Coding Challenge Overview

# Design Considerations

## Choice of language

Though in day to day life at the bank (NAB) I use java 7, I decided to use Java 8 here to show my agility for learning.

## Separation of concerns

When thinking of the design I tried to adhere to separation of concern. Thus, there are the following class groups:

1. cli – is responsible for processing program arguments.
2. data – is responsible for collecting data and processing it. The data may be entered by the user or supplied via a file as program arguments (DataInputReader).
3. core – is responsible for the core logic of the program where three page paths and usage statistics are calculated
4. main program – is responsible for managing the flow of the program from input reading to the resultant output.

## Simplification

1. Maintainability – One of the most important aspects of maintenance is readability. As such, I tried to use meaningful method names and keep the methods concise and responsible for as minimum logic as possible. Thus, method bodies ended up mostly with a small foot print making it easy to read and understand.
2. Thirdparties – I tried to make use of third party utilities to ease the reading. For instance: ‘hamcrest’ for testing as well as commons-cli for code simplicity.