

G4RCE Racing: Cycle 3 Progress



Group 4

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System and Cycle Intent

System/Long-Term:

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 3 Intent:

To refine the main features of the game before releasing the first installable version of it

- Finishing the Multiple Track Selection feature
- Possibly finishing other features: Mud, Car Motion Code, Lap Counter
- Testing that these features consistently work

Feature Status

Deliverable features:

- An interactable game menu
- Multiple tracks to choose from
- Multiple car colors to choose from
- More realistic car motion
- Mud obstacles to slow car motion

Still in development:

- Car motion code
- Lap Counter
- Timer

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Controls

W = Forward

A = Left

S = Backward

D = Right

R = Reset

BACKSPACE = Back

ESC = Exit

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Multiple Track Selection Feature

Updated Design:

- Position objects required on each track

Code Progress:

- All tracks have position objects to mark the starting line
- User can now select and enter any of the tracks
- Car starts at the correct position

Multiple Track Selection Testing The Tracks

Tested each track for rendering, collision, and position objects

Method

- Manual movement of car
- Crossing over the position objects
- Contact printed to screen

Results

- Successful rendering and satisfactory collision
- Successful “collision” with position objects
- Progress made towards the lap counter feature

Multiple Track Selection Testing

The Tracks

Multiple Track Selection Testing The Menu

Testing for consistency in the following

- Ability to enter last selected track or enter default track
- The correct placement of the race car
- Not testing for a clear selection indicator or screen issues

Manual testing

Results

- Success - minus the race car not facing the right angle

Multiple Track Selection Progress

Previously



Now



Same for car color selection

Mud Obstacle

Design is unchanged

Progress

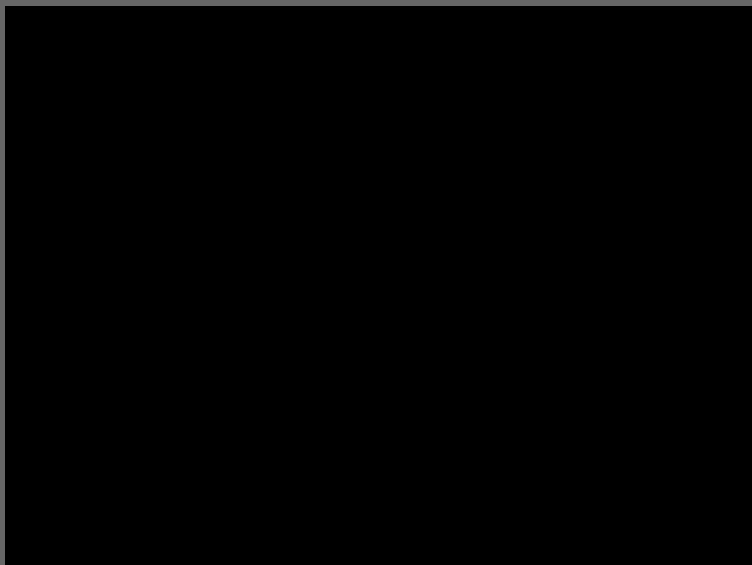
- Mud/grass now slows down a car that passes over it
- Code adaptable to other features

Manual Testing Results

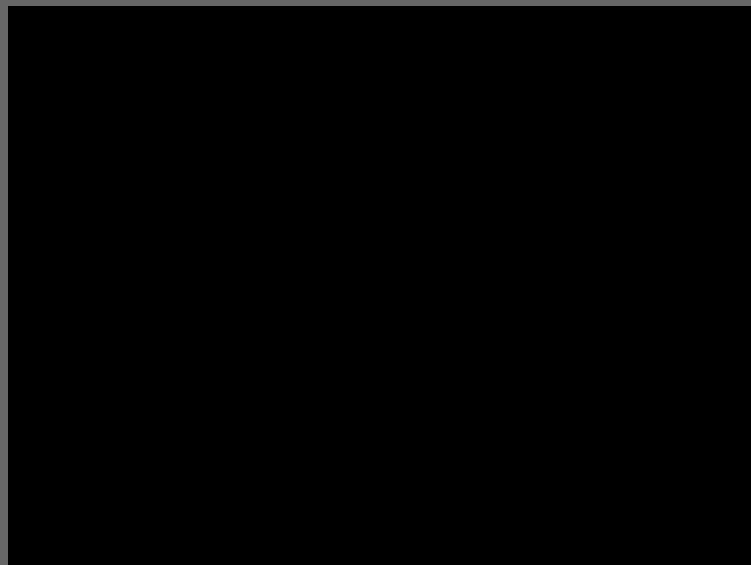
- Found that sometimes the car resumed normal speed
- No other problems found after fixing this

Mud Obstacle Progress

Previously



Now



Tools/Process

- IDEs - IntelliJ IDEA, Eclipse, Visual Studio
- libGDX
- Tiled
- JUnit for future testing
- GitHub
- Slack
- Google Drive
- Process: CAP (collaborative adversarial pair programming)
- One coder and one tester for each feature

Theoretical Plans

Finish the features we designed

- Car motion code, timer, lap counter

Start work on envisioned features

- Waypoints, custom track editor
 - Utilize the multiple track selection feature code and design when creating the custom track feature

Continue testing features as they are developed and do automated testing

Continue developing software using the CAP programming process or try other software development methods