Adiza Awwal
Preliminary Project Proposal
Professor Gail Kaiser Due: Thursday, April 4, 2019

What I would like to investigate:
I would like to investigate application development process for traditional programming in comparison to low-code development. This project idea stems from my midterm paper research that studies the maintainability of low-code software systems.

How I would like to investigate:
I plan to implement a mobile application with a fair amount of complexity using traditional programming techniques and then implementing that same application using low-code development. Throughout the process of developing these two applications, I can then document the development process for both and address instances when one type of platform should be prefered over another. Secondly, I can conduct a user experience study to understand the difference in reception from an end user.

This concept should address the three main criteria for the project: software developer productivity, software product improvement, and/or novel use cases for software engineering techniques, practices or concepts. This is a forward facing research in that there are a lot of unknowns surrounding low-code and/if if should or should not be prefered over traditional techniques.

Other considerations:
As pointed out by Professor Kaiser, all topics surrounding the applications have to be discussed for the research portion. Testing, maintenance, version control, development methodology etc. are all portions of the project that will be reviewed and compared. I plan reference COMS 4156 testing material.

The application itself:
For the actual application, I first plan to complete as many features available in the low-code development environment first and then complete the application using traditional systems. Professor Kaiser suggested this as doing the reverse could foster issues within the low-code platform (e.g. building features low-code development environment does not support.) The app will be an “everything” app - utilizing as many features within low-code as possible - without necessarily making cohesive sense.

Team:
I don’t have any teammates. I’m approaching this project as an individual.