## Shahrukh (Shalee) Qureshi GAMEOFNIM - BREAKDOWN

## Program Events:

1. Program Start

The user must start the program from the GameOfNim Class as this is the only class that has a main Method.

- This class creates an instance of the NimGame class by invoking its Constructor
- This class creates an instance of NimGUI by invoking its Constructor and passing in an instance of NimGame
- 2. Action of Entering text for Red Player

When the user inputs text the following actions must occur.

- a. Verify if the value entered is valid
  - i. If valid -> Accept value
    - 1. Check if token limit has been reached
      - a. If limit has been reached -> Red wins
      - b. If not -> Go to step 3
  - ii. If not valid -> Do not accept the value

All of this is conducted behind the scenes in the NimGame class and the data is passed into it from the NimGUI class.

3. Action of Blue Player entering text

When the user inputs text the following actions must occur.

- a. Verify if the value entered is valid
  - i. If valid -> Accept value
    - 1. Check if token limit has been reached
      - a. If limit has been reached -> Blue wins
      - b. If not -> Go to step 2
  - ii. If not valid -> Do not accept the value

All of this is conducted behind the scenes in the NimGame class and the data is passed into it from the NimGUI class.