Scratch From Absolute Scratch

Have you heard of "Scratch for Kids" though? So here is the story. You might have already noticed that the world of technology has been evolving recklessly for years now. Since the mid 20th century, the world started to move away from the world of analog systems like an infant who has recently learned to crawl. This child however has been growing exponentially ever since, meaning that not only the world has advanced towards more sophisticated technology, but also the rate of this advancement has been touching the roof.

What this is trying to warn us about is the fact that in just a couple of decades, many of the occupations and careers will no longer be in play. They will either be eliminated entirely or replaced by more advanced technology such as robots or automated machines and systems. The jobs that remain will most probably require more soft skills than ever before. But does this mean that college and university degrees will go out of the window? Well kind of yes.

Companies are already moving towards hiring people with more practical skill sets rather than certificates and degrees. This movement has become so common that even the most extreme companies such as Google and Apple are changing directions and this is not a new thing either. Read Businessinsiders' article "Elon Musk said a college degree isn't required for a job at Tesla — and Apple, Google, and Netflix don't require employees to have 4-year degrees." to learn the full story.

But what is going to happen to work experience though? Well, that remains in its core place when it comes to landing high-paying jobs. That is just one of the reasons why your child needs to first discover their areas of interest in technology and get on with learning it ASAP! In our other articles, we have deeply discussed other areas of technology that will be in the highest demand in the near future.

Head over to our articles, "A Brief Look At Game Design" and "5 Benefits of Robotics For Kids" to learn more about different areas of technology that are most beneficial for your child's present and future.

In this post, we are going to look at one of the most versatile and fun programs that would set your child en route to technological careers and help them enjoy the benefits of both game design and programming at the same time. The magic is known as "Scratch"! We have already discussed the benefits of game design in our article "5 Reasons Why You Should Enroll Your Child In Game Design Courses" so make sure to check that one as well.

Let's dive in!

Overall User Interface (UI)

The overall user interface or UI of Scratch is made very simple and colorful so your child would not feel bored or lose interest. After all, Scratch is specifically designed for kids and so the aesthetics of the program, in general, has been made in a way to be appealing for the typical kid as we know.

The program is compatible with various operating systems in order to have the trouble of installation removed for both the children and their parents. Scratch for kids uses a very easy-to-grasp and comprehensive tree-chart system where all the necessary commands and buttons are present.

Contrary to other programming languages, Scratch has added an interactive visual area where the user can seamlessly see the result of their code rather than having to wait to finish their work before compiling the code with a compiler. This is yet another reason why we often consider Scratch for kids rather than going towards the more advanced programming languages.

On the first page, the user can see the projects of the other users that have been published. This is in the *Explore* section. The previous projects of the users can also appear here. Scratch for kids provides a feeling of achievement for the children by making their work visible on the entire platform.

By clicking on the *Create* tab, the user can begin developing a new project whether being a game, story, or animation. Clicking on this tab would take the user to the main interface of the program. While being extremely simplistic, the user interface of Scratch is very versatile. it allows the user to change language, save their current project or load previous ones with just a couple of clicks.

The user can also control their blocks of codes, costumes, and sounds from their own dedicated tabs that are present on the top left of the user interface.

Syntax

Syntax is one of the core areas when it comes to programming. It is basically like the grammar and vocabulary that are present in any human language. We use syntax to kind of translate our commands from our language (whatever it may be) into the language of the computer. In our article "Coding, What It Is & What It Isn't" we have deeply discussed what syntax is and how it works so check it out if you are more curious about the matter.

Working with any programming language requires writing code. You have most probably seen this before in pictures, random videos, or even in movies. What this essentially means is that you have to be fluent in the syntax of the language which you are programming. You can see a couple of examples in our article “Java vs. Python, Who Does What?” as to how the syntax works in programming languages.

The story, however, is much different when it comes to Scratch! The whole concept of this programming language revolves around children and hence the name of this article, Scratch for kids! The developers of Scratch have developed the entirety of their programming language in a way that is most suitable for children.

What they have done on that front is that they have come up with blocks of code that are to be used as the syntax rather than actual code. For example, if the child wants their object to rotate 90 degrees, there'll be a block of code already established for that so all the child has to do is select it.

Scratch for kids would essentially eliminate the need for memorizing and learning the huge amount of code and syntax that is present in every other programming language. What this means is that your child will get to experience the great things they can achieve in both programming and game design without having to deal with the headaches of syntax.

Head over to our article "5 Reasons Why You Should Enroll Your Child In Game Design Courses" to learn about the benefits of game design for your child.

Flow

Another aspect that is very innovative and has proven to be extremely effective in the learning process of children is how the flow of Scratch for kids has been laid out and is being displayed. We have dived deeply into what flow is in the process of programming in our article "Coding, What It Is & What It Isn't" so head over there if you want more information on the matter.

Flow is, basically, the order in which the code must be laid down in a programming language for the user to achieve the end result they are after. Planning and applying a good structure for the overall flow of the program is one of those things which separates the master programmer from the noobs. This is especially important because one, the new programmer who may join the group later must be able to follow up on the work of his predecessors, and two, it would just make debugging the program so much easier.

The flow chart of the program actually appears in the form of a tree chart. This makes understanding the workflow that the project has come so far, extremely easy. What's more, is that the person who is debugging the game will also be having a much better time when trying to discover the error that might have appeared during the development process.

Another key benefit this type of visual presentation of the workflow provides is helping with the memorizing of the code that is being used throughout the program. Being able to visually see which part of the code is doing what and how

changing the order of the code blocks will affect the entire work is not only exciting for children but also, helps them get a better grasp of the concept entirely. This in turn will assist the child with better learning the code they are to use for running their projects on the Scratch platform.

Scratch For Kids Vs. Coding For Kids

All that we have spoken so far raises one critical question: if similar to other more advanced programming languages, Scratch has both syntaxes and flow, then why not just go ahead and learn the real stuff?

That is an excellent question! Well, it is true that all programming languages work with syntaxes and flowcharts, the way they are used and input within the framework of the language and the project differ greatly. While being more realistic and future-proof, programming languages such as Python and Javascript are often filled with complex codes and data structures that may not only be way too difficult for a youngster to grasp but may even also push them towards losing their interest in the matter!

With Scratch, programming has turned into an extremely simple drag-and-drop system that works! As we have mentioned previously, the developers have managed to turn all the headaches of coding into a fun and easy-to-use system so the children can easily interact with the program and achieve their desired results.

Another reason for choosing Scratch for your child over other programming languages or simulators is the real-time visualization that Scratch provides. After putting the block of code together, the entire program will be rendered with just one simple click.

Having to use blocks instead of typing in code is also another key feature of Scratch. As also mentioned before, the developers of the program have managed to get rid of the tedious typing thing and instead, turn it into a pleasant experience.

Programming can also turn into a nightmare for beginners and children. It is often quite difficult to determine where you have gone wrong and find an easy fix for the issue. This process, which is called debugging in the world of programming, is often a headache and has been overcome in Scratch!

It is only fair to mention that while being extremely user-friendly, Scratch is not as capable as other more advanced programming languages. The applications of Scratch are limited to those integrated within the program. What this essentially means is that even though the user will be learning about the basic concepts of programming and creating some basic games, animation, and programs, they will not be able to take that much further.

With more realistic programming languages such as Python and Javascript, the programmer can code for literally countless purposes and applications. The real-world applications of these are extremely vast which makes them super versatile.

The Community

According to the Scratch official website, they are currently offering the largest coding community for children. The Scratch Foundation has managed to bring countless benefits through creating a diverse and versatile online environment for their young users.

The community is created around the most updated international standards and regulations so parents can freely allow their children to make friends and communicate in the community.

The community allows our children to make like-minded friends from all around the globe, preparing them for building a future anywhere in the world. They get to experience life and cooperation with children from other nations and varying cultures, share their knowledge and experiences with them and learn so much more along with learning about game design and coding.

This community is basically like a tech kindergarten where children get to sharpen their soft skills in an extraordinary environment that is not only safe and supervised, but is also culturally rich. The creativity of children literally has no end. Grouping all these ideas together often leads to fruitful results.

The children also get to share their projects with their friends through the community and receive feedback. They will have the chance to ask their questions from one another and solve their problems by themselves rather than taking help from their parents. This leads to a major boost in their self confidence by stimulating a sense of achievement.

Such communities are not very new though. For example, there are also large communities for Python and Javascript developers where they do pretty much everything our children do in the Scratch community. Many times, these lead to well-paid career opportunities.

Overall, the community which the Scratch Foundation is providing is an excellent tool for children to boost their creativity and increase their learning curve.

What We Offer

In Geniuscamp we offer all-inclusive Scratch courses pretty much from the scratch! The purpose of these courses is to familiarize your child with the basics of programming and game design in a fun and creative way to ensure maximum learning quality.

Our courses are suited and crafted for children as young as 5 and all the way to 17 years old. Each course has its predefined course material, homework and final project. Your child can take semi-private sessions with a maximum number of 3 students per class or, take our 1-on-1 sessions and enjoy a customized lesson plan that suits their needs and style of learning. The guys at Geniusmath have fully explained the advantages of private tutoring in their article “7 Reasons Why You Need to Hire A Private Math Tutor For Your Child” so make sure to check that one as well.

Our Introduction course will cover all the foundations that are necessary for your child to grasp the basic concepts of programming. This includes things such as how syntax and flow work individually and together and what motions and loops are. This course consists of 10 hours of teaching and learning along with 2 weeks of project. The entire course takes 3 months and is the prerequisite of the next course. Click here to head out to the page of this course and learn more about it.

The Intermediate course takes all those basic grounds and builds a couple of stories over them by taking the material further and more in depth. In this course the student will dive deeper in loops and variables as well as data storage and decomposition. It is a 15 hour course that is followed by 2 weeks of projects. The final project for this course is for the students to learn to create a wider range of programs and games using Scratch. Learn more about this course by clicking here.

Finally in our Scratch Advanced course, your child will head out to develop and design more sophisticated games such as Super Mario and Angry Birds with the firm foundation they have already established through taking the previous courses. Similar to our Intermediate course, this course also consists of 15 hours of lessons and 2 weeks of projects and is completed within 3 months.

Final Thoughts

To wrap up the entire thing, it is safe to say that Scratch is one of the best tools that are out there for getting your child to try programming and game design in a fun way. After all, the world has been heading towards technological advancements for quite some time now. This essentially means that there is a good chance a good portion of the jobs and careers we know today may not exist in the next 10 to 15 years.

If you are concerned about the future of your child, head over to our courses section on top of the page or click here to learn more about the courses we offer,

how each one would prove beneficial for your child and select the most suitable class.

Also don’t forget that their first session is on us so feel free to contact us for any further questions or information and get your child started!