



Product Planning

1 Road map

This section specifies the road map of the development of Taxi Trouble.

Design phase

- Brainstorming on game concepts.
- Choosing three best game concepts.
- Picking one concept out of the three to develop.

Sprint 1

In this sprint we create the first working prototype.

- Drivable car with collisions.
- World map.
- On-screen buttons for controlling the car.

Sprint 2

During this sprint we focus on refactoring and research, as well as implementing the navigator screen.

- Implementing the navigator screen.
- Refactoring all the code.
- Researching multiplayer theory and implementation details.

Sprint 3

During this sprint we implement the basics of the multiplayer aspect of the game.

- Matchmaking system with a lobby and invites.
- Team creation (pairing up navigators with drivers).
- First start on realtime multiplayer (syncing car locations).

Sprint 4

During this sprint we start implementing the gameplay.

- Implementing basic gameplay (picking up passengers, dropping them off).
- Refining the multiplayer (reducing lag).

Sprint 5

During this sprint we implement advanced gameplay mechanics.

- Implementing advanced gameplay (car collisions and passenger stealing)
- Further refining of the multiplayer.

Sprint 6

During this sprint we fine tune and polish the game.

- Fine tuning of game balance.
- Improvement of game graphics.
- Fixing any problems that still linger.
- If possible: implement additional features.

Sprint 7

During this sprint we do user tests and we finalize the game.

- User testing.
- Finalizing end product.

2 User stories

2.1 Introduction

In this section we will specify the most important user stories. In the user stories, we differentiate between the app and the game. The app what is installed on the users device and it contains the main menu, the game lobby and the actual game. The game is the actual game play, e.g. driving around in a car and navigating.

The roles 'driver' and 'navigator' are both subroles of the user role.

2.2 User stories

As a user

Given that I have installed the app

And I have started the app

Then I can create a new game lobby

As a user

Given that I have created a new game lobby

Then other users can join my game lobby

As a user

Given that I am in a game lobby

And there is at least one other user in the lobby

Then I can team up with that user

As a driver

Given that the game has started

Then I can drive around the car

As a navigator

Given that the game has started

Then I can navigate around the map

As a driver

Given that I collide with a building

Then the car will bounce back

As a driver

Given that I stop next to a passenger

Then the passenger will enter my car

As a driver

Given that I drop off the passenger at the correct location

Then I will receive a point

As a driver

Given that I do not have a passenger

And I crash my car into a car that does have a passenger

Then I steal the passenger of the other car

As a user

Given that I am in the team with the most points at the end of a game

Then I win that game

As a navigator

Given that there is a power-up on the map

Then I can use that power-up to influence the game.