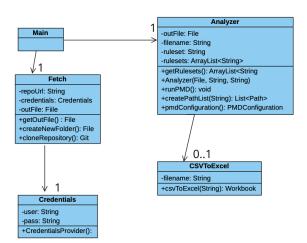
Jake Opie 3/6/2023 SE 350 Implementation Project

Overview

I did research on the libraries offered to use before attacking this project. I found that PMD, JGit, and Aspose were best for my implementation. I did not feel the need to use many of the design patterns discussed later in class (Abstract Factory, Decorator pattern, Interfaces in general), so I had a rather basic implementation. There are classes that serve each individual purpose from providing credentials for JGit operations, fetching the repository from Github, a class to handle PMD analysis, and another to convert the default CSV file to an Excel visualization. This makes the UML fairly simple, with every class connected but only CSVToExcel being optional. Every other class is only implemented once, yet the Singleton pattern is not implemented to prevent the application from being over-complex. The project only work on Java files, and it automatically parses the project to find Java files given a root directory.

UML Diagram





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