

## Project Status Report

Project Name: G4RCE Racing

Team Members: Cassandra Companion, Brian Louis, Stephanie Petronella, Garrett Sullivan

Date: 4/5/2020

Cycle Number: 2

System Intent: To develop a car racing game that delivers a fun and unique experience to users through granting the users customization choices and creative powers.

Cycle Intent: To make races more realistic and enjoyable (better car motion, timer and lap counter features, multiple tracks to choose from).

Accomplishments since the last status report:

- Car movement and rotation can now be easily controlled, and the car moves in the correct directions.
- Figured out how to use the virtual machine with game files.

Obstacles encountered since the last status report:

- The car seems to “slide”/“skate” when driving around the track.
- Have not yet been able to get JUnit correctly set up with the game.
- Car movement does not slow down when passing over mud or grass for an unknown reason.

Risks facing the project:

- None at the moment

Objectives for the next week:

- Resolve the issue with the car sliding around the track when driven
- Fully integrate the virtual machine
- Have JUnit functioning with the game project
- Test the new tracks for functionality with the game code
- Create tests for the virtual machine
- Figure out how to implement SensorListener methods in order to make mud and grass sense an overlapping car and lower the car’s velocity

## User Features:

| # | User Feature < <b>Short Name:</b> <b>Short Description</b> >                                                                        | Planned                      |                     |                          | Actual                                                                         |                         |                                 |
|---|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------|--------------------------|--------------------------------------------------------------------------------|-------------------------|---------------------------------|
|   |                                                                                                                                     | Cycle planned for completion | Total planned hours | Planned hours this cycle | Status (completed, discarded, in progress, unstarted, etc.)                    | Actual hours this cycle | Total actual hours this project |
| 1 | Interactable Game Menu: The user will be able to click on buttons that lead into other menus or into a race.                        | 2                            | 30                  | 14                       | Code completed. Needs to be tested.                                            | 2                       | 18                              |
| 2 | Timer: The user will be able to see the time they took to complete three laps.                                                      | 2                            | 20                  | 16                       | Coding has been paused because of dependency on VM.                            | 0                       | 4                               |
| 3 | Car Motion Code: The user will be able to type in code given a set of possible commands, and a virtual machine will read this code. | 3                            | 60                  | 20                       | Coding in progress . Test suite is unstarted.                                  | 17                      | 37                              |
| 4 | Mud Obstacle: Whenever the race car passes over mud on the track it will slow down.                                                 | 2                            | 30                  | 10                       | Coding in progress. Test suite is unstarted.                                   | 11                      | 31                              |
| 5 | Waypoints: The user will not be able to cheat races by going backwards because there will be waypoints in the track's code.         | 3                            | 20                  | 0                        | Unstarted                                                                      | 0                       | 0                               |
| 6 | Multiple Track Selection: The user will be able to choose from multiple tracks already made.                                        | 2                            | 20                  | 11                       | Tracks are being redone for successful integration. Test suite is unstarted.   | 8                       | 21                              |
| 7 | Lap System: Each track will have a set number of laps for determining that a player has completed a race.                           | 2                            | 20                  | 20                       | Design documentation created. Code and test suite are not yet started.         | .5                      | .5                              |
| 8 | Improved Car Movement: The car will move more realistically.                                                                        | 2                            | 20                  | 20                       | Coding in progress. There is an obstacle (see above). Test suite is unstarted. | 17                      | 17                              |

# Team Actions:

|                      | User Feature <# only> |           |             | Planned                  | Actual        |       |               |       |                |       |             |       |
|----------------------|-----------------------|-----------|-------------|--------------------------|---------------|-------|---------------|-------|----------------|-------|-------------|-------|
| Name                 | Coder(s)              | Tester(s) | Reviewer(s) | Planned hours this cycle | Process hours |       | Product hours |       | Customer hours |       | Total hours |       |
|                      |                       |           |             |                          | Week          | Cycle | Week          | Cycle | Week           | Cycle | Week        | Cycle |
| Cassandra Companion  | 2, 6                  | 8         | 2, 6, 8     | 36                       | 0             | 0     | 5             | 8     | 0              | 0     | 5           | 8     |
| Brian Louis          | 3                     | 1, 7      | 3, 1, 7     | 36                       | 0             | 0     | 12            | 19    | 0              | 0     | 12          | 19    |
| Stephanie Petronella | 4, 7                  | 6, 3      | 4, 7, 6, 3  | 36                       | 2             | 6     | 8             | 16.5  | 0              | 0     | 10          | 22.5  |
| Garrett Sullivan     | 1, 8                  | 4         | 1, 8, 4     | 36                       | 1             | 2     | 9             | 19    | 0              | 0     | 10          | 21    |