



GLANCE TOWER DEFENSE

"Kingdoms At War"

[GAME DESIGN DOCUMENT]

– Insanity Crew



Project Description

This game design document describes a tower defense game with unique characters and a story.

In this mobile fighting game, players engage in an arena-based fighting ground, in which they send their troopers to fight and conquer the other side.

Version History

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason
1.0	Manik, Tejas, Faizal, Megh	06/12/2023	No By Glance	11/12/2023	Initial version
1.1	Manik, Tejas, Faizal, Megh	12/12/2023	Yes by Glance	20-21/12/2023	Change of story/ theme
1.2	Faizal, Tejus	02/01/2024	-/-		Bull troop, Hammer tower & Base upgrade removed.
1.3	Faizal	16/01/2024	-/-		Path indication dots added

INDEX

1. Characters

2. Story

2.1. Theme

2.2. Genre

3. Gameplay

3.1. Goal(s)

3.2. Controls

3.3. Game Mechanics

3.4 Core Loop

3.5. Upgrades System

3.6. Economy

3.7. Progression & Challenge

3.8. Win / Lose conditions

4. Environment design & Art style

5. Music & Sounds

6. Technical description

7. Marketing & Funding

7.1. Demographics

7.2. Platforms & Monetization

7.3. Localization

1. Characters

Soldiers: Solarions and Lunaris troops are fighting a war for their nation.

Bulls: Each team has its castle bases. They send their soldiers and Bulls troops to go and conquer the other side.

2. Story

Step into the war-torn lands of Solarions and Lunaris in 'Kingdoms at War.' As a fearless commander, your mission is clear: capture nearby towers, lead diverse troops, and conquer the enemy's base tower before they breach yours.

Engage in gritty, strategic warfare, upgrade your castle, and build an unstoppable army to secure dominance in this relentless battle for supremacy.

Armored troops, mounted cavalries, and siege engines assembled on the battlefield, ready to heed the commands of their respective leaders. The clash is inevitable, the stakes high, and the outcome uncertain as the kingdoms prepared to engage in a medieval war that would etch its tale into the annals of history.

In this saga of rivalry and valor, the fate of the kingdoms hung in the balance, where only one would emerge triumphant, claiming dominion over the coveted castle and securing its place as the undisputed ruler of the realm.



2.1. Theme /Setting

Set in different battlefields called biomes!

2.2. Genre

Strategy | Adventure | Top-Down
Orthographic | 3D



These images are for camera reference

3. Gameplay

"Immerse yourself in the epic tale of 'Kingdoms at War,'

A tower defense game that transports you to the embattled realms of Solarions and Lunaris. As a valiant commander, your mission is clear: capture nearby towers, lead diverse troops, and ultimately conquer the enemy's base tower before they breach yours. Engage in strategic warfare, upgrade your castle, and build an unstoppable army to secure dominance in this relentless battle for supremacy."

3.1. Goal(s)

- **Short term in-game goal(s):**
Take over as many nearby small towers as possible.
- **Long term in-game goal(s):**
Conquer the base tower of the enemy before they conquer yours.
- **The overall goal of the game:**
Collect in-game collectibles/money (currency) to upgrade your cardboard castle base, troops, and weapons to their full potential.

3.2. Controls

The game is played with simple and intuitive touch controls.

- **Tower connect:** The player will connect towers by dragging his/her finger from the tower/base to the tower/base he/she wants to take over.
- **Break the connection:** Break the connection between two or more tower(s) by swiping perpendicular to the connection line.

3.3. Game Mechanics

3.3.1. Troop Towers





Soldier	Level 1	Level 2	Level 3
speed	Stays 1		
damage	Stays 1		
Health	Below 10	10 to 29	30-64
Tier Indications	1 white dot over tower	2 white dots over tower	3 white dots over tower
Brute/Giant Tower	Level 1	Level 2	Level 3
style	walk	walk	Running
speed	1	1	1.5
damage	2	2	2
Health	Below 10	10 to 29	30-64

Tier Indications:



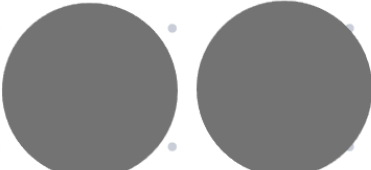
Dots filled (in yellow): A path is available to create.

Dots unfilled (in gray): Path exists.

Tier 3 tower dot indications

All 3 dots filled		No path is created till now and all 3 Paths can be created
2 filled 1 empty		Only 1 path is created and 2 Paths can be created
1 filled 2 empty		2 paths are created and only path can be created
All 3 dots empty		All 3 paths have been created and None can be created anymore

Tier 2 tower dot indications

Both filled		No path is created till now and both paths can be created
1 filled 1 empty		Only 1 path is created and 1 path can be created
Both dots empty		Both paths have been created and None can be created anymore

Tier 1 tower dot indications

Dot Filled



No path is created till now and
1 path can be created

Dot empty

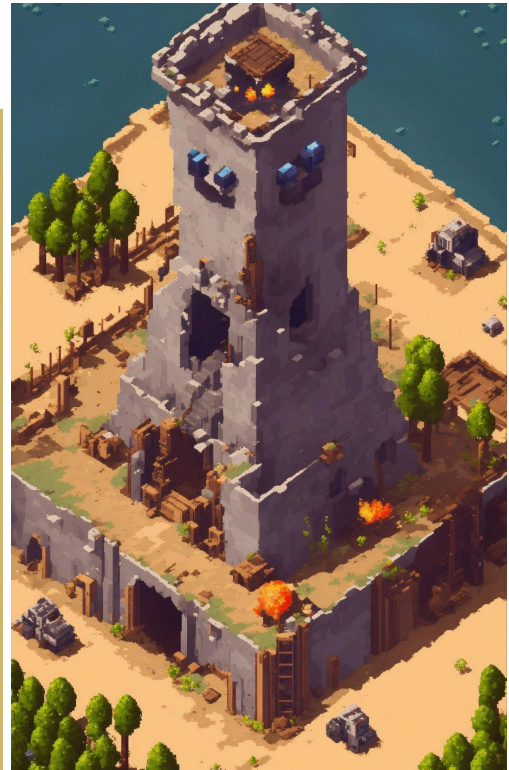


The path have been created

**The indication of dots and health will
Be similar to this reference image.**



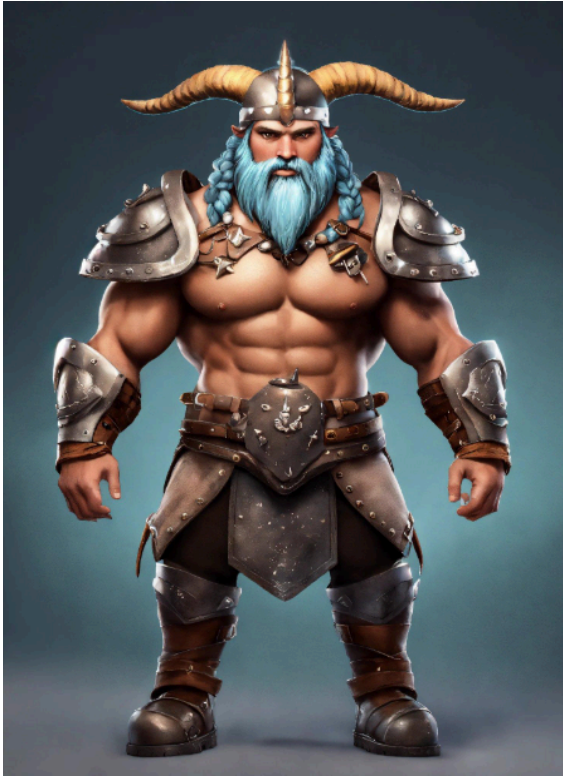
Soldier Tower :



This basic troop has 3 levels like all the other troop towers. Speed and Damage stay the same throughout all the levels but the number of tower connections increases on every level. (3 max)

The tower for this troop will look like a normal 3-storey cardboard building.

Brute Tower : (walk/walk/run)



This troop will have a cartoonish round-shaped body. On Tier 3 of the tower this troop starts moving with slightly increased speed that can be upgraded in the upgrade system(SHOP) towards the target instead of walking slowly. These will be less common than other buildings.

Damage stays the same throughout all levels, but movement speed slightly increases on tier 3.

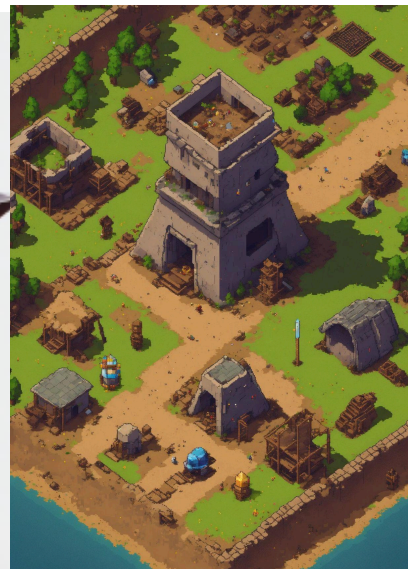
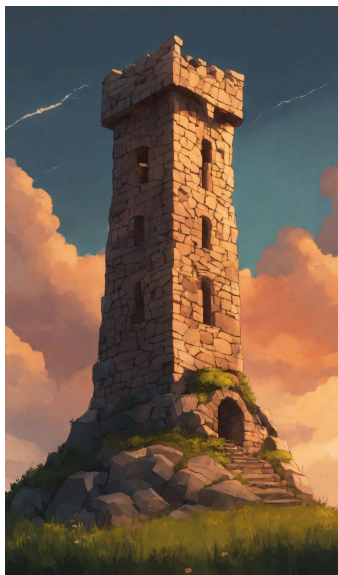
This troop will change according to the biom, hopefully.

3.3.2. Attack Towers

These attack towers cannot connect to other buildings to send troops, but other buildings can connect to this.

These also have 3 levels and with each level, they get stronger and better with more damage, range, etc.

Archer Tower :



Archer standing on this tower shoots arrows at all the troops that come in the range of this tower dealing 1 damage to a single unit.

Every level upgrade (MID GAME) will only increase the radius of effect for all attack towers.

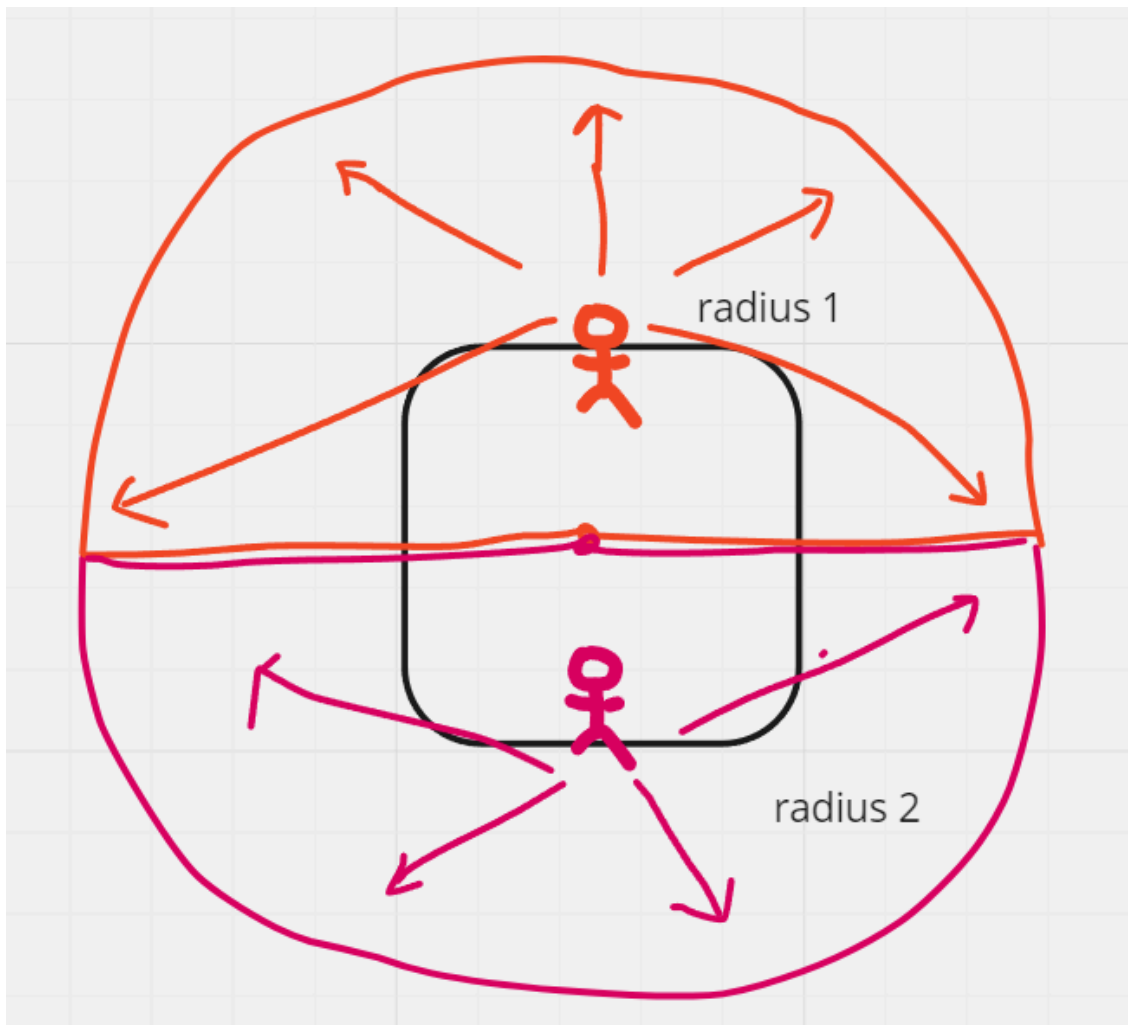
Aircraft carrier: (A soldier in an old plane drops explosives on the path. *NOT IN PROTOTYPE*)



This tower has a path that can be set by the player. A plane will go to the extent of this path and on the way drop multiple explosives depending on the level of the tower. Each bomb will deal 1 damage to all the troops and enemy towers in the pathway.

The plane makes a U-turn comes back to the tower to restock the supplies, and then goes on to the set path to drop more bombs on a loop.

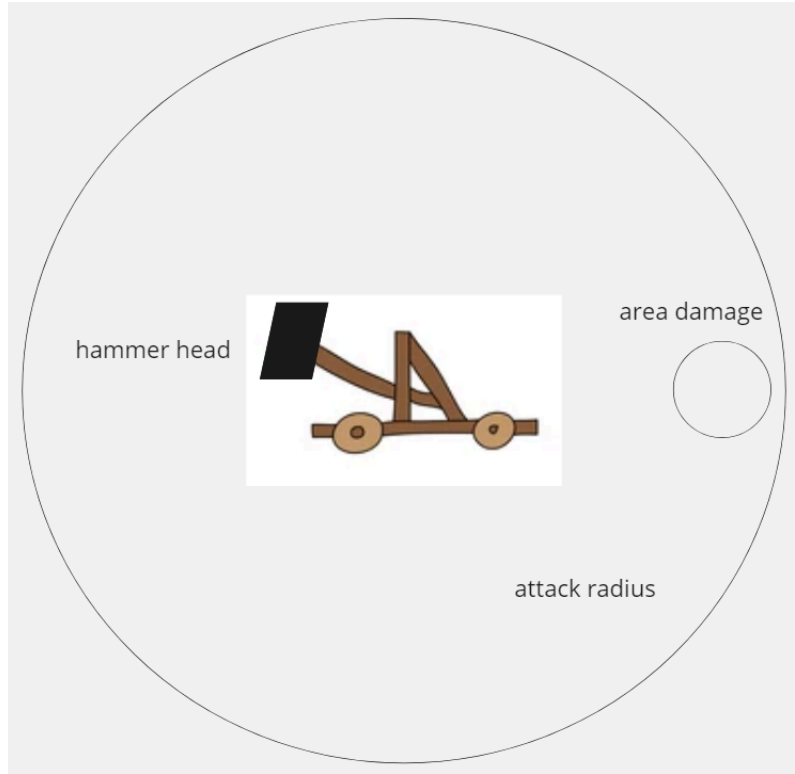
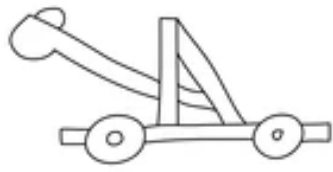
Fort: (Two soldiers throwing spears: after playtesting)



This mini castle will have pillars on 2 sides of it which have soldiers with spears. This tower's range will be divided into 2 parts, and each soldier will shoot targets in its semicircle.

This makes this tower more dangerous as it has two shooters, and it's difficult to pass through its range even if you have a troop who can take two hits.

Hammer Tower: **discarded** (Area damage instead of single target)



This tower attacks automatically on any troop crossing through its range dealing area damage of 1 to any troop in the area. The second level makes the attacks faster and the third level makes the damage area larger.

This will not have any upgrade option in the shop as this is a very late-game tower and to keep it simple, it will just show as locked to the player, and when it's unlocked it will show as MAXED.

Base Tower:



This is the base tower that every player will have to defend.

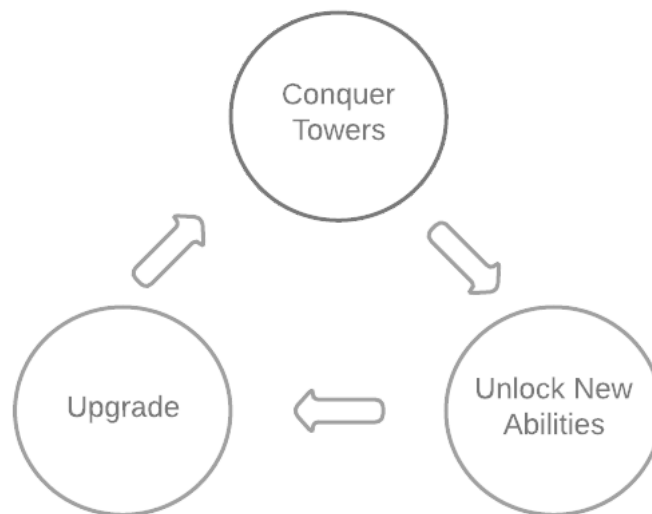
Health Power HP	Can it be upgraded	If HP ≤ 0	Can it be healed?	Has a flag on top?
50	YES	Lmao dead	YES. By other towers	YES

IMPLEMENTATION:

- Every clan/team have this base tower that they have to defend at all costs, not doing so will result in failure of that team.

- b. The base tower will appear every few levels(5,10,15,20,40,65,90,125,150,200...) and the frequency will increase till level 100 and then remain the same(25).
- c. The base tower can make three paths regardless of its HP.
- d. Player will lose the level if this base tower is captured by the enemy. It will create a situation of tension for the player.
- e. It will have a health bar hovering over it.
- f. Max health of this base tower can be upgraded[to be discussed later].

3.4. Core Loop



3.5. Upgrades System

There are various items, troops, and weapons that can be upgraded through the in-game currency called "Gold". There are 100 levels of each upgrade.

Some troops/weapons can be upgraded alternatively.

Movement speed if the base speed is 1m/s then the max will be 1.4m/s for brute and 1.2m/s for regular troops.

Armor Strength: The Brute Soldier will have this ability at base 50% which means that the shots received by this troop will have a 50% chance of **deflecting and the troop will go unharmed**. On deflection, the armor on the troop will fall off. Max is 75% throughout 50 alternate upgrades.

Fire Rate: Increases the rate of speed these towers attack in their range by 0.4% at every alternate level.

Tower resistance %: This is the percent of chance that the tower getting damaged will deflect the shot. It starts with 0% probability but goes up to 20%.

Path width: Very Slightly increases the area of damage.

Reload Speed: This reduces the time taken for the aircraft to reload the chocolate bombs.

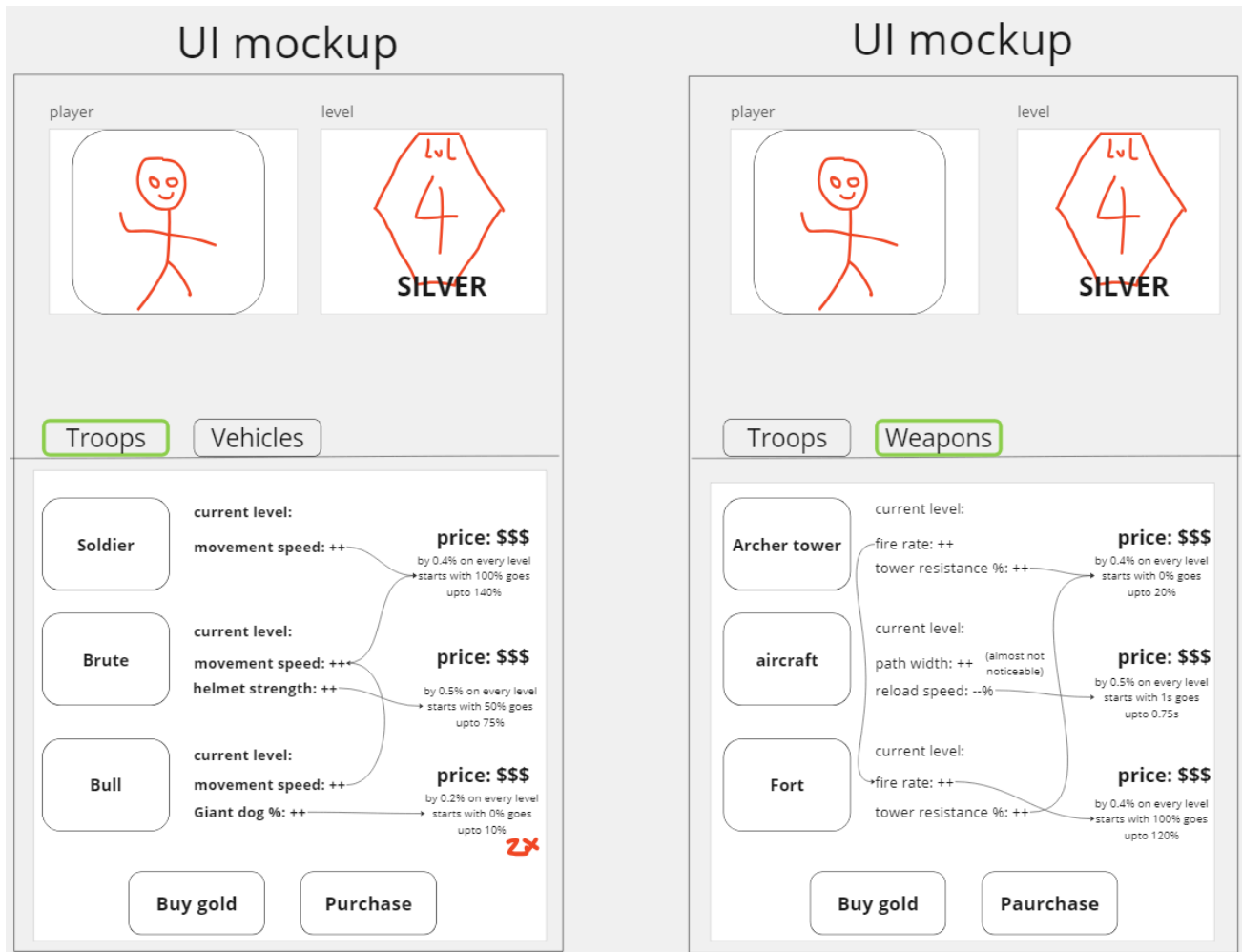
TROOPS

Troop Name	Upgrades	Default Damage	Default Health	Alternate upgrade	Amount	Price
Regular	Move Speed ++	1	1	NO	0.4% every level Base 100% to max 140%	NDY
	Move speed ++	2	2		0.4% every level Base 100% to max 120%	NDY

Troop Name	Upgrades	Default Damage	Default Health	Alternate upgrade	Amount	Price
Regular	Move Speed ++	1	1	NO	0.4% every level Base 100% to max 140%	NDY
Brute Soldier	Armor Strength(chances) ++	2	1	YES	0.5% every level Base 50% to max 75%	NDY

TOWERS

Tower Name	Upgrades	Alternate upgrade	Amount	Price
Archer Tower	Fire rate ++	YES	0.4% every level Base 100% to max 120%	NDY
	Tower resistance %		0.4% every level Base 0% to max 20%	
Aircraft	Path width ++	YES	Very slight increase. If the initial is 1m then the max should be 1.25m	NDY
	Reload speed - -		0.5% every level Base 1s goes down to 0.75s	NDY
Fort	Fire rate ++	YES	0.4% every level Base 100% to max 120%	NDY
	Tower resistance %		0.4% every level Base 0% to max 20%	NDY



3.6. Economy

There will be two types of currencies, primary and secondary. Primary currency will be used for most of the purchases and will be abundant throughout the game, whereas secondary currency will be used with monetization strategies like buying rare items or weapons. There are several ways to do so. A few of them are:

- a. IAPs and Ads: If a rare item/weapon is worth 500 (say) secondary currency and a player doesn't have enough primary currency, then he/she can get

secondary currency via IAPs or watching in-game ads.

- b.** VIP pass: A monthly pass can be bought, which will boost the player's primary currency income and give some extra amount of secondary currency to give VIP players a sense of premium feel.

Potential ideas for currencies:

- a.** Primary currency: looks like a gold bar. 
- b.** Secondary currency: A blue colored cubical gem that looks like a diamond. 

3.7 Progression and Challenge

AI behavior:

Example priority of the enemy which can be set however it is needed:

1. Player Tower (If enemy tower level > player tower level)
2. Brute Tower (on the basis of level regardless of conquered status)
3. Normal Tower (on the basis of level regardless of conquered status)
4. Archery Tower (on the basis of level regardless of conquered status)
5. Unconquered Brute Tower

6. Unconquered Normal Tower
7. Unconquered Archery Tower
8. Support himself

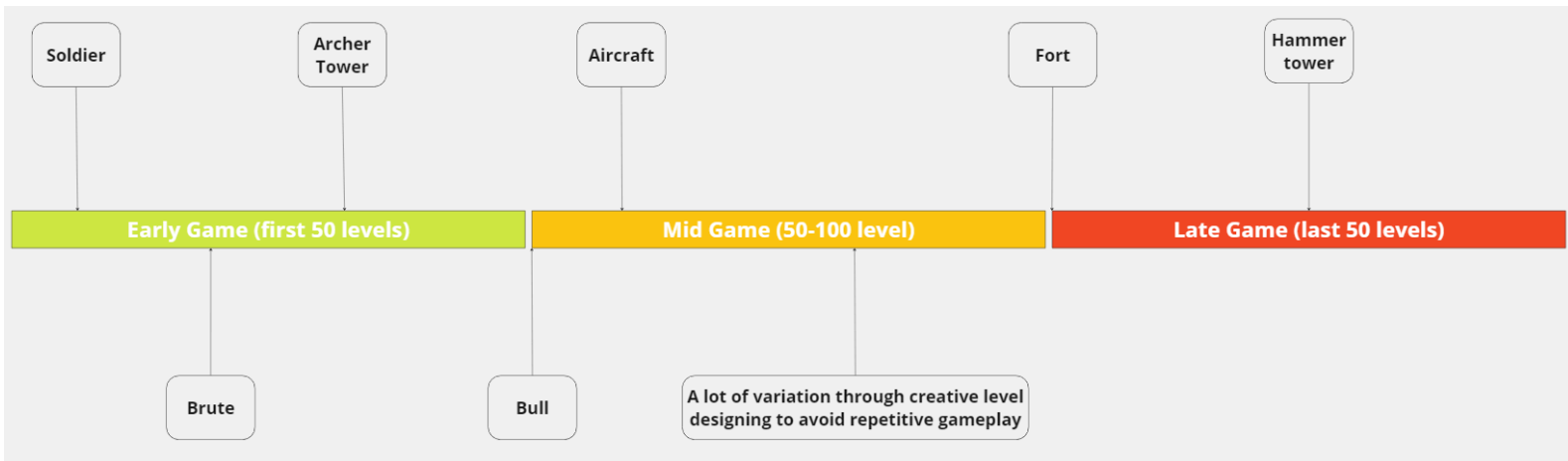
Game pacing:

The game will be progressing linearly, as the player climbs the level ladder, after a certain amount of levels, new mechanics and environments will be introduced. Enemies will become harder and harder after every new environment and mechanics are introduced, making the player feel challenged to complete levels.

Economy scaling:

The upgrade costs of the weapons, troops, etc. will be scaled proportionally or linearly accounting for the needs of the situation's circumstances in the game balancing phase.

Progression chart :



3.8. Win/Lose conditions

Win condition(s)	Lose condition(s)
Conquer all the towers.	Lose your base tower to the enemy.

4. Environment Design & Art Style

Bioms:

There will be an ample amount of biomes to fight in, each unlocking after a certain amount of levels (let's say every 20 levels).

Character design, weapons & animals will change with the changes in biomes.

Bioms :

a. Wooden Villages :



b. Wooden World Biom



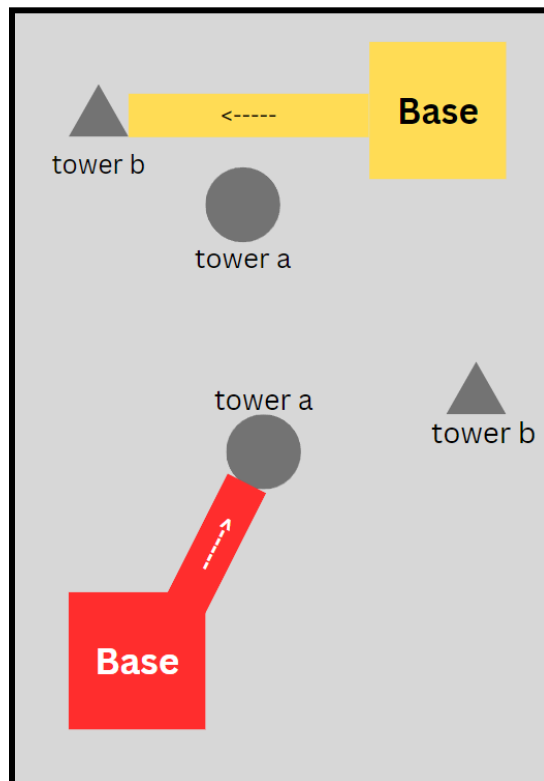
c. Medieval War town



d. Modern War field Ruins



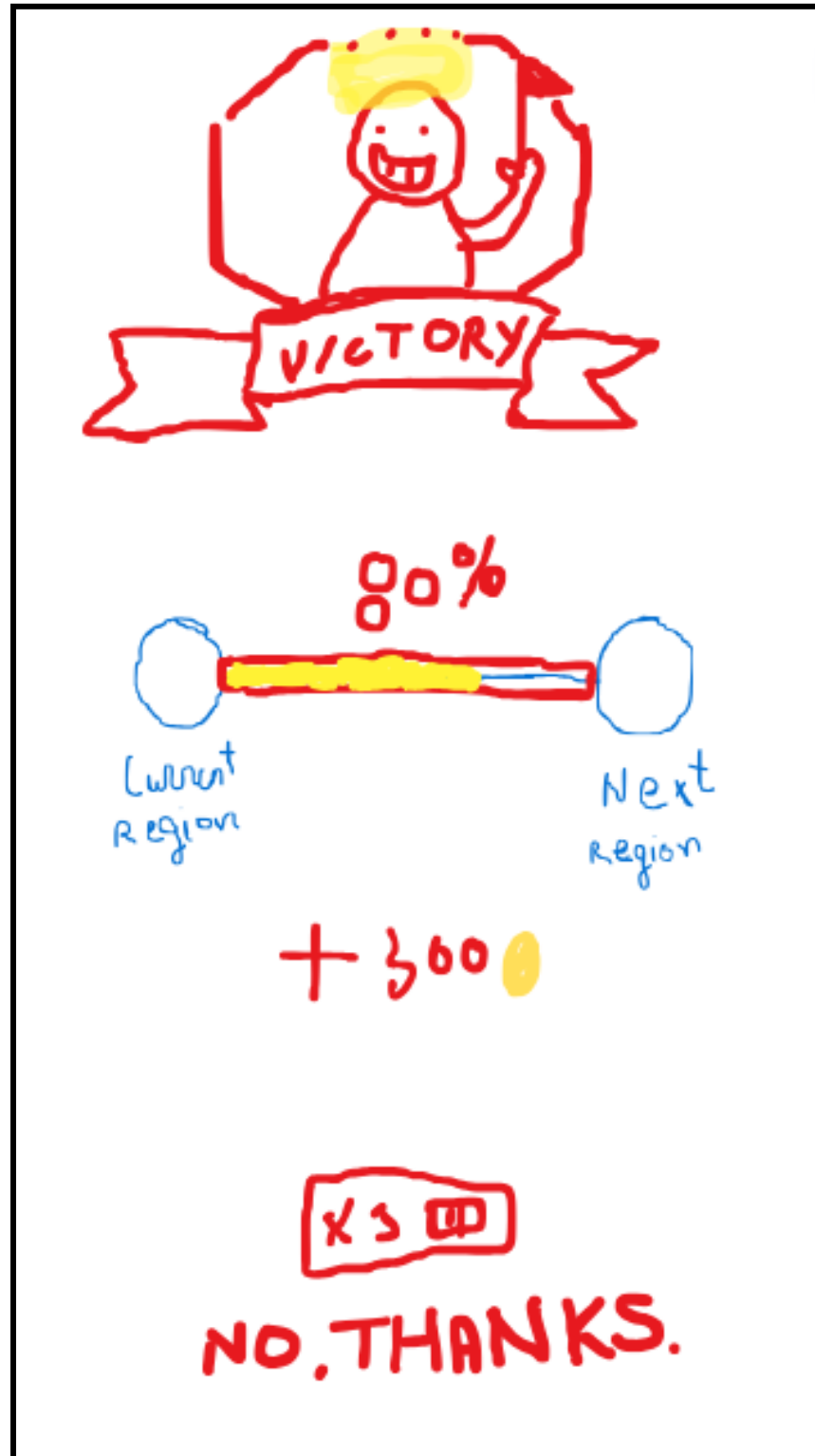
Basic Level design Mockup:



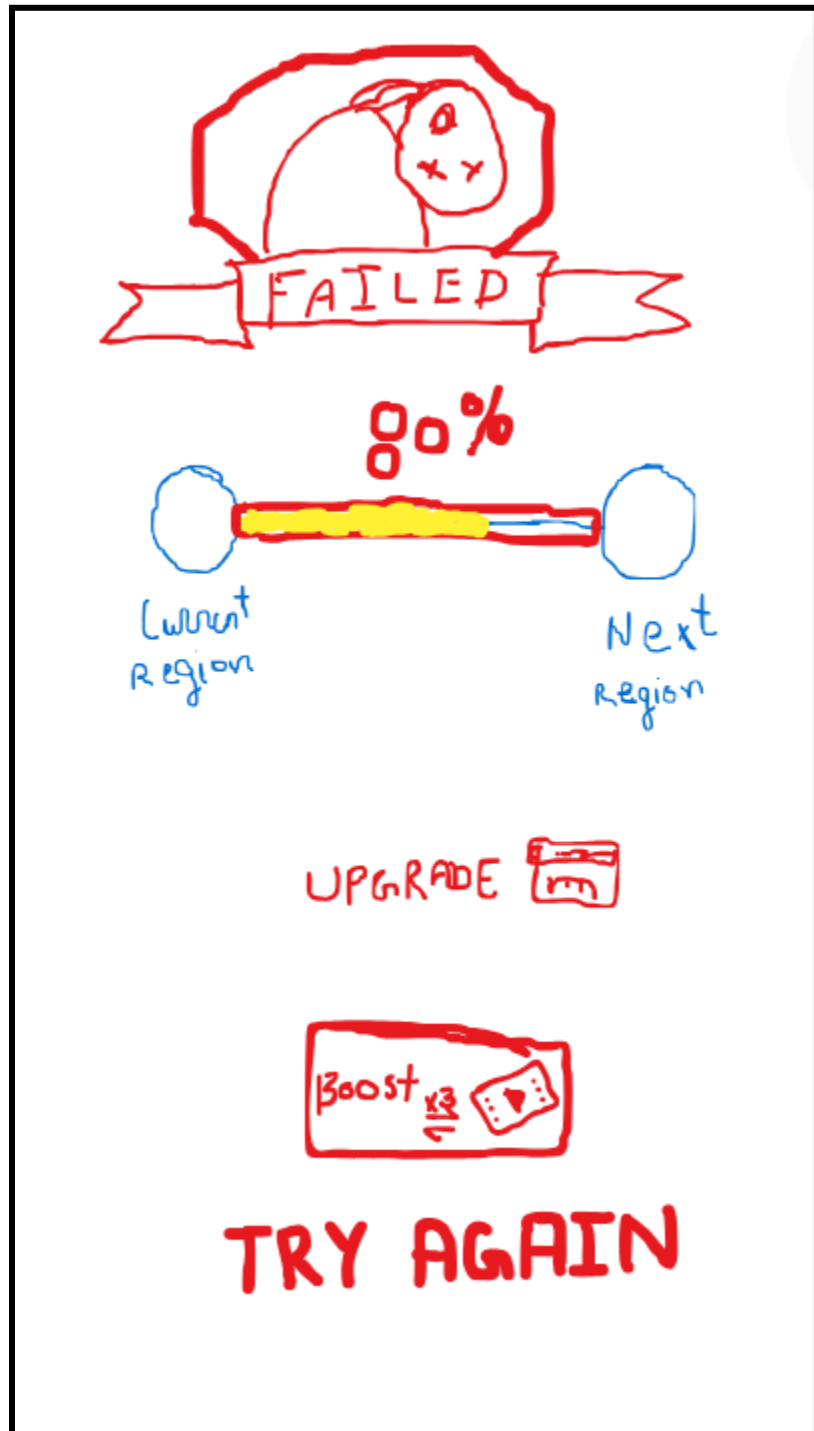
Main menu Mockup:



Win Screen Mockup:



Lose Screen Mockup:



5. Music and Sounds

5.1. Music

The game's musical backdrop immerses players in the medieval era with a delightful and enchanting score. The soundtrack is made to evoke the spirit of medieval festivities, featuring lively tunes that accompany the player's journey through the whimsical landscapes and epic battles. Each melody is intricately composed to capture the magic and excitement of the medieval world, providing a cheerful and memorable auditory experience that complements the game's overall charm. More information is in the MUSIC & SFX List in a separate document.

5.2. SFX

The game's sound effects are thoughtfully designed to bring joy and excitement to players of all ages. Each tap, swoosh, and sound is crafted to enhance the medieval world's atmosphere. From cheerful chimes for success to the playful laughter of characters, the sounds aim to create an engaging and delightful experience for casual players exploring our magical realm. More information is in the MUSIC & SFX List in a separate document.

6. Technical Description

Target platforms: Android & iOS

Game engines: Unity3D or Unreal

For Version control: GitHub or GitLab

Project management: JIRA or Trello

7. Marketing & Funding

7.1. Demographics

Age: 7+

Gender: Any

Target audience: Casual players

7.2. Platforms & Monetization

- Initially: Free Android app with in-game ads, and paid version without ads.
- Free iOS with ads. Paid iOS version without ads.
- Will contain IAPs.

7.3. Localization

Language: English.

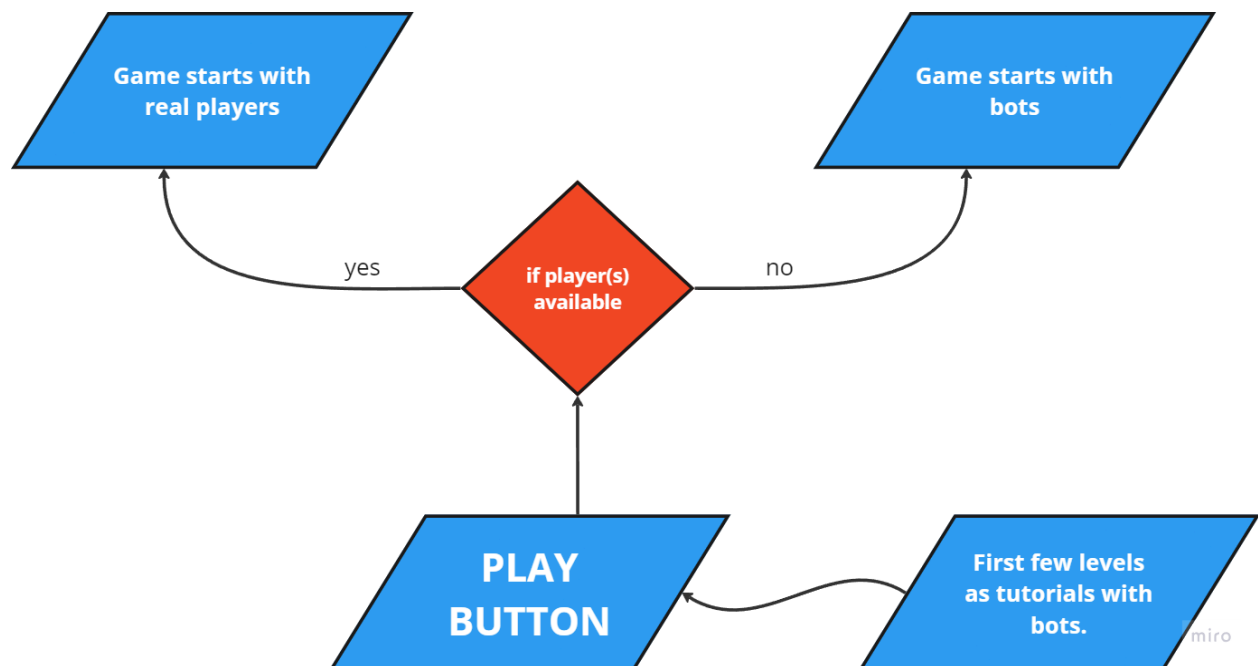
GLANCE TOWER DEFENSE EXTENDED VERSION

INDEX

- 1. Multiplayer system**
- 2. Shop/Upgrade System**
- 3. Tower Unlock System**
- 4. Base Gameplay**

1. Multiplayer System

How the multiplayer system is going to work is once the player hits the play button, the game will start searching for players available on the servers for a certain amount of time, game will start if they are but if players are not available, game will still start but with bots. The maximum players that can play at a time will be 4.



Also, the first few levels will be tutorial levels to make players familiar with the environment so, these will be compulsory bot levels and not with real players. Once players pass these tutorials, the multiplayer system will kick in.

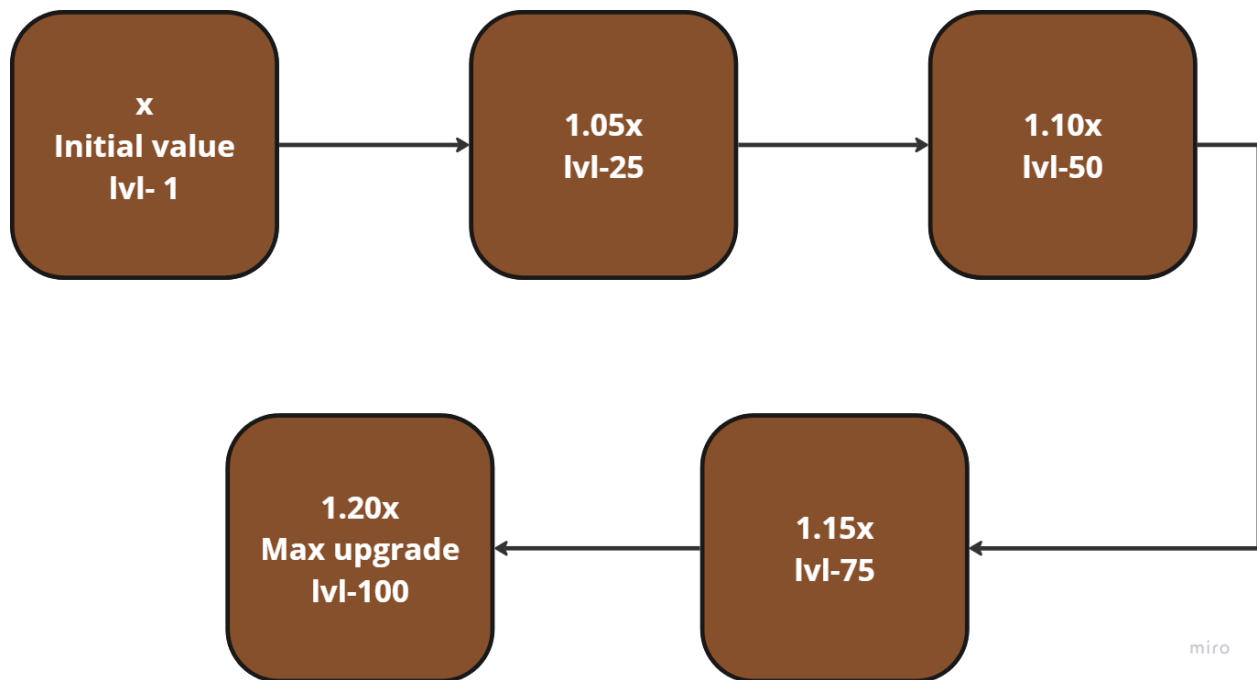
The joining of real players and bots is as follows:

Real Players Available:	Game Starts With:
All 4.	All 4 real players.
3 real players.	3 players & 1 bot
2 real players.	2 players & 2 bots
1 real players.	1 player & 3 bots
0 real players available.	all 4 bots

miro

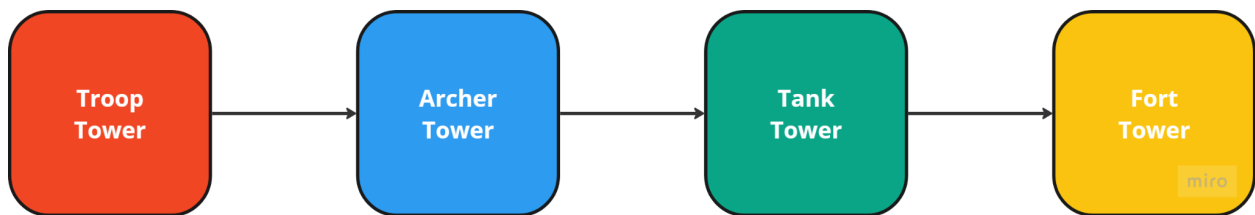
2. Shop/Upgrade System

The upgrade system in this game is fairly simple. Only the towers are to be upgraded and in that, the spawning rate is the only thing that is to be upgraded through the shop system. x is the initial spawn rate of the towers which is same for all towers in the beginning and it can be upgraded from 100% to 120%



3. Tower Unlock System

Tower unlock system works in the form of progression. On completing a level, the player opens a chest in which there is a possibility to get a puzzle piece that unlocks a new tower if the required number of pieces are collected. For example: a tank tower requires the player to collect 5(say) puzzle pieces, and the player will be able to use the tank tower if all pieces are collected. Tower will be unlocked in an order.



4. Base Gameplay

All 4 players will have 1(atleast) tower in the beginning. There will be multiple unconquered towers(marked in color gray).

Players will conquer the tower and choose which type of tower they want to implement there.

The default tower will be Troop tower and can not be changed to another tower.

If a player has unlocked towers(Tank, archer, launcher) they can implement it on the captured tower. Same can be done when a player captures another player's tower.

Players can change a certain tower only twice or different sets will be created for different level -

Level 10 - Tank Tower(1), Archer Tower(2), Launcher(2)

Level 11 - Tank Tower(0), Archer Tower(1), Launcher(3)

Level 12 - Tank Tower(0), Archer Tower(0), Launcher4)

The first tower will always remain the Troop tower.

Tower Levels - 1, 2, 3 & Max

GLANCE TOWER DEFENSE

[LEVEL DESIGN DOCUMENT]

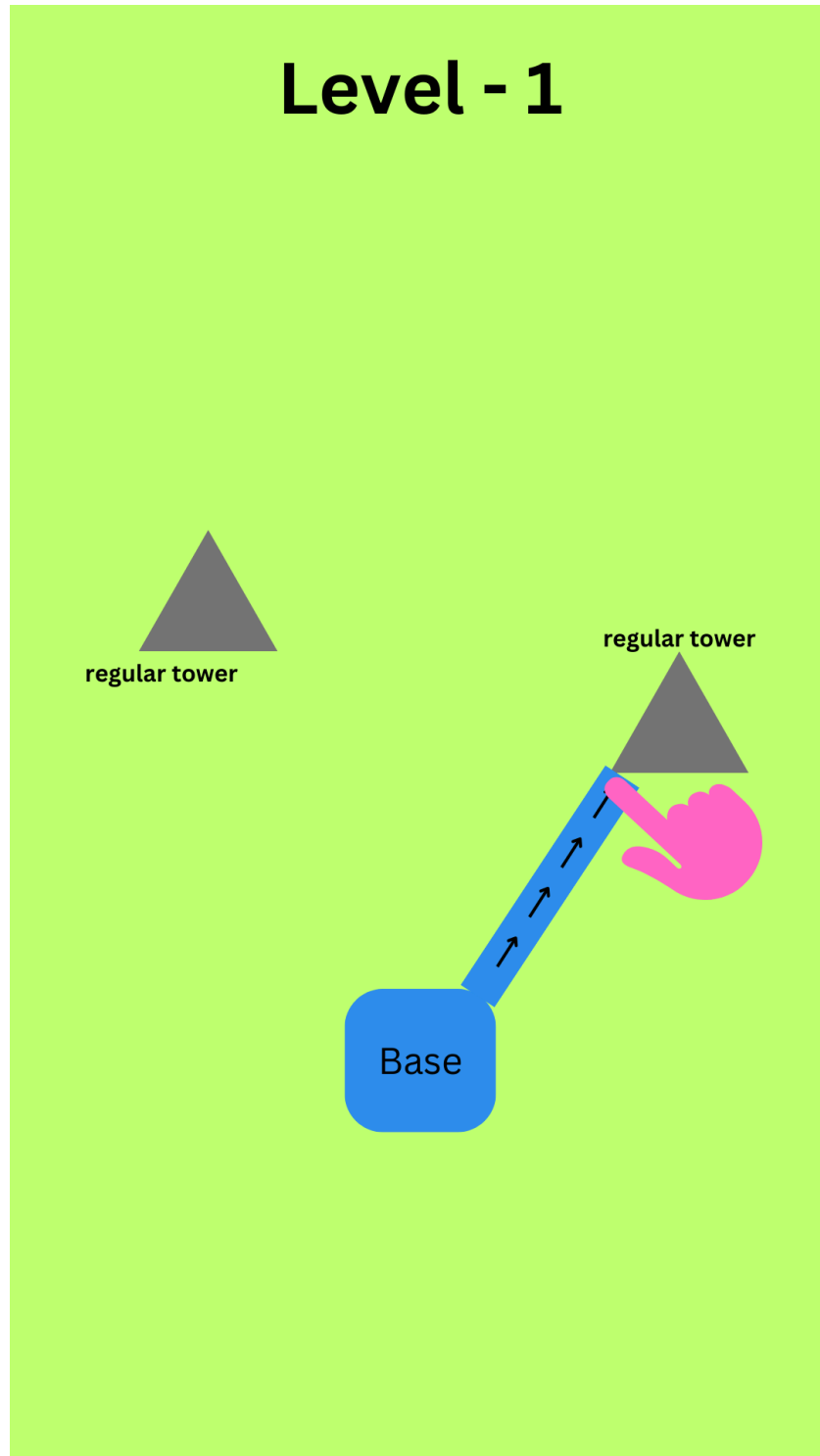
Description:

This document describes a basic layout for the first few levels.

Includes all necessary details and mockups about how the placements of objects, player base, towers, enemies will be.

LEVEL 1:

Level one will be like a tutorial level, explaining the player how controls work and what is the player agency.



Level - 2



regular tower



regular tower



regular tower



Base

Level - 3



Level - 4



Giant tower



regular tower



Giant tower



regular tower



Level - 5



regular tower



regular tower



Base



Base



Giant tower



regular tower



regular tower

Level - 6



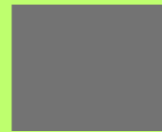
Giant tower



regular tower



Level - 7



Giant tower



archer tower



regular tower



Giant tower



Level - 8



regular tower



regular tower



Base



archer tower



Base



regular tower



regular tower



Level - 9



regular tower



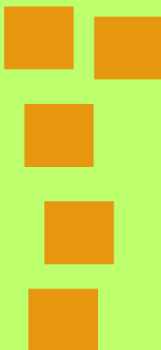
Giant tower



regular tower



Base



Base



regular tower



archer tower



regular tower

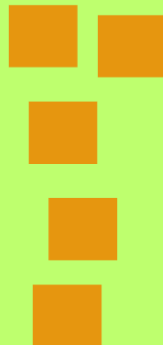
Level - 10

Base

Base



regular tower



Giant tower

Base

Base



regular tower



regular tower



ASSET REFERENCE LIST

All the troops and towers will have a generic look so that we can just change the environment and not the troops every time a biom is changed.

1. Regular tower troops:



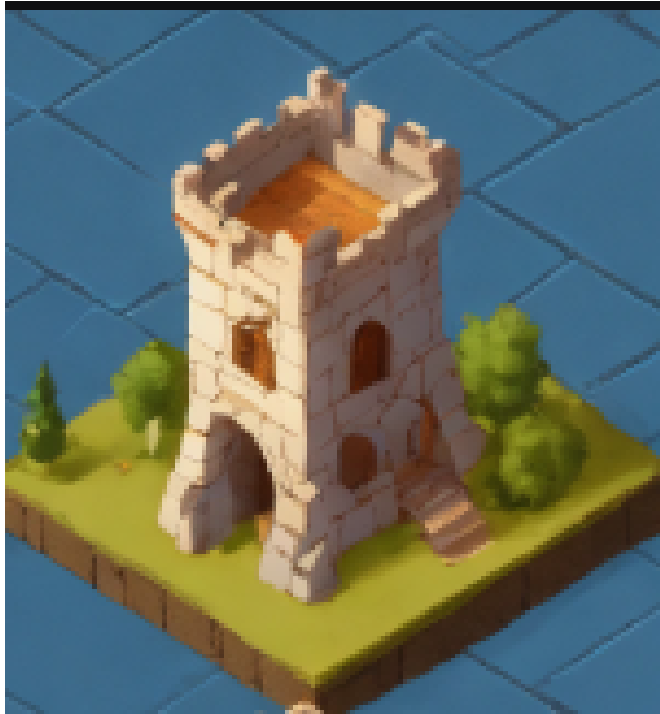
Description: Only one of them will be finally selected. These troops will be holding a sword

2. Tank:

Description: This is for reference, it doesn't have to be exactly the same but similar in style.

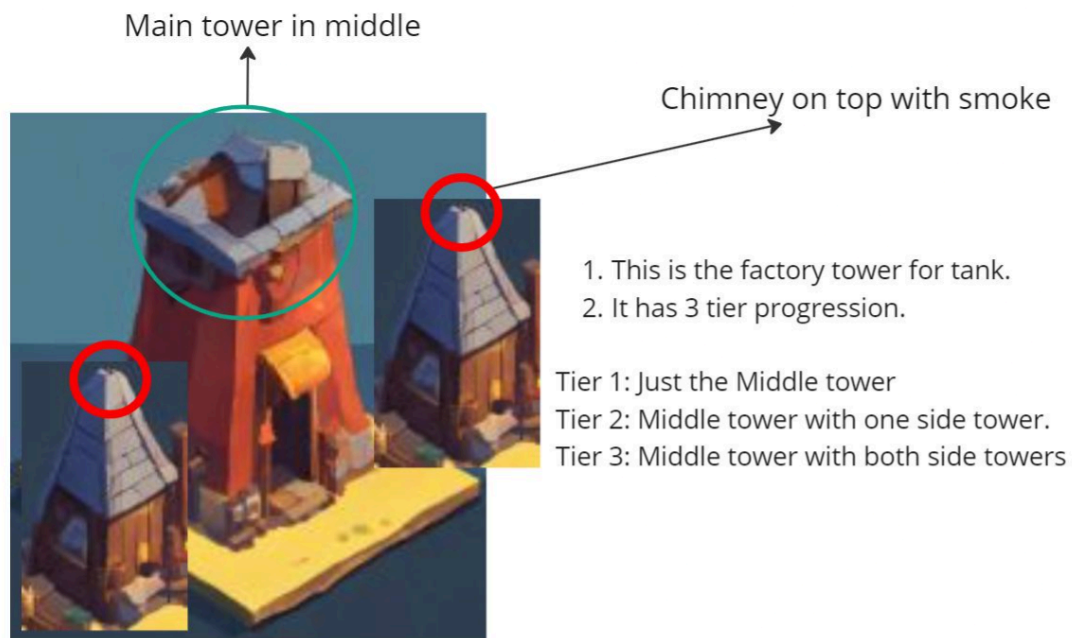


3. Regular troop tower reference:



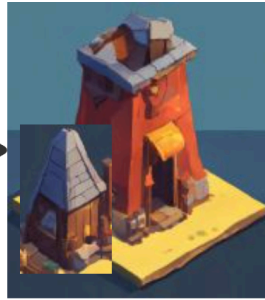
These towers will be made of stone and wood in medieval style. Regular tower will have 3 floors according to the tier 1,2 & 3.

4. Tank Tower





Tier 1

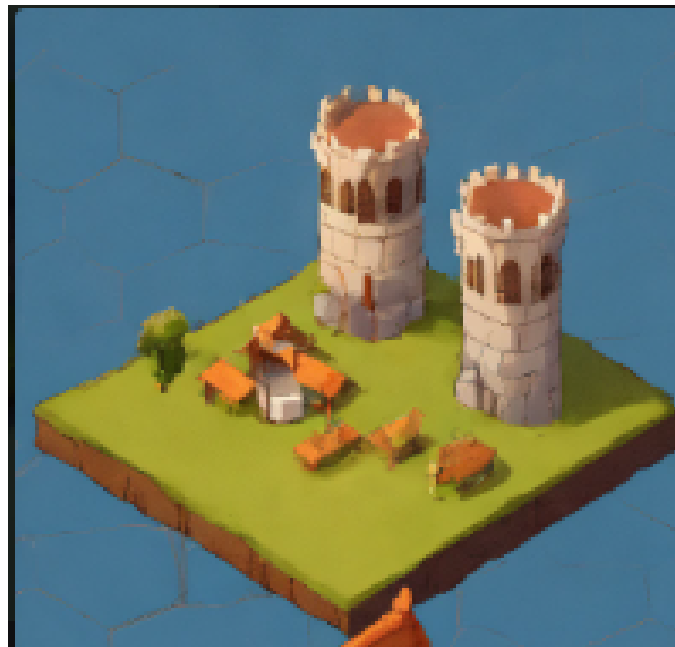
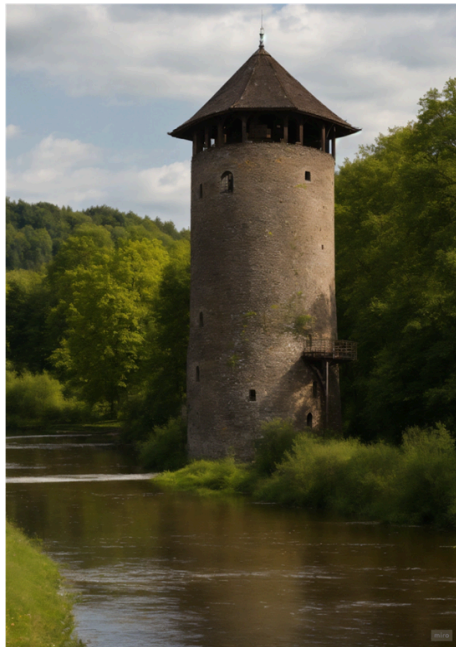


Tier 2



Tier 3 miro

5. Archer Tower:



The height and of the tower will increase according to the respective Tier 1,2 & 3.

There will also be a flag on top of each tower indicating the team color. For example, if it is occupied by the red team, the flag will be red, same for the blue team etc.

6. Some Props:



