## Pattern 1: Template Method

## Location: Filehandler.py – lines 9 – 158

## Why:

This pattern is applicable because the different file extension readers are practically the same object. They differ in the body of the method which reads the file. Originally, these subclasses methods were the only difference between each one. Each class had one method called read() which would open the file, read it’s contents and then close it (excluding xlsx).

A problem with the old implementation was that some code was being reused across different subclasses (.txt and .csv) where the file was being opened and closed.

To implement template method I separated out the responsibility of opening, reading and closing the files into 3 separate methods. These methods could be technically interchangeable across different file extensions depending on what is required to open them.

## Pattern 2: Factory Method

## Location: chart.py – lines 7 – 143

## Why: