Project 4 Rubric

Checkpoint 1/Section 1: 15 points

This section of the rubric (Checkpoint 1) is meant to be a backup in case we decide not to assign a binary grade

* The plot button is there - 1
* The plot button is functional - 1
* There is a graph element that displays the function - 1
* The graph displays the correct function based on user entered parameters - 4 (1 for each parameter)
* All the parameters are present - 4 (1 for each)
* All the text edit fields are present and can be modified - 3 (1 for each)
* Overall clarity of labels - 1 (subjective - but if they have more than half)

Checkpoint 2/Section 2: 10 points

This section of the rubric (Checkpoint 2) is meant to be a backup in case we decide not to assign a binary grade

* LEDs form a grid - 3
* LEDs are connected to the specified pin numbers - 4
* Functioning LEDs - 3

Section 3: 25 points

* Task 3.1
  + The array of pin locations is correct - 1
* Task 3.2
  + A single for loop - 1
  + No output - 1
  + The function works properly - 2
* Task 3.3
  + A loop is used - 1
  + 1 second delay - 1
  + Blinks 3 times - 1
* Task 3.4
  + Correct order on new .csv - 1
  + 2 second delay - 1
  + LEDs stay on after lighting up - 1
* Task 3.5
  + The user is prompted for two inputs - 1
  + Correct initial LED lights up - 1
  + Remaining LEDs light up randomly - 2
  + Correct time delay - 1
* Task 3.6
  + Function randomly determines a number and prints it to the command window - 1
  + That number of LEDs light up in random locations - 2
  + Function is called 5 times with 5 second delay - 1
* Task 3.7
  + The user is prompted for two inputs - 1
  + Correct initial LED lights up - 1
  + Does it work - 2 (arbitrarily determined by Vincent)
  + 5 second time delay - 1

Section 4: 50 points

* Number of ships spinner
  + The spinner is there - 1
  + The range is 1 to 4 - 1
  + The value decides the number of ships - 1
* Number of guesses spinner
  + The spinner is there - 1
  + The range is 1 to 9 - 1
  + The game should not begin if it is less than number of ship spinner - 2
* Start game button
  + The button is there - 1
  + Clicking other buttons before this one does nothing - 2
  + The select LED is lit up upon pressing - 2
  + The select LED is in the middle - 1
* Quit game button
  + The button is there - 1
  + Turns off all LEDs - 1
  + Start button can be pressed afterwards - 2
* Shots remaining info field
  + The field is there - 1
  + The field initializes to the correct value - 1
  + The field updates whenever a guess is made - 2
  + Game ends as a loss when field reaches zero - 2
* Ships remaining info field
  + The field is there - 1
  + The field initializes to the correct value - 1
  + The field updates whenever a guess is made - 2
  + Game ends as a victory when field reaches zero - 2
* Movement buttons
  + All buttons are there - 1
  + Each button moves the cursor in the correct direction - 4
  + The cursor never moves off the grid - 2
* Make shot button
  + The button is there - 1
  + The button does not let the user guess the same spot twice - 3
* Victory/Defeat response
  + For a victory, the board blinks in a special pattern and prints to command window - 2 pts each
  + For a defeat, the board blinks in a special pattern and prints to command window - 2 pts each
  + If both fields reach 0 at same time, it counts as a win - 1
* Hit/Miss lamp
  + The lamps are there - 1
  + Lamps only glow after guess is made - 2
  + Lamps remember past guesses - 2