# CS 351 Project 2 Human Benchmark Due 09-23-21

Joseph Haugh

## **Project Description**

- https://humanbenchmark.com/
- Human Benchmark is a website that ranks you against other people in the world
- It ranks you based on reaction time, memory, hearing, and overall cognitive ability
- You will be tasked with recreating these mini games using JavaFX
- Your application should have a home screen that allows the users to select
  a game to play or quit and record there scores in a CSV file, details for
  this file are below.
- The mini games are as follows:
  - Reaction Time: tests your reaction time by seeing how quickly you can click a button after the screen changes color.
  - Sequence Memory: tests your ability to remember clicking a sequence of squares
  - Aim Trainer: times how long it takes you to click 30 targets that randomly appear on the screen.
  - Chimp Test: click the boxes in numerically increasing order. After you click the first box the numbers disappear.
  - Visual Memory: a grid of squares is shown where some of the squares are white and some are not. Then the white squares become the same color as the other squares. The user must the click only the squares which were white.
  - Typing: times how long it takes the user to type out given paragraph with no mistakes allowed.
  - Number Memory: users must recall an ever increasing number of digits
  - Verbal Memory: users must mark a word as "seen" or "new", 3 strikes and your out.

## Output File

Your program must also have the ability to write out a users scores to a CSV file. The CSV file should have the following columns in this order and spelled exactly the same:

name, reaction\_time, sequence\_memory, aim\_trainer, chimp\_test, visual\_memory, typing, number\_memory, verbal\_memory

The user should be prompted for their name when the application launches. After they are finished playing games the user should have the ability to output their scores CSV file. If the user did not play a particular game then a 0 should be entered for that column. All times should be in milliseconds. This file should be saved in a folder titled "resources" at the root of your project.

### Project Requirements

- Coding standards must be followed
- Submission guidelines must be followed
- Design documents must be provided for the overall project as well as for each mini game
- Ask for the users name
- Home screen to navigate between games
- Button to output CSV file when the user is finished playing
- Implement all of the mini games described above
- Come up with your own mini game
- Back button to take users back to the home page
- Reset button to reset the current game
- All mini games must be implemented using JavaFX

# Submitting Your Project

Submit the link to your CS git project to UNM Learn before the deadline. Make sure your project follows the submission guidelines as given on the learn.