

# **G4RCE Racing: Cycle 2 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 2 Intent:

To make races more realistic and enjoyable and to create more consistent gameplay

- Improved car motion
- Multiple tracks to choose from
- Possibly other features: Timer, Lap counter
- Testing features

# Current Features

Mostly completed:

- An interactable game menu
- Multiple track designs
- More realistic car motion

Still in development:

- Car motion code
- Mud obstacles
- Functioning track selection
- Timer, lap counter

# Testing

Testing of two features:

- Multiple track selection
- Mud obstacle on track

Testing Outline:

- Expectations
- How we tested
- Results
- Future testing plans

# Multiple Track Selection Testing

## Part 1: Testing the tracks

### Design/Expectations

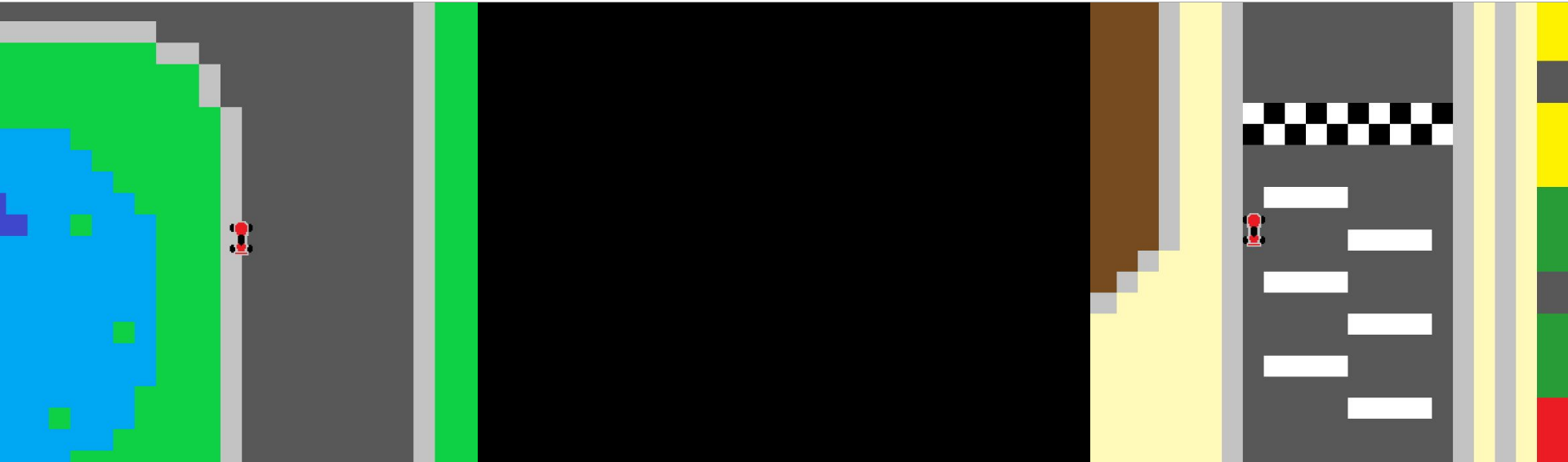
- Each track should have no problems rendering
- Each track should have a collision layer
- A car cannot go through this layer
- A car can move freely around the track otherwise

### Testing Procedure

- Manually tested
- Moved car along the curb
- Mainly tested the 8 track

# Multiple Track Selection Testing

## Part 1: Testing the tracks

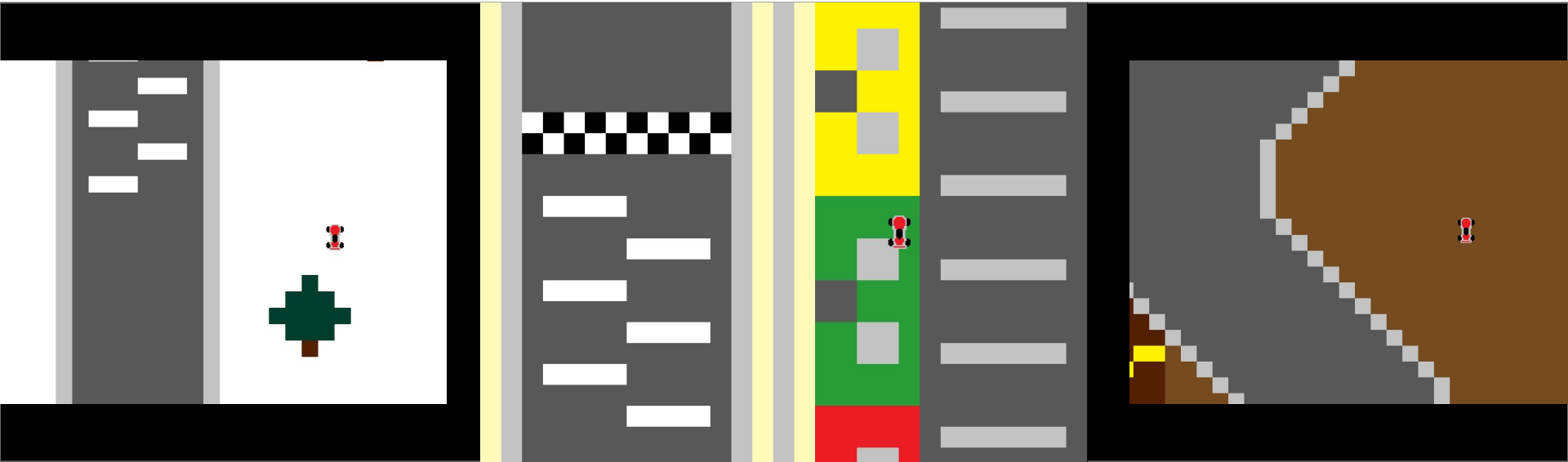


Results: Rendering and collision problems

Outcomes: Added and improved collision lines

# Multiple Track Selection Testing

## Part 1: Testing the tracks



Another Result: Race car started off the road

Future Outcomes: Adding this aspect to design, code, and future testing

# Multiple Track Selection Testing

## Part 2: Testing the menu

### Design/Expectations

- A track should be selected by default
- Users can select other tracks
- Selected track will be clearly indicated
- Pressing play should start a race on the last selected track

### Testing Plans

- Manual or automated
- Press play with different tracks selected and different orders of clicking



# Mud Obstacle Testing

## Design/Expectations:

- Display a visual representation of mud on the track
- Allow the car to pass over it
- Slow the car down when driven on

## Testing Procedure:

- Manually tested
- Drove the car into each mud obstacle
- Testing how the mud affected the car

# Mud Obstacle Testing

Results:

- The car could not pass over the mud obstacle completely.
- Each mud obstacle acted as a wall that the car could not pass.



# Tools/Process

- IDEs - IntelliJ IDEA, Eclipse, Visual Studio
- libGDX
- Tiled
- JUnit for future testing
- Bitbucket → GitHub
- Slack
- Google Drive
- A process similar to collaborative-adversarial pair programming

# Plans for Cycle 3

## Testing

- Continue testing features as they are developed
  - More tracks, track selection, mud
- Design and try tests for other features
- Manual to automated testing

## Continue/start coding other features

- Mud obstacle
- Car motion code
- Track input
- Timer and lap counter