

It's the year 2037 and the worlds never been so hostile, the world leaders are at each other's throats over anything and everything, no matter how petty.

**Plan, Attack & Defend**, your country in this online turn-based multiplayer strategy RPG.

Built in a 2.5d grid world the players take it in turns to explore the world in order to expose the enemy.

Debate over the worlds issues<sup>[3]</sup> and make an ally or two while at the world summit (aka game lobby)

- Discusses tactics with your allies, with the built in team speak<sup>[4]</sup>.
- Fight armies of a similar size and strength, with the enhanced matchmaking algorithm built on top of the Photon<sup>[2]</sup> framework. Or join your friends in an open server.



Take your turn, command your troops and defeat the enemy

- **Plan**, call in supplies, position your troops;
- **Attack**, in open spaces, take cover in abandoned buildings or even call in air support; but most importantly
- **Defend**, your county from up to 7 other armies.

Combine commands for unique tactics but make sure you don't run out of time and get stuck in no man's land. Or call in the special forces, but use these wisely as the opportunities don't come often and you don't want to get caught out.

Survive the war, grow your army and strive to create the most relentless force to dominate the world. But fail and you have no option to build from the grown up once again.

- Win your war, to earn perks, unlock solder classes and gain credits of war (or money)
- Your army is stored in our reliable database<sup>[ii]</sup> so you can defend your country from any pc or mac<sup>[1][5]</sup>.



[1] Mac is not guaranteed

[2] I cannot guarantee at this stage that Photon will be used but most likely, it will be that or similar. More info on Photon at <https://www.photonengine.com/>

[3] Debates will use predefined dialogue, to prevent real arguments.

Debate dialogue will also be stored in an SQL database somewhere magical<sup>[i]</sup> in the cloud

[4] Built in team speak is only available to ally teams.

[5] Internet access required.

[i] Digital Ocean, more info at <https://www.digitalocean.com/products/droplets/>

[ii] Our MySQL database is hosted at Digital Ocean<sup>[ii]</sup>

Project RealTimeRPG is a multiplayer turn-based strategy 'board' like game. The player will be in control of company of soldiers/units. On each of the player turns the user will have to perform an action or numbers actions within a given time limit which decreases as the game progresses. These actions can include,

- Move tropes
- Attack
- Hiding in bunkers etc...
- Move & place objects to defend you base and troops
- Call for reinforcements, supplies, air strikes. (Special action)
- Request radar support (removes fog of war for one turn) (special action)



Several actions can be grouped together but they must be performed with in the time limit. Wherever the units stand at the end of the turn is where they will remain until it's their turn again. However, some actions such as special moves will use an entire turn while supply drop offs will give the player a chance to collect their supplies. Any supplies that are not collected can be intercepted by the enemy. Supplies will be dropped off within a radius and the exact position cannot be guaranteed.

The games focus is to utilize online/networking techniques for a turn-based strategy game. This will include;

- A Game Lobby and matchmaking using a framework such as photon
- Realtime game play against other players, use sockets which will utilize the C# .NET API for the client (game) and the Python API for the server side.



For the initial stages of development, simple block-out world and basic movement and attack system with the focus being on developing and deploying the multiplayer features, followed by expanding the world and gameplay features. At the start of this process there will be a lot tinkering with the new frameworks to enable me to create the proposed application which will require that I design a reasonable architect. The initial tinkering stage will also be a good time to build the initial foundation for the research report, as there will be opportunities to test different frameworks and methods.