**Summary of Final Project:**

For this final project, we are creating a fun game for Wellesley students to play and relieve stress. In this game, the player aims to pop the different size of balloons that are flying up to the sky at different speed from the bottom of the screen to the top. The number of points scored by popping each balloon depends on the speed of the balloon. The faster the speed, the higher the score. There are also two other different types of balloons, the negative points ones, the and the mystery points ones. If the player pops the balloons with negative points, then certain amount of points will be subtracted from their final score. Both the positive and the negative points will be displayed on their balloons. The mysterious points ones do not display their attached score to the player. The player can play on for one minute. Once the time is up, the game stops and the final score will be displayed on the screen. Then the player will have the option buttons to either quit the game or restart the game.

**Features**:

* Intro screen:
  + On the intro screen, there will be a welcome message welcoming the player. After, the player click on start button, the game screen will be displayed and the game will start.
  + Text : “Welcome to Wellesley Balloon-Popping Carnival!”
  + Start button for user to start the game
  + Picture of Wendy Wellesley holding balloons.
* Game:
  + Display balloons of different colors with their points(or question mark for the mysterious balloons) flying up at different speed. Balloons will move up from the bottom of the screen to the top at different speed. The speed is proportional to the score. Balloons are colorful and of different sizes. The colors and sizes of the balloons will be randomly assigned. Positive and negative points balloons have scores one them. Mysterious balloons have a question mark on it. The score of the Mysterious balloons will be determined randomly. This is to make the game more visually pleasing and exciting to play.
  + After the user click on the balloon, the clicked balloon will disappear. This is to clear the screen and notify the player if the popping is successful . It also gives the player a sense of satisfaction.
  + Clock/Timer displaying current time left: At the beginning of the game, the timer shows the total time of 60 seconds, and it will continue counting down.
  + Scorekeeper that the user can see what their current score is
* Ending screen:
  + Text: “Congratulations! You scored XX Points!”
  + Once the time is up. The game will stop and a final page will be displayed with final score on it. There will be a restart button that restart the game, and a quit button that allows the player to exit the game.

Actions:

* Intro screen:
  + Picture of Wendy Wellesley holding balloons. Create the picture tk.Label and put the picture of the girl into that label. Then using grid to put this picture on to the canvas.
  + Create a start button to start the game. The command part of the button will be self.onStartButtonClick. Then flush out the code of the game page under the method of onStartButtonClick.
  + Create a label for the introduction text by using tk.StringVar(), so this way we can change this text if we want. Then out this label on to the canvas, location determined by the grid.
* Game Page: Display the balloons.
  + Balloon needs to move up, so create this using similar strategy as we did with minions by moving it up a small measurement and repeat it. The speed of these minion will be random using random generator to generate number.
  + Create a list of colors to be used and use random number generator to generate different index number of the color.
  + The points need to be linked with the speed.
  + Mysterious balloons have a question mark on it. The score of the Mysterious balloons will be determined randomly with random generator including negative numbers.
  + Clock/Timer displaying current time left will be create by creating a message and make the message change every second.
  + Scorekeeper will be done whenever the user clicks on a balloon, we add the waste balloon to a list and add the score associate that that balloon each time.
* Ending screen
  + Text: “Congratulations! You scored XX Points!” The result page action will be similar to the introduction page. Text displayed saying congratulation and get the total score that was added.
  + A restart button will be created and it resets the score to 0 and time to 60s.
  + A quit button that will exit the game with code like self.destroy().