# SPO2160 Task 6 Individual Report - Henrik Hustoft

### Team members

- Alex
- Heimir Sindri Þorláksson
- Henrik Hustoft
- Håvard Svendgård
- James Sinclair Stokke
- Julia Lund Stokke

## How to play

W = accelerate

A = turn left

S = de-accelerate / accelerate backwards

D = turn right

Space bar = Brake

C = switches between sets of different camera angles

R = restart

# How we approached the project

First we discussed how to approach it, deciding on the most important tasks first and splitting the group into pairs to work on the different main mechanics together. When those were done, we split up and worked on smaller tasks by ourselves. When we were somewhat done with the basics, we allowed the team to add little extra things they wanted to the project.

### My Contribution To The Exam

- I wrote all the main scripts from client side for the communication between the php scripts and unity. Which means I had to change the scripts we already had provided a little, and write my own scripts for downloading the ghost data, uploading the ghost data, and viewing the players and their highscores. We found out that if the ghost data is too long it won't be able to be saved since it was longer than the string max length.
- I made the leaderboard UI. (exception for the highscore time seconds to minutes:seconds format.)
- We used the provided UI scripts for login and logout. There is an oversight we did not have time to fix (might only be a problem from the editor, but we are not sure.) which is that stopping play in the editor does not log the player out. This should be easy to fix as it would just be adding a logout method to the gamemanager, and if the gamemanager is destroyed logout. We can do this since the gamemanager doesn't destroy on load and will always be in the scene. There were also other small changes me and others had to do because the UI did not behave as expected.
- I helped all the people who did anything in php, some of which i had to do small
  changes to since databases changed from Alex's to mine. (we did that because then
  i could debug easier to find the issue we were having) Or there were small mistakes
  none of us noticed, like the high score list was set to descending instead of
  ascending which i didn't even know was an option at that point.
- I helped julia with some c# scripts
- Some small scene fixes here and there.
- Talking to the team to find the causes of our bugs and solutions.
- made a quick shader that moves the texture, to make a moving rainbow. started on
  adding hsv but never got that far since it was extra and we didn't think a shader
  would give much extra points. then added the shader to the road, fixed some issues
  with the road where it didn't look as great because of zfighting (this was before we
  had the path generated road.).
- Made a change to the checkpoints system and fixed the issue where we were able to go backwards and the timer would stop so the race could be finished with practically 0 seconds. This change made it so the player had to pass through each checkpoint in order, checkpoints can have the same number which allows for creating shortcuts.
- we changed our minds to use my database (because then i could easily make a change to a script and debug the error to find and fix it quicker) so i changed all the php scripts to work with my database so that i could have access to the stored info and control the uploaded scripts (one of the issues we had was fixed by this because the database was not set up in the way we were thinking in the script because we forgot to change it)
- On task 5 I wrote the part that explains the ghost data upload/download, there might have been someone else that also added something there but I don't remember. I also wrote all the stuff on the lobbies. I am not too sure if we should have explained more or not, but from the text we think we have not missed anything. I was wondering if since it was explained as a lobby, would we also then need to write about how the networking would be once the game has started and no longer in the lobby but it did not mention anything about gameplay so we decided against it.