Faris Soepangat
Raziuddin Mohammad

Summary and Discussion

The Testing Project was a project given to us in the CSE 4321: Software and Maintenance course during the Summer 2024 semester. The motivation for this project was to provide an opportunity for us to practice basic, concepts, principles, and techniques covered in this course. Specifically, we were able to apply control flow testing to a program of moderate size. The program was called Printtokens.java which is a Java class that implements a string tokenizer. The program is about 500 lines of code with seeded faults. There was a total of 17 methods including the main method.

Setting up the project:
1. Create a github account if we haven't already
2. Go to the github classroom link in canvas to either create or join a group (this would automatically link our github account to the project)
3. Generate a personal access token for later
4. Launch terminal in Linux with git installed. Navigate to the desired directory where you want your project to be
5. Clone the project (instructions were provided in class)
6. Watch the 3 youtube videos provided
   - Drawing Control Flow Graph
   - Creating Test Paths, Identifying Test Inputs and Expected Outputs
   - Writing Tests and Debugging in Java
7. We were then ready to begin the project

Must have Files:
1. Control Flow Graphs (CFGs)
2. Test Cases
3. Source Code
4. Code Coverage Reports
5. Faults and Corrections
6. Summary and Discussion (this)
7. ReadMe.txt

Experiences:
Our experience working on this project was interesting. We used draw.io to make the control flow graphs because it was recommended. We never worked with Junit in the past and learned a lot about it. Having the correct Jar files is important because your code can be correct but if you don't have the necessary jar files the test would not work. We were able to learn and implement everything we learned this semester in this project. If we were to do this project in the future, we would start earlier instead of the week that it is due. Also, we would ask questions ahead of time.