

Idea Proposal

[Maximum 200 words / answer]

Names: Austin Parris-Powlette, Joseph Paradiso, Aida Bozulan

Target SDG(s): Quality Education

1. What is/are the problem/s you want to solve? Why is it important?

To make CS more entertaining and easier to understand for people with little to no experience. Learn data structures and algorithms with JAVA.

2. Who are the users you are targeting?

People who want to learn how to code but do not have much experience and are scared to learn JAVA and data structures.

3. How will this app solve the tackled problem/s? Provide a vision statement.

We will provide lesson plans to learn fundamental coding knowledge. Then, we will provide quizzes and flashcards to deepen the student's understanding. Simultaneously, there will be graphical demonstrations to help users understand concepts in an intuitive way.

4. What are the major features of the app?

Beginner option, advanced option. Flashcards, quizzes, and graphical examples that look like scratch.

5. What similar apps exist on the market? (at least 5 apps with names, screenshots, links, descriptions and how different they are from what you want to do)

- 1) Duolingo, is an app to learn new language, our app is to learn java programming language
(https://play.google.com/store/apps/details?id=com.duolingo&hl=en_US&gl=US)
- 2) Codecademy, is an expensive teaching app, and we are non-profit
(<https://www.codecademy.com/resources/blog/codecademy-go-faq/>)
- 3) ScratchJR, an app designed for 5-7 year olds to learn coding and is very basic. Our app will be for older children and be more advanced.
- 4) Encode, a structured learning environment, like a classroom, we would offer more of a Quizlet style learning environment option.
- 5) Udacity is an app that offers courses in HTML, CSS, Javascript, and Python. The app is free, however, some courses can be expensive, costing anywhere from \$1000-\$2400. (<https://www.udacity.com/>)

6. How is your app unique?

Our app would be unique by combining the best aspects of the different apps on the market. Each of these apps has something to bring to the table but are lacking in other aspects. Our app will also be completely free.

7. What are the risks associated with the development of this app? Why wouldn't it be delivered completely (scope), on time and on budget? Identify 3 to 5 risks that are relevant in your case.

- 1) We may not be able to offer all of the different aspects of the app in the time given.

2) We may not stand out in the competitive app market with well-known alternatives out there.

3) We will not provide a compiler for student's to implement their code as it takes more space and resources

8. What is your goal with this project? (build portfolio/resume, get experience in mobile app dev ...)

Our goal with this project is to build an app that will be useful to students learning how to code and learn algorithms and data structures. We also want to use this app to flesh out our resumes.