

The goal of this thesis was to implement the mobile game Traffic, in which the player controls a car and navigates through a road network. The general concept of the game is based on our vision of a game simulating the experience of driving that would be different from similar existing games. This vision proved to be overly complex. Therefore, we selected only a subset of its features while ensuring that the resulting game can serve as a basis for future extension towards the original vision.

We targeted the Android operating system and used the Unity game engine and C# for implementation. In the resulting game, the player acts as a taxi driver, i.e. they pick up customers and drop them off at designated locations. The player receives game money and rating based on the quality of each ride. The game world contains roads, intersections, sidewalks, buildings and pedestrians.

The game world can be edited by a game designer with no programming skills. The designer can shape the roads and sidewalks using Bézier curves and connect roads into intersections. The shape of intersections is generated automatically.