**Software Testing Mini Campaign**

**Week 13 Third-Party Code Testing**

**Issac Jose Ignatius (1004999)**

Xu Muzi:

<https://github.com/xl-Mu/50.003-Software-Testing-Mini-Campaign>

*Code Inspection:*

Upon inspecting her code, I have noticed the following:

* A user is unable to select a unique combination of columns to allow for comparison between the 2 Files – This is a requirement stipulated for the Mini Testing Campaign. Hence, the user is only able to perform a full row comparison between the 2 files.
* The CompareCSV Program performs a line-by-line comparison between the 2 Files. This means that it is sensitive to duplicate records and the order of the records.

Based on the above observations, I have identified a set of bugs. The **most critical bug** is that the software program is unable to compare records against a unique combination. This was a functional requirement of the CompareCSV Program.

*Blackbox Testing:*

Then, I tried to do the following –

1. Check the program’s ability to work with duplicate records
2. Check the program’s ability to work with records with different number of records in both files
3. Check the program’s ability to work with different order of columns
4. Check the program’s ability to work with different order of rows

Code and Files Used: xl-Mu-50003-Software-Testing-Mini-Campaign.zip (Refer to issac-j17/SUTD\_ESC\_2022\_Software-Testing-Mini-Campaign GitHub Repository).

Result – All Tests Failed. These 4 additional bugs arise from a Design Flaw in the Program where the comparison is made line-by-line instead of a row-by-row comparison. Hence, the Program is unable to recognise duplicate records, different order of columns and different order of rows. Also, a Boolean AND is used to check if both files have a next line. Hence, the comparison is truncated by the file with fewer number of rows present.