Software Construction Notes

Black Box testing

* Focuses on input/ output of each component or call
* Without knowledge of how the class under test is implemented.
  + Program is treated as a black box.
  + Implementation details do not matter.
  + Requires an end-user perspective.
  + Criteria are not precise.
  + Test planning can begin early.

Equivalence Partitioning

* Basic idea: consider input/output domains and partition them into equiv. classes.
  + For different values from the same class, the software should behave equivalently
* Use a test value from each class.
  + Example: if the range for input x is 2..5, there are three classes: “<2”, “between 2..5”, “5<”
  + Testing with values form different classes is more likely to uncover errors than testing with values from the same class.

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Using Input / Output Files

General File I/O steps:

1. Include the header file fstream in the program
2. Declare file stream variables.
3. Associate the file stream variables with the input / output sources.
4. Open the file.
5. Use the file stream variables with >>, <<, or other input/output functions.
6. Close the file.

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