

## General Requirements - Text Files Analyzer:

1. GUI
2. Opening and validating file names
3. Reading text from file and reporting
  - a. # lines
  - b. # blank lines
  - c. # spaces
  - d. # words
  - e. Average chars per line
  - f. Average word length
  - g. Most common words
4. Help information
5. Removing punctuation and possession from analysis
6. Handling multiple files
  - a. Reporting history of all files processed (name and date)
  - b. Averages across files

## Non-functional:

1. Creating use case scenarios
2. Creating class diagrams
3. Testing planning with data
4. Using bitbucket

### ViewModule

- Controls the rendering of the GUI
- Transitions between different views/states
- Listens for user events and fires actions

### FileModule

- Handles program interaction with the file system
- Checks for the existence and permissions of files
- Reads and writes files

### AnalyzerModule

- Handles the analyzing of text from files
- Parses input while recording necessary statistics
- Ignores punctuation and possession from files during analysis

### HistoryModule

- Keeps a historical record of the files that were analyzed
- Tracks filename, date, time, and final statistics of each record
- Tracks averages of all statistics from all files analyzed.

### HelpModule

- Provides a description of the program as well as guides for all possible user interactions
- Provides an error log that has a history of all past error messages