

# High Concept Document

MyRTSGame is a 2D, top down simulation of a battle; using user defined parameters for the number of units and buildings of different types. Ranged and Melee units battle for control of the scalable map and resource and factory buildings.

## Character Design -

Two teams of user-specified sizes and two different types. Some are Ranged, some are Melee, and some heavy, there will be the same amount of each on each team.

The characters are depicted on the map as either a red 'M', 'R' or 'H', or a green 'M', 'R' or 'H'.

The red team and green team are lead by well respected leaders, who clearly, between them, have little to no combat experience. The teams of soldiers that they create are fearsome and loyal to their deaths.

The leaders are said to come from somewhere in North Asia but no one knows who they are, where they really are from or why they are fighting. All we know is that the fighting methods are unorthodox and questionable.

The red team fight wielding Axes and Bows while the green team use large knives and primitive crossbows

In later versions, cosmetics could be added, literally changing the design of the characters.

Melee and heavy units are only capable of attacking enemy units directly adjacent to them, while, ranged units can attack from up to four blocks away or three diagonally.

Ranged units have the least health at 80, Melee units have 100 and Heavy units have 200.

Ranged units deal the least damage per hit as 7, Melee units deal 10 per hit and Heavy deals 12.

## World Design -

The game is set in neutral territory, a flat, barren, former nuclear-testing zone; which, the teams need to capture by eliminating the enemy force and their structures.

The world is depicted as a grid in a rich text box. Empty spaces are full stops and the players are shown as 'R', 'M' or 'H' depending on their type; i.e. Ranged, Melee or heavy respectively, while Resource buildings and Factory buildings are depicted as '\$' and '@' respectively.

## Story and level progression –

The game is scalable to include a progression system, such as, unlocking more powerful warriors and/or buildings through either betting on the winner or the player being one of the teams.

In later versions, unlockables could be added; such as, stat boosts, potions, and cosmetic changes for the teams.

The story is simply that the two teams are opposing, and, they will fight to their deaths as many times as the user would like.

## User Interface –

The user interface is very simple with minimal clutter. It has a Start, Stop and Exit button; a large rich text box as the map, this will display empty space, red and green team soldiers and resource and factory buildings belonging to both teams; and, a label for information such as score and how many soldiers left on each team as well as resource counts. The user does need to close the program and reopen in order to start a new game.

Saving/Loading will have a message box asking on start-up whether to load a game or not, and on exit asking if the user would like the game to be saved.

## Game Script –

All of the code is written in C# using Microsoft Visual Studio 2017 with the exception of the possibility for a Visual Basic based input box.

Example code:

```
abstract public void moveToPos(int x, int y);  
abstract public void combat(Unit enemy);  
abstract public bool withinRange(Unit enemy);  
abstract public Unit nearestEnemy(List<Unit> u);
```

# Flowboard

