# CptS 422 Deliverable 1

## **Group Members:**

Kenzo Banaag @kenzobanaag on GitHubDrew Kelly @DKelly01 on GitHub

Isaac Schultz @IsaacMSchultz on GitHub
Sean Wallace @swallace-wsu on GitHub

## **Development Process**

The group started by assigning each member an anti pattern to research. The group then proceeded to choose metrics that they would implement. Each group member had a branch to work on the GitHub project. Periodically we would merge all our work together into the Deliverable1 branch on GitHub, then merge the changes back into our local branches to make sure we had a somewhat up to date copy of the project.

### Work Distribution

We tried to assign the similar metrics together, but things ended up being rather messy so assignments are all over the place. Each person decided on an anti-pattern that they would implement in their code.

#### Drew:

- Operator count
  - Unique operators
- Operand count
  - Unique operands
- Halstead Length (Figuring out how to run checks inside other checks)
- Anti-Pattern: Swiss Army Knife

#### Sean:

- Number of comments
- Number of lines of comments
- Number of looping statements
- Beginning work on writing JUnit tests
- Anti-Pattern: Shotgun Surgery

#### Kenzo:

- Number of expressions
- Number of variable definitions
- Local method calls
- External method calls
- Anti-Pattern: Duplicate Code

#### Isaac:

- Cyclomatic Complexity
- Maintainability Index
- Halstead Length
- Halstead Difficulty
- Halstead Volume
- Halstead Vocabulary
- Halstead Effort
- Number typecasts
- Anti-Pattern: Cut-and-paste programming

### **Team Communication**

To communicate, the team used a discord server for voice and text communication when not at school. We also made use of a project board on our GitHub Repository with Issues assigned to each team member to split up the work.

## **Team Meeting Schedule**

The team met twice a week on Tuesdays and Thursdays after 422 until about 6pm.