## Homogeneity

## Weekly Report 24: 3/23 - 3/28

Programming languages can usually be broken down into categories of higher-level languages and lower-level languages. However, within each subcategory, software developers can leverage prior knowledge from one language and apply it to another because of the homogeneity between languages and results in quicker and more efficient development.

This past week I had the opportunity to leverage ideas in high-level backend languages like Python and apply these concepts to frontend languages like Javascript. In doing so, I was able to ensure that the general development process was smoother and the learning curve would be less significant.

One of the major challenges of applying Python-based code to Javascript based code were syntactical issues in regards to the different ways the code is written; in essence, while the logic and fundamental were the same, the style was different. To overcome this, a couple of different approaches were taken; first, it was necessary to see if there were any Python to ReactJS transpilers which was inspired by previous projects which used a Java to Kotlin transpiler. Unfortunately, these did not exist. Therefore, the only other option left would be to become proficient in Javascript. This would require intensive study of the language and application. Through facing these challenges, I have gained skills of adopting prior knowledge to current projects as well as quickly obtaining the skills to fulfill a project's necessities, all skills highly sought after in the software development industry.

Reflecting for the future, this experience has been more beneficial in general skills rather than specific technical skills. While I have learned many programming concepts through this, the more important skills that have been transferred along are learning concepts quickly and with ease as well as thinking creatively to develop effectively.

