Test your Knowledge – a Programming app to visualize what you need to work on.

Kthan Graham

[21/FA-COP-2939-55638 Computer Programming Capstone](https://hcc.instructure.com/courses/104584)

Dr. Mubarak Banisakher

8/29/2021

The purpose of this application for my capstone is to help gauge where you fall as far as your knowledge goes for different programming languages (both logically and for syntax. With the languages of ; C, C#, C++, CSS, Java, Javascript, PHP, SQL, and HTML as these are the only languages I have experience with) and give you a statistical break down on what you scored and why, it will also provide W3school links to resources to help you improve .The problem that follows entry level program specialists is that they have a hard time gauging their knowledge level and often fall victim to ‘imposter syndrome’. Imposter syndrome is defined as ‘refers to an internal experience of believing that you are not as competent as others perceive you to be’ ([reference](https://www.verywellmind.com/imposter-syndrome-and-social-anxiety-disorder-4156469)).

Please let me know if this does not meet your requirements as I spent a few days brainstorming and landed on a few different ideas (Name: new Music much? - a music app that is similar to Spotify but will not replay previously played songs to help you expand your music library, Name: It’s just facts - a visualizing programming puzzle game to help teach younger individuals to program, or Name: Psych - stock bot that will give the approximate prices of stock in the future based off of news articles and world events)

Platform:

I really wanted to test my self and my ability to learn new processes and make an Android application as I have never even thought of trying to develop one before. I am hoping to gain a good understanding of UX and UI because most of my programing projects have focused on the back end of the software and not much of the front end. I will be using adobe Xd to help me decide on a clean and easy use interface.

Intended audience:

This app would be aimed to hit young adults that want to improve their programming as well and individuals trying to break into the industry to help them gauge if they are considered novice, intermediate, or a savant and point them to resources to improve.

The inspiration for my idea comes from my self and my friends that I help to program (Aden and Alicia). Aden is a brilliant individual and I consider a savant, but he is always downplaying what he can do when it comes to programming and Alicia is always saying that I am 1000x better and programming logic even though she solves problems I didn’t even realize existed.

Limitations:

Sadly, this is going to be a very time-consuming project because I have never developed an app and have next to no experience with front end design. On top of that I will be needing to reach out to developers at my work and in linked in to get a gauge on what working professionals consider to be novice, intermediate, or a savant and why then I will need to translate that into the test somehow.

Schedule:

I am aiming to have 2 week sprints where I gauge where I am at and what I need to complete the next step of the program.

* By Sep 19 – Have a prototype with a few of the language tests flushed out with a statistical break down.
* By Sep 26 – Have at least one test completely flushed out with links pointing to resources.
* By Oct 1 – have a Case study defined completely with feedback from professional programmers.
* By Oct 31 – Fully document my program and hopefully be done with all of it and begin bug testing
* By Nov 15 – Have a fully fleshed out App that would be ready to launch (this should give be about 10 days to add min more features and implement some nice-to-have ideas that pop in my head)

User training and/or user documentation:

Please forgive my ignorance but I believe this is asking for what the user manual would be right? If that is the case, then I when you first download the app or launch it for the first time I am thinking of making a quick 10 second video explain what the app is and what it does. After that it should be pretty straight forward for the user to begin using the tests.

A delivery/installation plan if:

This one will be the tricky issue because I am not sure what the requirements are to publish an app on the Play store but if I cannot get my app up in time then I will have a packet that can be installed onto your phone directly that will let you launch the app.