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SSW 540: Individual Exercise – Testing Software

1. What kind of tests would you run on this program?  For what would you test?

**ANS:** The Software testing methods that I will use are as follows:

* 1. System Testing: It evaluates the code written fully as a system. Designing the test cases based on the overall requirement specifications and covers all the combined parts of the system.
  2. Unit Testing: This method evaluates each modules/function used in the program by defining the test cases, in our case guessing the number. From the guess the number program, we only have on function gs(a, b) will check if the number guessed matches random number.

1. What testing partitions would be appropriate for testing the function comparing guesses to the target number?

**ANS:** We can build test cases for different partitions such as:

* 1. If the user could not guess the number in 5 attempts, printing out the random number the computer generated.
  2. When user enters number less than 1 and greater than 20.
  3. Testing all the error conditions – If the input entered is not an integer, Accepting values in the range 1-20.
  4. When the user has guessed the number in 5 turns.

1. What testing of ATM software would be analogous to the tests and partitions used for your Guess a Number game?

**ANS:** The type of testing which are similar between ATM Software & Guess the Number program is Unit Testing & System Testing. Since, the ATM model has more functions as compared to guess a number model, we will require Component testing & integration testing to evaluate the non-functional/defects after the completion of the entire program.

Also, partitions which are common would be:

1. Correct Value:

Defining the next steps after entering the correct values and integrating with modules which evaluates the next step.

1. Incorrect Value:

The Value entered to guess the number & PIN in the ATM needs to be validated with correct Number/PIN.

1. Number of attempts:

The Number of attempts required to guess the number & Number of attempts required to Enter the PIN are both limited.