

This thesis deals with the design and implementation of a multiplayer run and gun game, which can be run on Windows, Linux and MacOS platforms. The thesis contains discussions about the gaming platforms and the most important components of the application and of a suitable world editor. Furthermore, the problems of map smoothing and dynamic image synchronization are explored and the last part addresses the design and functionalities of a matchmaking server. The result of the thesis is a two-dimensional game, with a complementing world editor and server.