EECS 581 Initial Project Description

Team No. 19

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Project Name:

Automated Code Refactorer

Project Synopsis:

A tool to help developers automatically refactor their codebase with one click.

Project Description:

Through our collective experiences working as Software Engineering Interns at big tech companies, we all came across a common problem. The problem is that these companies with huge codebases tend to have a ton of technical debt. These technical debts include code that are not being reused efficiently or not being split into its own independent function on another file. This is a huge problem as developers end up spending hours fixing their technical debt as opposed of using that time to work on building cool new features that will bring them more users. Therefore, in order to address this problem, our team though of building a tool that allows developers to refactor their codebase with one click. We are envisioning our end product to be a command line interface where our users will specify the file and content of the file they want refactored, and after that our algorithm will automatically generate a new file with the refactored code.

Project Milestones:

First Semester:

- 10/23/2020 - Complete research on tools we can use to accomplish our task and plan on how to efficiently use them.
- 11/13/2020 - Complete the code portion where users will now be able to use our tool as a command line interface.
- 12/04/2020 - Complete the code portion that will enable users to specify the files and output them.

Second Semester:

- 02/15/2020 - Complete automated refactoring algorithm.
- 03/29/2020 - Combine code together and present first prototype.
- 05/03/2020 - Final product ready.

Project Budget:

$0 – We plan on hosting our code with Heroku’s free hosting service.