

Game Description

The Node wars is a turn-based war board game. The board the game will be played on will be a graph data structure and the pieces moving on it are the army units.

Army units can be either tanks, attack helicopters, infantry or supply units. Each one has a different role can move differently across the board. The attributes all army units have is, health points, damage points, attack range and travel speed. Travel speed is the number of nodes the unit can move per turn. Attack range is how many nodes away the unit can attack.

- **Tank Units** have a lot of health, but move slowly and deal a lot of damage
- **Attack helicopter units** have little health, but move fast and deal long ranged damaged
- **Infantry units** have a lot of health because of the numbers of people, move slow and deal some damage
- **Supply units** have a lot of health, move fast and deal no damage and only supports

Units	Health	Damage	Travel speed	Range
Tank Units	100	50	1 node/turn	1 node away
Attack Helicopter units	50	50	2 nodes/turn	2 nodes away
Infantry units	150	30	1 node/turn	0 nodes away
Supply units	300	10	2 nodes/turn	0 nodes away

No game would be complete without its players, a player would control/own a single country. Each player's turn will have the chance to make armies, give existing army units on the battlefield, to surrender and end their turn.(Banks, 2019)

The kinds of commands the Player can give an army are:

- Move to the next node
- Attack a unit in a node
- Supply neighbouring units

The kinds of request the Player can make to a factory:

- Make Tank units (150)
- Make Attack Helicopter (200)
- Make Infantry units (100)
- Make Supply units (150)

The player can surrender, which essentially changes their current flag to a white flag and they are taken out of the war.

The player's country has financial resources that can be used to pay the factories to make more armies.

The player can either be a human or a scripted AI, which is a lot more A than I.

The board is a graph node structure, each node has properties that influence the units that travel in them. The terrain makes it harder to move. The types of terrain would influence the attributes of the units in it, increasing or decreasing their health, speed, damage and travel speed.