## Final Project Proposal CSCI 35500 Jayden Thrasher

## **Project Description**

For my final project, I would like to do an in-depth exploration of the Kotlin programming language. Kotlin is a statically typed, general-purpose programming language initially designed to run on the JVM. Today, Kotlin is quickly becoming a reliable alternative for Java codebases and has a wide range of solutions for mobile development, server-side programming, data science, and even web development.

For this project, I will be working alone. I plan to explore what solutions Kotlin offers in each of the domains listed above, namely, mobile development, server-side programming, data science, and web development. In each of these domains, I plan to build a small sample application and write about my findings. Creating a small sample application in each space will allow me to better understand how using Kotlin compares to using some of the alternatives in each field

## **Anticipated Challenges**

Kotlin is a programming language that I have been interested in for a while, but I haven't had a great opportunity to dive in. As with any language, I expect that there will be a bit of a learning curve. More so than the syntax itself, I think that there will be a fair amount of tooling to learn before I will be able to make much progress with my implementations. For example, I will need to learn more about build tools like Maven or Gradle to properly build my sample projects.

To show that my projects are correct, I will demonstrate some functionality in each of the domains listed above. Additionally, in my write-up, I will link to proper documentation where appropriate.