Multiplayer Driver Licence Simulation Game

My name is Murat Gunes. I graduated from Pamukkale University Department of Computer Engineering in June 2021 with a GPA of 3.36. I developed a multiplayer driver licence simulation game in scope of my graduation project. The text below is from my graduation project. This text is also as summary of my graduation project.

"In our country, whose population is close to 85 million, there are approximately 23 million vehicles and more than 30 million citizens with driving license according to TUIK data. The process of getting a driver's license in our country is completed in the forms of theoretical training, practical training, followed by a theoretical and practical exam. In this process, people who have never used a vehicle even on private tracks in their life go directly to the traffic in practical lessons and complete their training in real traffic. This situation poses a serious threat to the traffic safety. With the "Multiplayer Driver Licence Simulation Game" developed within the scope of this thesis, it is aimed to prevent this threat. "Multiplayer Driver Licence Simulation Game" simulates the driving license process exactly. In addition to the theoretical training, practical training, theoretical exam and practical exam steps, simulation also includes a multiplayer driving mode that reflects the real traffic environment to the virtual world in order to prevent the danger mentioned above. A user who plays the game experiences all the steps in the process of obtaining a real driver's license in advance by participating in the trainings in the game, passing the exams and using the vehicle in multiplayer mode, and gains experience and knowledge in this regard without jeopardizing traffic and traffic safety. The most important feature that distinguishes this game from its counterparts is that it is multiplayer. In multiplayer mode, multiple players can drive on a mini map at the same time and interact with each other to experience real traffic. In addition to all these, the vehicles used in the game have two types of transmission systems, just like in reality. According to the players wishes, vehicles or transmission systems change and the flow of the game is affected in this direction. Unity, one of the most used game engines in the Turkish game industry, was used in the development of the game due to its multi-platform support. C#, the only language supported by Unity, was used as the programming language. Photon Network system was preferred for network infrastructure, Sketchup software for drawing 3D models, Audacity software for editing and creating sounds. In addition, the game was developed using the High Definition Render Pipeline(HDRP) in order to appeal to the visual taste of the end user, not the standard render pipeline of the Unity game engine."

At the present time, computer games are designed not only for entertainment but also for educational puposes. With my graduation project which I did get a score of A1, I also aimed the aducational purposes.

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