

Design Test Part 3 by Borja

Parameters

Parameter	Description
Health points (HP)	Amount of health an unit has, every attack it receives depletes its health points by the other unit's attack (x2 if bonus damage).
Attack value	Base damage a unit inflicts to an enemy unit's HP.
Bonus damage	Doubles the damage of a unit when attacking certain unit types.
Attack type	Determines the effective area of a unit's attack. It can be: • <u>Single</u>. It can only damage one unit at a time. • <u>Area of effect</u>. Affect all units inside a circular area (m²).
Attack range	Effective distance a unit can attack an enemy unit (m).
Move speed	Speed in which a unit travels distance (m/s).

Other “hidden parameters” that units may have, like attack speed, size, acceleration, rotation speed, etc. are considered the same for each unit for simplification purposes. Units can't attack while moving.

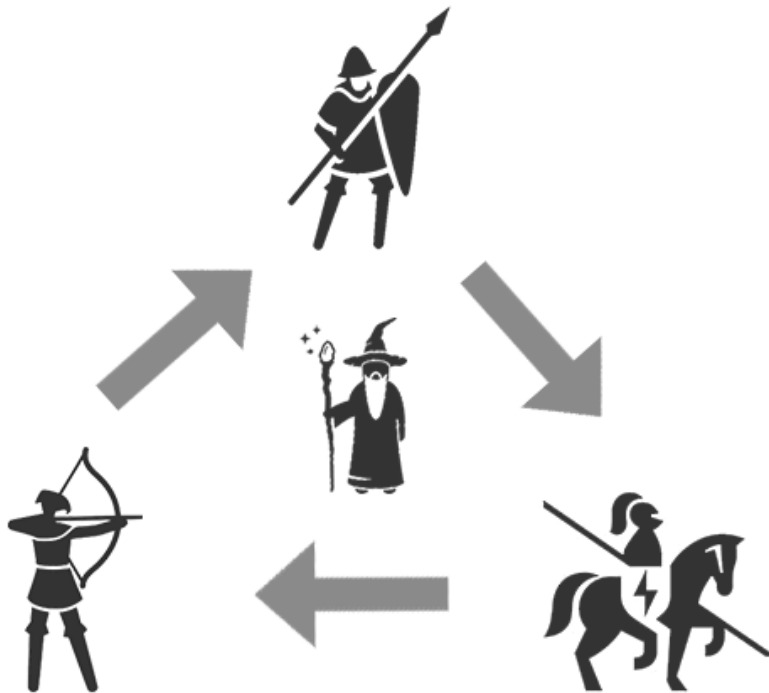
Unit types

	• Can attack units in long distances but has low HP. • Usually placed behind units with more HP. • Deals bonus damage to spearmen.
Archer	
	• Has great HP but lacks mobility and attack range. • The frontline of an army. • Deals bonus damage to horsemen.
Spearman	
	• Has great mobility. • Useful to attack high value targets or retreating units. • Deals bonus damage to archers.
Horseman	
	• The only unit capable of dealing area of effect damage. • Works great against grouped units. • Has the highest attack but is slow and fragile. • Doesn't deal bonus damage against any unity.
Sorcerer	

Table with abstract values

Unit type	HP	Attack value	Bonus damage	Attack type	Attack range	Move speed
Archer	Low	Mid	Spearman	Single	Long	Mid
Spearman	High	Mid	Horseman	Single	Short+	Mid
Horseman	Mid	Mid	Archer	Single	Short	Fast
Sorcerer	Low	High	-	AoE	Mid	Slow

Table with abstract values



The gameplay mainly revolves around the proven rock, paper, scissors relationship:

- Spearmen counter horsemen: bonus damage and more health.
- Horsemen counter archers: bonus damage and move speed.
- Archers counter spearmen: bonus damage and attack range.

But with an extra unit that can change the tide of battle if used correctly: the sorcerer - a unit that can deal massive area damage.

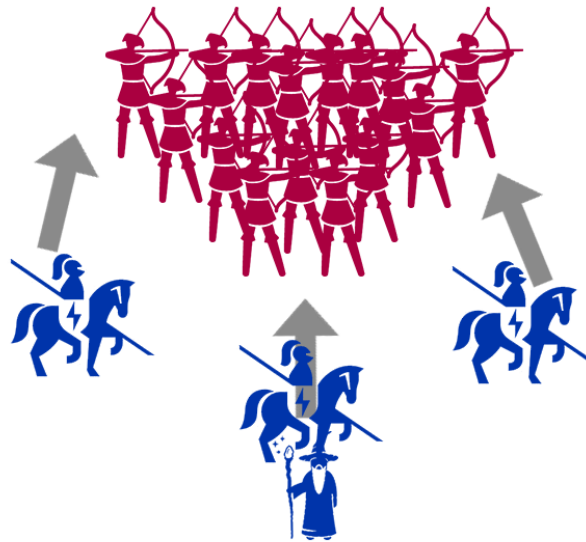
The game is focused on unit placement and unit targeting (micro play). By default, units will focus on the closest enemy unit but the player may change the target manually and take advantage of the bonus damage.

With the bonus damage, a player with a small army who places units correctly and gives good target commands can outplay a player with a bigger army.

Grouped units can be easily decimated by the sorcerer, so charging with brute force is not recommended.

Raw numbers can overcome an enemy with bonus damage, for example a huge army of archers can one shot approaching horsemen but smart tactics can outperform that. See the following example:

Tactics vs raw numbers

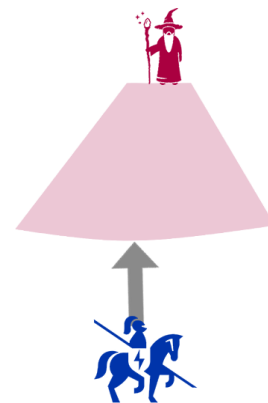


The **red** player has a huge **archer** army that one shoots horsemen, so the **blue** player sends **horsemen** from multiple directions to create distractions while the **sorcerer** is approaching to crush the **archer** army.

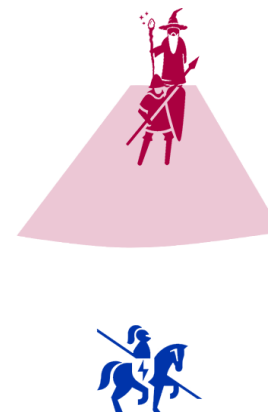
The key to victory is to adapt, there's no winning strategy, everything can be countered, leading to interesting decisions - the main aspect of the RTS genre. Here's an example depicting it:

Adapting strategy example

The **blue** player wants to use a **horseman** to quickly close the gap and attack the **sorcerer**.



The **red** player sends a **spearman** to guard the **sorcerer**, so the **blue** player stops the **horseman**.



The **blue** player puts an **archer**, who has higher range than the **sorcerer**, to either attack it or bonus attack the **spearman**. The **red** player is forced to retreat and the **horseman** is sent to chase the less mobile **sorcerer**. If the **spearman** stays defending the **sorcerer** from the **horseman**, the **archer** will kill him. This leads to an interesting decision for the **red** player: to sacrifice one unit and save the other, to micro out play the **blue** player, to send reinforcements, etc.

