

**Department of Electrical & Computer Engineering**  
**AAI/CPE/EE 551 Section A *Engineering Programming: Python***  
**Spring 2022 – Final-project**

---

Notes:

- Project Due Date: Wednesday, May 4<sup>th</sup> by 6:30 PM.
  - Submit a Python File (.py file) to the Canvas course website. There is a “Final Project” assignment on the course website where you can submit your project.
  - Do not submit PDF or .doc files
- Add comments in your .py file.
- Grading is based upon 100 points. This project is 20% of your final grade.

This python project is a good start for software developers as it has concepts including strings, variables, and concatenation. This project teaches the following

1. To manipulate user-inputted data.
2. To print the user input data
3. To use string concatenation
4. To take entered data and arranges it to build a story template.

**Procedures on how to write this project:**

The program generates a random number from 1 to 10, or 1 to 100 any range that is specified by the user and the user must guess the number. Every time a user's guess is wrong, they are prompted with hints to make it easier for them to guess the number but at the cost of increasing the number of guesses.

Challenges to do on your code to earn points [max earning points are 100]

1. Use the random module from Python [10 points]
2. Ask the user to enter what is the max possible random number [10 points]
3. Check if the user enters a number or a string and request the user to enter number the next time [20 points]
4. Ask the user to guess the random number [10 points]
5. If the user enters wrong guess, prompt the user to enter below or above the wrong guess [20 points]
6. Inform the user with how many guesses were done to guess the random number correctly [20 points]
7. Clear your code and add comments as appropriate [10 points]