform with matrix that acts like a vector matrix to change the numbers in the SVG to give the impression of motion. I think I will research to see how others have implemented it. I have done something like this in the past but…

- How feasible is it to preview the customised settings on the onboarding by a tap of an icon/button? (for example the different fonts, the sounds etc)

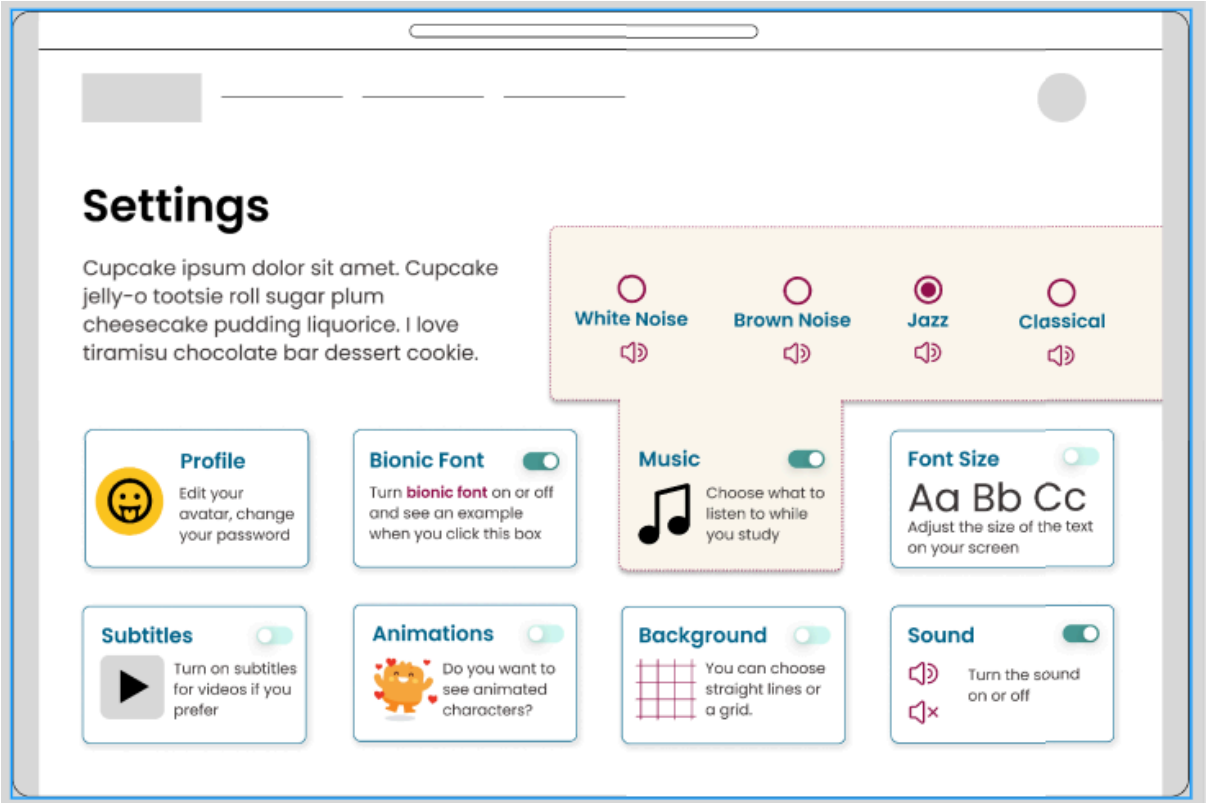
May I ask a clarifying question: your vision for this is a pop-up video with an example of how it might look or to navigate to that screen or a blank screen template showing a preview of that setting? The sounds would be easy.

- If we asked “What Math topic are you wanting to work on more?” could the answer we get be coded into what the first lesson is? For example, if someone chooses money, can then their first lesson be money?

That is exactly how I would implement that feature; a coding structure or tags that accurately describes each individual lesson or categorised in the database and pushes it to the user based on the business logic. We could get that granular with the individual lessons, but that would require some heavy coding to automate it based on the individual user's progress for example; doing it by learning modules, a more general category would be easier. I am assuming that you want to customise the lessons based on the user. Automating that process based on the progress of the user would require some heavy logic or an A.I. system that learns and adapts to the user.

- Is it possible to have example text on the screen that responds to toggled settings in real time?

If you are referring to the this:



Then easy answer, yes.

Strategy:

- How responsive / real time can the app be with regards to changing the appearance of the learning environment- so that the app appears to learn the preferences of the user and implement those preferences moving forward.

The responsiveness/real time change of those elements will be immediate. If I am understanding you correctly, you want the program to make adjustments based on the user or essentially the machine to learn from the user and implement changes. As far as feasibility, it would be easy to automate some of this, but any deeper learning would require an A.I. engine and that level of math and programming is beyond me, maybe for now.

- How adaptive can the app be with regards to learning methods?

Same answer as above.

- How might the app adapt to the different “themes”

Same answer as above.

Figjam resources:
Design-
https://www.figma.com/file/vmnv7ZUMauUfpbB6oLobqA/Mindful-Digits---Phase-2---UX-Writing-Team?type=whiteboard&node-id=0%3A1&t=BkPKC0RjoeSmG2tZ-1