

Abstract

Title: **Multi-platform Multiplayer RPG Game**

A multi-platform game, which would be able to run on various devices with Windows 8.1 and Windows Phone 8.1 systems, was created in this work. It was supposed to be a universal game client executable on desktop PCs, notebooks, tablets or mobile phones. The game was supposed to be role-playing game (RPG) with focus on turn-based action combat. In this work, a 3D game engine was written which supports rendering simple scenes with objects and animated characters. The engine was developed using DirectX. The engine was written in .NET C# using SharpDX library. A cross-device communication framework based on bluetooth technology was implemented in this project as well. This communication framework allows two game clients running on two different devices to communicate with each other.