

# Project Concept Proposal for 'Java Project Analyser'

Nowadays, a lot of software engineers engage themselves in writing plenty of code. This java tool is intended to help these developers keep a track of the volume of code they have developed till date. This project will scan through a java source directory, and extract valuable information such as the Number of Classes, Number of Interfaces, inheritance relationship between the classes, the signature of functions within the classes etc. This information can help a reviewer to assess the quality of code written by evaluating the ratio of number of lines per class or per function to gauge whether certain functions could have been implemented in a better way.

This Project when developed should consist of 4 screens

- **Welcome Screen:** This should be the initial screen in which a brief description about the project is displayed, and the user must choose the path of the java project they want to analyse
- **Project summary screen:** This screen will be a dashboard where a user can see overall metrics of the project such as the number of classes, interfaces, lines of code. This page should also list out the package names which the user can choose to analyse further
- **Package Summary Screen:** This screen when developed should consist of metrics about the package the user selected in the previous screen like the number of classes it contains, and lines of code contained in this package. The user should be able to click on any class within this screen to analyse it further.
- **Class Summary Screen:** This screen should consist of metrics about the class the user selected in the previous screen, and details about the functions it contains.

To analyse the project, the user is required to select a java source directory, and not the JAR file of the project.

## Technologies used in the project

- Java
- JavaFX

## Third party libraries used in the project

- Java parser