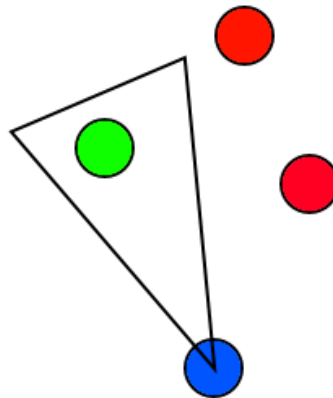# Dead of Night

Prototype Document

I)   Overview:

Dead of Night is a 3D third-person rogue-like stealth action mobile game set in a dystopian future. Players take the role of an assassin tasked with infiltrating and destroying a corrupt dictatorship. The core of the gameplay is around using gadgets, tactics, and stealth to complete goals while avoiding detection. Death brings players back to the starting point with rogue-like behaviors. The player progresses by leveling up, obtaining better gear, and customizing their character. The core gameplay loops and ongoing challenges attempt to engage and keep players in various kinds of approaches.
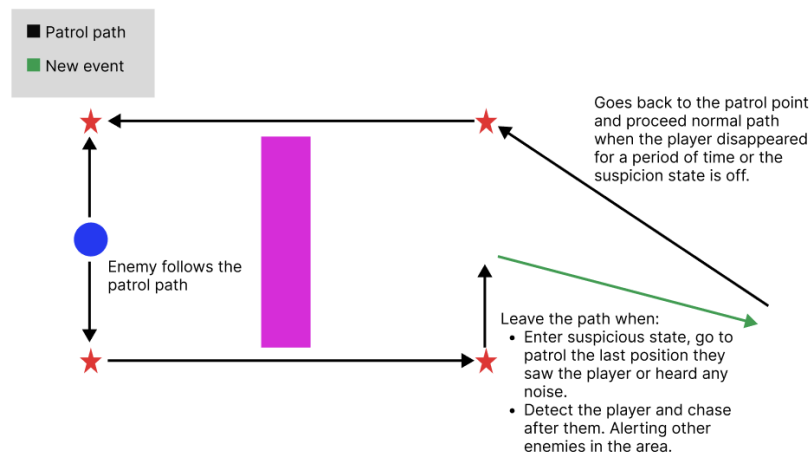
II)   Core mechanics (Priority 1)

1. Stealth:

- Players must get through levels undetected by heavily armed guards, security systems, and surveillance cameras, different kind of enemies and security systems will have unique patrol patterns and detection sensitivities that force players to adapt strategies:
  - *Enemies:*
    - *Grunt*: Basic type of enemies, their patterns will be relatively basic with one narrow path, a light cone detection range and slow detection speed (5 seconds). Grunts carry normal weapon weaponry such as Assault Rifles, Shotguns and Grenades and has no special powers plus gadgets to support them. They normally wear light armor with no helmets.


Pic 1: Vision cone of grunts.

Goes back to the patrol point and proceed normal path when the player disappeared for a period of time or the suspicion state is off.

Enemy follows the patrol path

Leave the path when:
- Enter suspicious state, go to patrol the last position they saw the player or heard any noise.
- Detect the player and chase after them. Alerting other enemies in the area.

Pic 2: Patrol path of grunts.

■ _Elites_: Special type of enemies a wider detection range, a unique patrol pattern and faster detection speed than a normal grunt (3 seconds). Elites also can access to various special weapons from high damage to adding major debuffs and heavily armored. Players need to be very careful when faced these kinds of enemies.
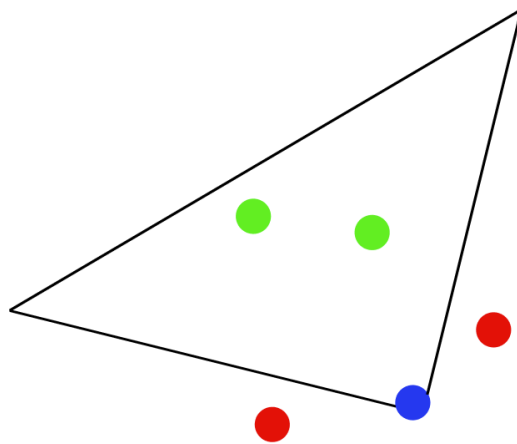
Pic 3: Vision cone of elites.
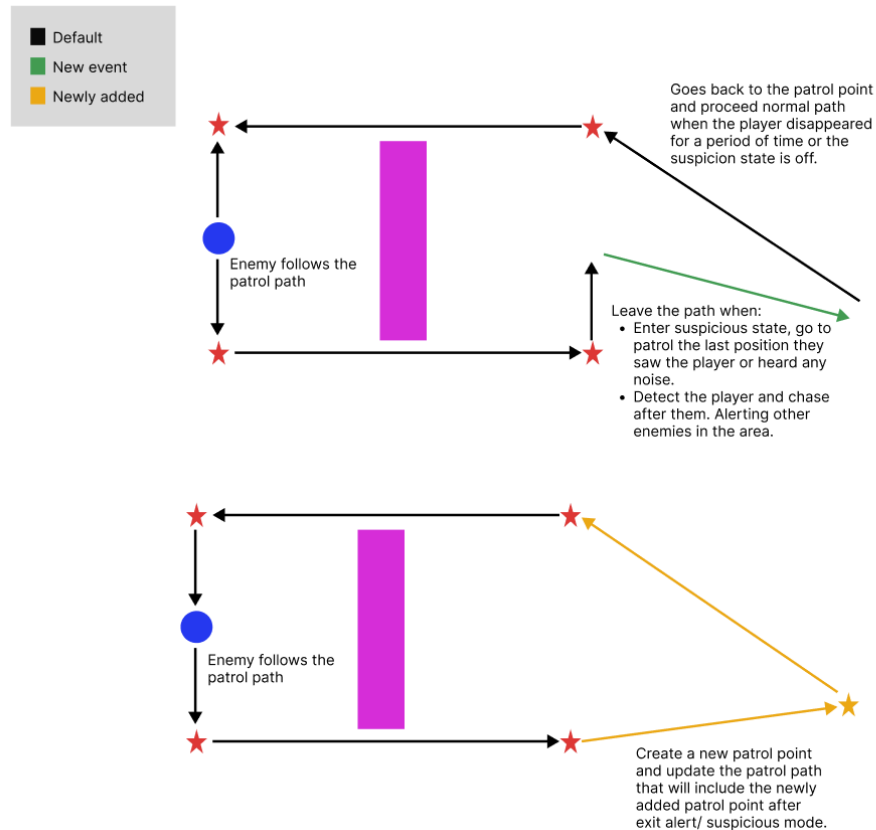
Pic 4: Patrol path of elites.

Detection will warn enemies and make the mission becomes more difficult.

- Players can use cover and stealth abilities (grappling and camouflage) to hide from enemies and reduce their chances of being detected.
- Distractions such as noisemakers or holographic decoys can be used to lure in and distract enemies.
- Silent takedowns allow gamers to dispatch enemies while staying undetected.
- Lighting, shades, and cover affect detection – players are more difficult to spot in the dark, shades or behind cover.

No cover   **Has cover**
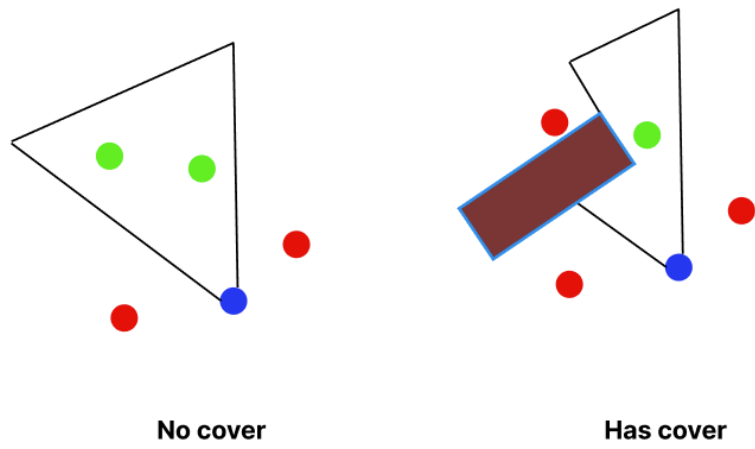
Pic 5: Enemy vision being obstructed by objects like wall.

Light   **Dark**
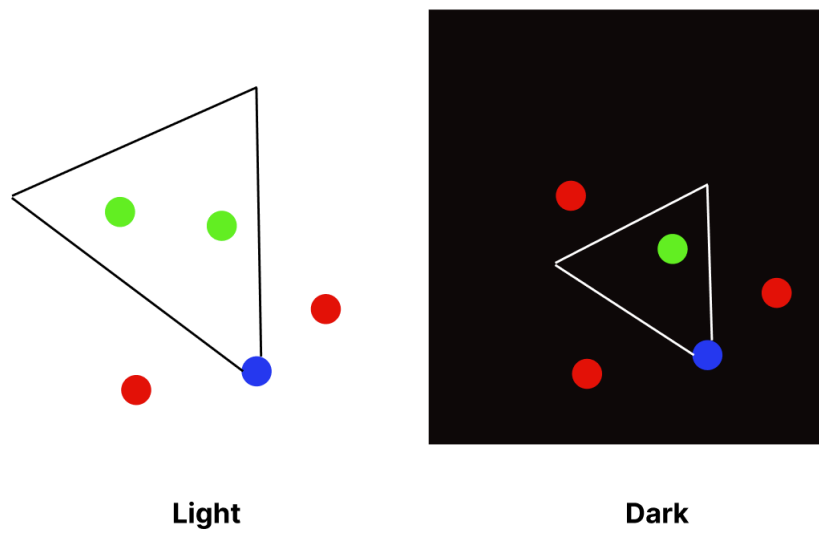
Pic 6: Enemy vision being reduced in the dark
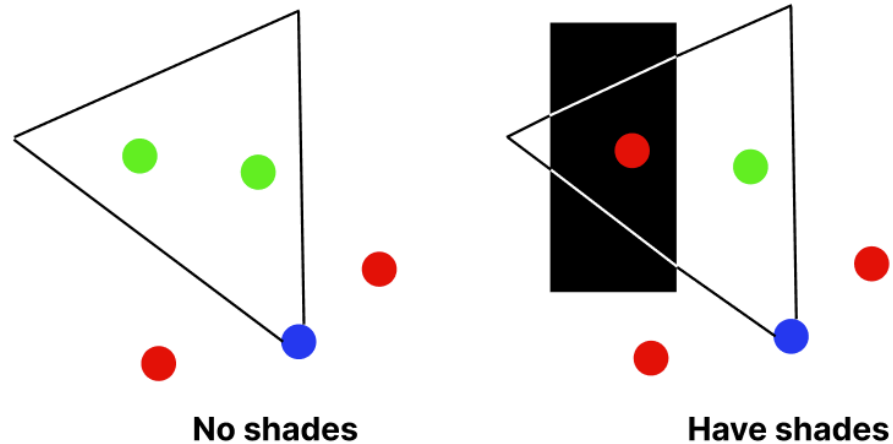
Pic 7: Enemy vision cannot detect in shades.

2. **Rogue-like progression.**
   - Unlike normal stealth games that players will progress through levels, this game will put players into a multiple floor tower that can change its structure as a security method.
   - When players die, they restart from the beginning and floors are procedurally generated, all enemies will respawn and procedurally placed too.
   - Players collect loot from missions that allow them to unlock and upgrade better skills and gear in safehouses. Better gear and gadgets increase chances in assassinating targets.
   - Safehouses will be placed at the start and between floors in a form of an elevator. This zone will allow players to upgrade their current gear and gadgets or sacrifice a gear or gadget for a random new one.

3. **Gadgets and weapons.**
   - Players have access to gadgets and weapons that aid in stealth and distracting/disabling enemies:
     - **Weapons and attachments:**

       Player has access to an arsenal of weapons with their own set of attachments, and they can carry 2 weapons per game.

       - *Non-lethal weapons:* The category of weapons that do not deal lethal damage to enemies. So, these weapons require to not damaging enemies, just knock them out for a period. These kinds of weapons will fit for people want to play a

pacifist route where you just need to eliminate the target, not killing everybody in sight.
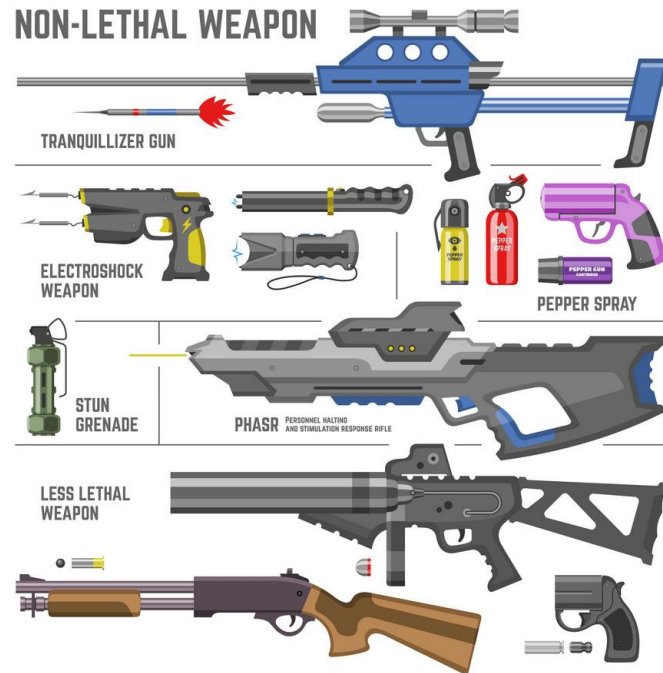
Pic 6: Examples of non-lethal weapons.

- *Lethal weapons:* Normal weapons that deals damage and kill enemies.
- *Attachments:* Each weapon will be able to install different attachments for recoil control or noise reduction. For the prototype, these attachments will be included:
    - *Suppressor:* Reduce noise but also reducing range and damage.
    - *Compensator:* Improve recoil control but also reducing recoil stability.
    - *Scopes:* Different scopes that can increase your range and vision when ADS.
    - *Magazine:* Varies from mags that can increase number of bullets or mags that decrease reload time.

○ **Gadgets:**

There will be various gadgets that the player will have access to, each game the player can only carry 2 gadgets per game. For the prototype, the gadgets will be:

- Decoys - Lure away enemies.

Pic 7: Examples of decoy (Metal Gear Solid V).

- Smoke bombs – creates a smoke screen that temporarily blind enemies.

Pic 8: Examples of Smoke (Counter Strike: Global Offensive).

- EMP - Disables cameras/turrets enemy gadgets and stun enemies temporarily.

Pic 9: Example of EMP (Call of Duty).

- Grappling hook – Use for fast positioning by pulling the player to the position that the hook lands in massive speed.

Pic 9: Example of Grappling hook (Just Cause).

4. **Neural Hacking**
   - Players can hack into security systems and enemies by using an advanced neural hacking device implanted in their brains. This expands hacking capabilities in new ways:
   - **Neural Camouflage** - Players can hack the neural networks of enemies to disguise their presence for a short amount of time. Enemies will perceive the player as one of their allies.

- **Neural Manipulation** - Hack into an enemy's neural network to confuse them or manipulate their actions like making them into psychosis and turn enemies against each other.
- **Neural Recon** - Hack into the neural communication channels of the network to gather intel on enemy whereabouts.
- **Neural Override** - Hack neural security protocols to override door controls, alarm systems, turrets, safes, and other countermeasures.
- **Neural Breach** - Hack directly into an enemy's memories and cognitive processes to extract government member data.
- The neural hacking mechanic will be implemented through a mini game where players visualize penetrating network firewalls and bypassing security nodes. Successful hacks require focus and skill. Failed attempts can stun the player temporarily. The neural hacking element brings a futuristic, high-risk way to infiltrate secured enemy networks.

Pic 10: Cyberpunk 2077 Hacking minigame.

III)   Mission Structure (Priority 2)

- The main goal is to eliminate every government official operating inside this tower in a single infiltration attempt. Any player death throughout the gameplay will result in the resurrection and reappearance of all government targets, requiring the player to restart the game entirely.
- Each floor has multiple paths and approaches to accomplish objectives.
- Security will increase the further the player progress by increasing enemy and security system numbers, increasing the spawn of Elite soldiers - players must assess risks vs rewards of each infiltration.

- After 2 floors, player will face the government member which will be the boss of that section. Player must choose between whether direct combat or stealth will be the best approach for each boss cause every boss will have different strength and weaknesses. But overall, the boss fight will be far harder.

IV) Combat (Priority 3):

- Players have access to weapons that can be used for stealth or combat when stealth fails.
- Combat is high risk and will likely lead to death since the troops are better armored than the player. So stealth is encouraged.
- For the prototype, there should only be 7 weapons: Pistol, Assault Rifle, Non-lethal tranquilizer rifle, Sniper, Shotgun, Knife and Baton.

V) Progression (Priority 4):

- Experience points earned after each infiltration allow players to unlock skills that aid stealth.
- The player's weapons and gadget change between runs based on randomly found items and unlocked potential loadouts. This variation helps keep the game feeling fresh.
- Loot collected in some crates populated in random floors can be used to upgrade weapons and gadgets. Some can unlock blueprints that can unlock permanent weapons and skills. These blueprints can then be purchased with game currency to add them to the player's possible loadouts.
- Higher difficulty levels are unlocked as the player progresses, offering greater challenge and more rewarding drops. Players must beat each difficulty level to unlock the next.
- To encourage a stealthy playstyle, non-lethal takedowns give 1.5x more XP than lethal kills and being undetected grants bonus to XP plus extra material drop.

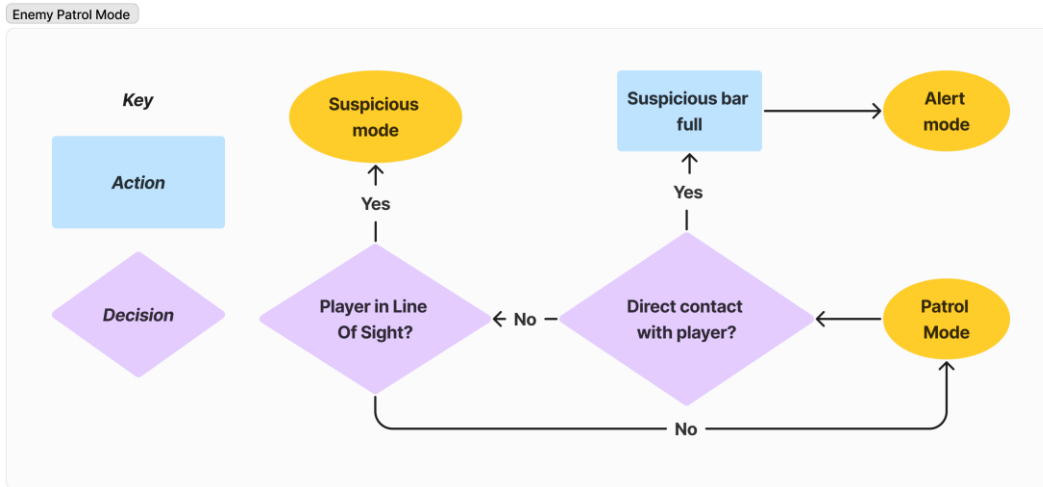# VI)   Wireframes & Flowcharts:

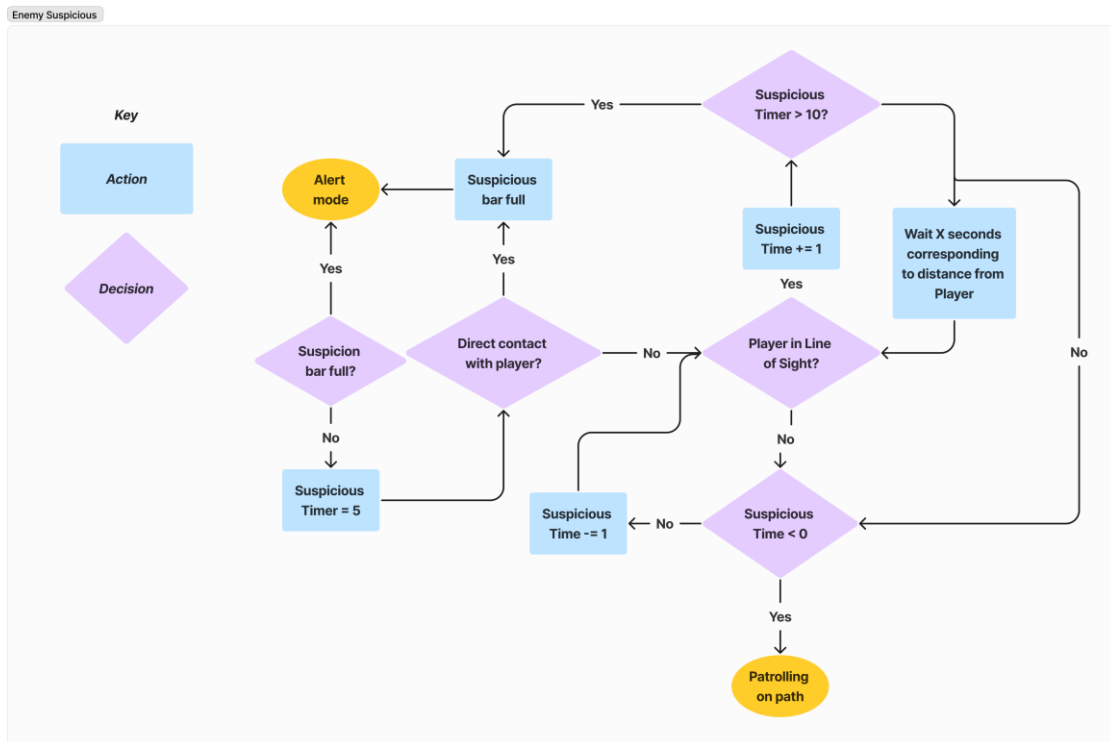## a) Flowcharts:

1. Enemy behavior:
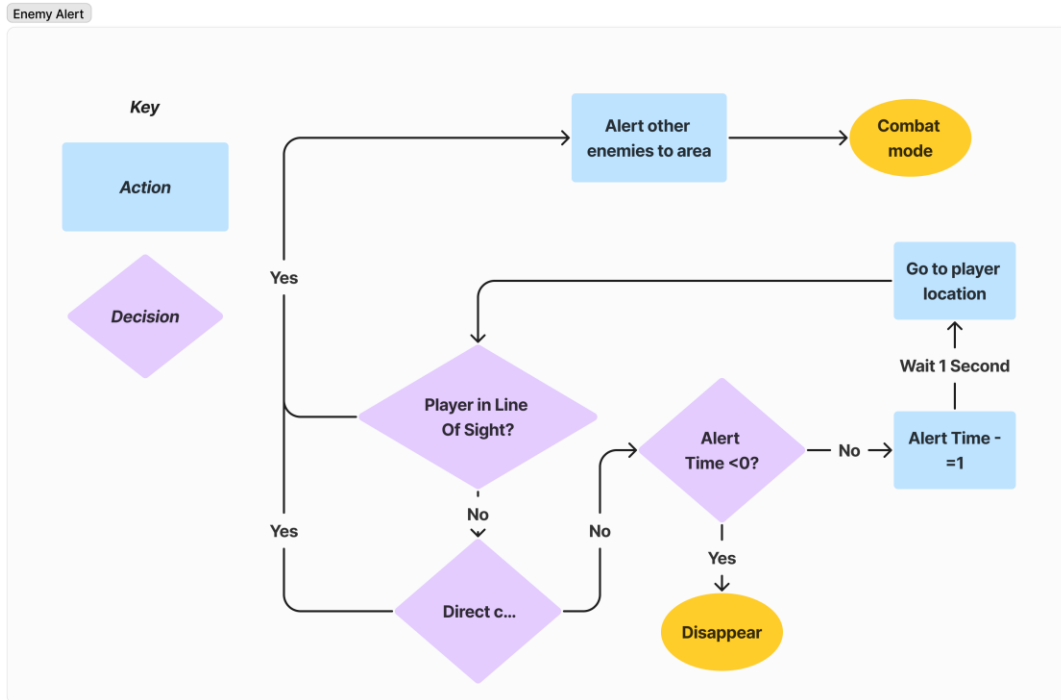

Diagram 1: Patrol mode

Diagram 2: Suspicious mode

Key

Action

Decision

Alert other enemies to area → **Combat mode**

Player in Line Of Sight?

Yes

Go to player location

Wait 1 Second

Alert Time <0?

No → **Alert Time -=1**

No

Direct c...

Yes

Disappear

Yes

No

Diagram 3: Alert mode

Key

Action

Decision

Disappear Time -=1 → **Location Visited = TRUE** → **Go to last position visited** ← **Disappear Time =5**

No

Disappear Time <0

Yes

Elite enemy? → Yes → **Add new waypoint based on last location visited to the patrol route.**

No

Patrol mode.

update the patrol path

Patrol mode on newly updated path.

No

Player in Line Of Sight? ← No ← **Direct contact with player?**

Yes → **Alert mode**

Yes

Diagram 4: Disappeared Player

Enemy Combat

Key

Action

Decision

Player in Line Of Sight? → Alert Mode

Yes

Approach Player till inside combat range → Low on Health? — Yes → Elite enemy?

Elite enemy? → Yes → Heal (15%)

No

Player Attacking?

No

Yes

Take cover

Basic Attack (Shooting)

Random chance

Skill: Grenades
- Different nades depends on the kind of Grunts.
- For the prototype: Molotov and Frag Grenade

Elite enemy? — No ← / → Yes

Skill: Superpowers
- Different skill depends on the kind of Elites.
- For the prototype: freezing the player for 2s or temporarily prevent players from using skills .

Will attack as a single unit if mutiple.

No

One left alive?

Yes

Tries to run off-screen to get more guards (2-3 guards) (will only happens once)

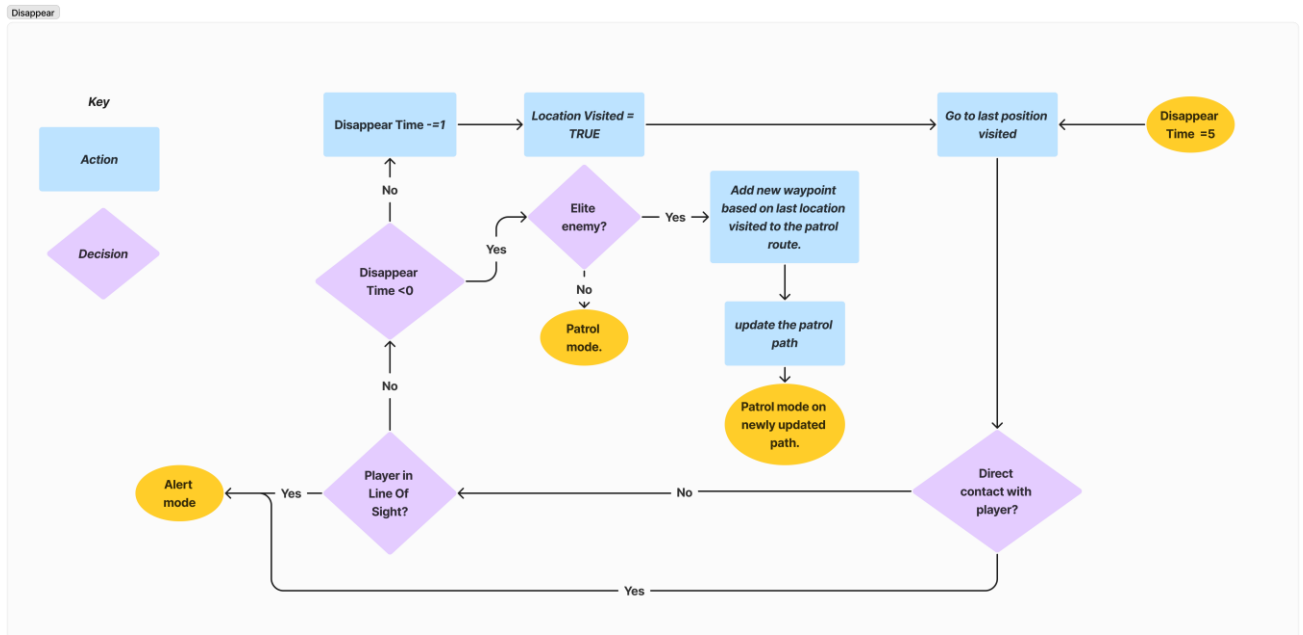Successful? — Yes → Returns back to battle with more guards

No
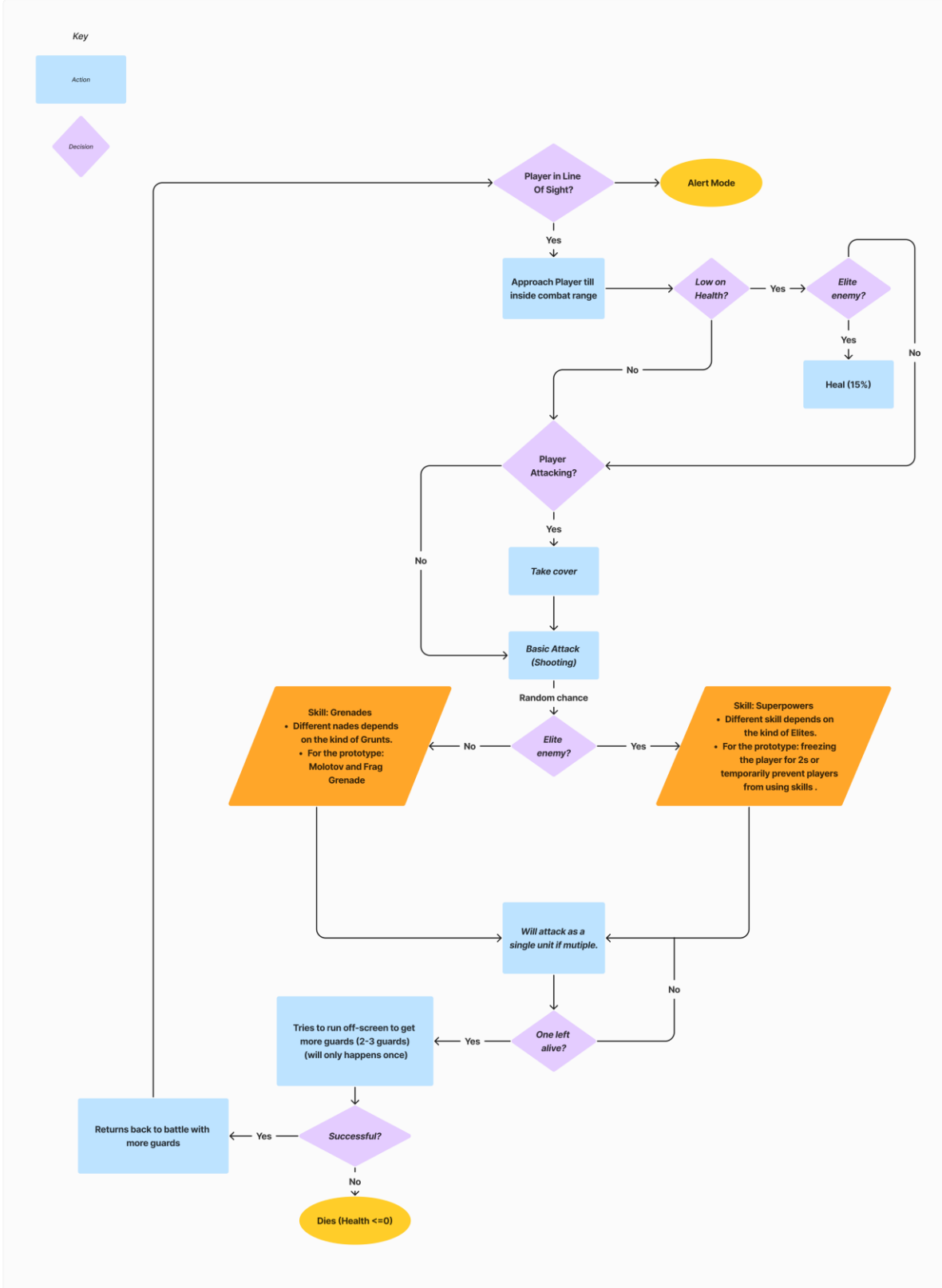
Dies (Health <=0)

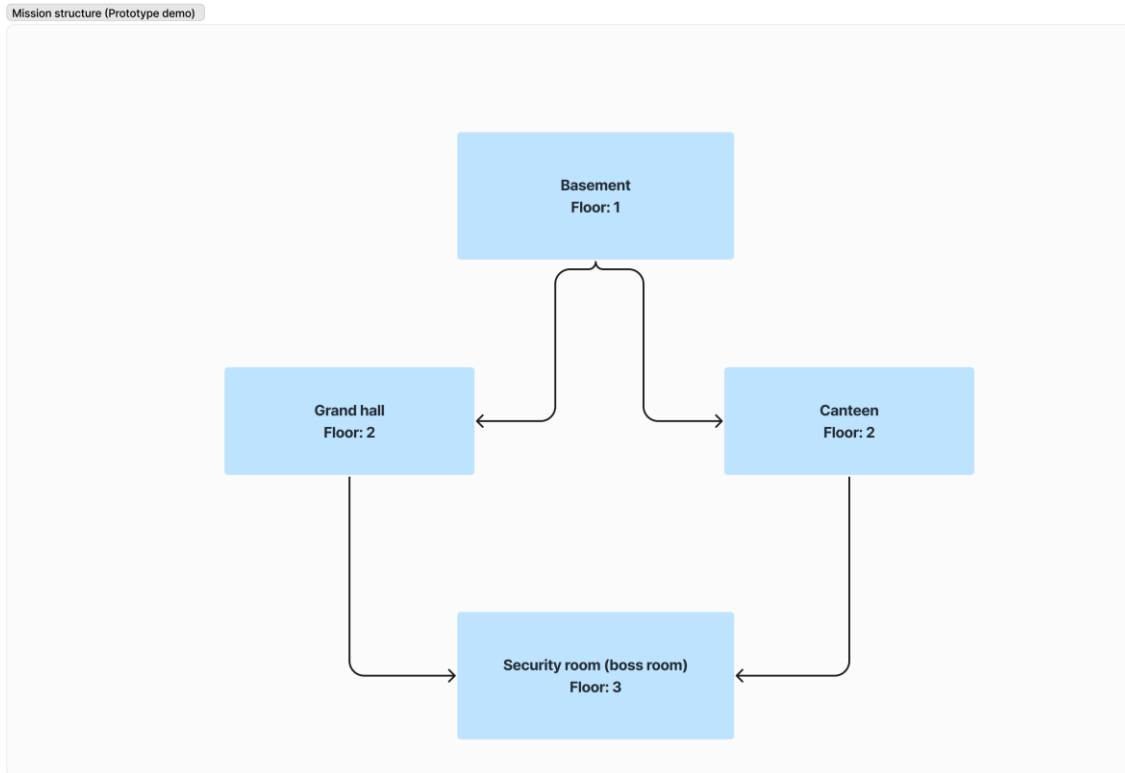*Diagram 5: Combat mode*

2. Prototype mission structure:

Diagram 6: Prototype mission structure.

b) Wireframes:

Main Menu
A main menu with basic layouts along with a game updates box for new game updates and news
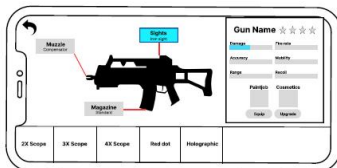

Lobby
A lobby where you can trade, buy stuff, upgrade gear and start infiltrations
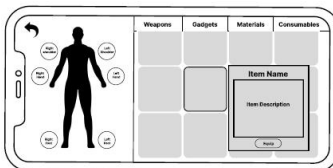

Battle
A Battle UI with a minimap, pause button, action buttons such as shooting and a joystick. It also have a crosshair for better movement. This UI will be used when the player start infiltrating the tower (start the game)
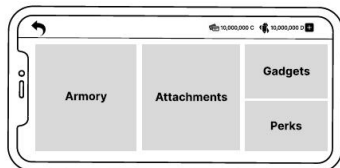

Gun Modify menu
A gun modify menu used for adding attachments and upgrade guns

Inventory menu
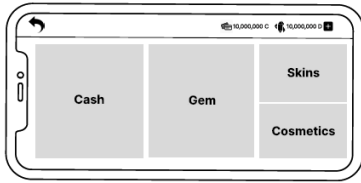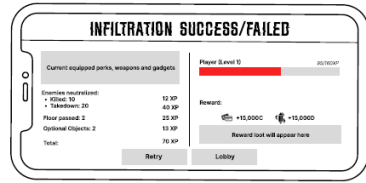Iventory menu for implement gadget, buff and view weapons

Market
Market where user can browse and buy gadgets, weapons, attachments and Perks

Currency-cash

Novice offer	Assassin offer	Master offer
$0.99	$9.99	$12.99

Currency-cash

User can choose from different offers that provide by the screen

Store

Cash	Gem	Skins
		Cosmetics

Store

Currency screen provides different options of buying cosmetics, game currency and buffs to the user

INFILTRATION SUCCESS/FAILED

Current equipped perks, weapons and gadgets

Player (Level 1)   RETIRE XP

Enemies neutralized:
- Killed: 10   12 XP
- Takedown: 20   40 XP

Reward:

Floor passed: 2   25 XP   +15,000C   +15,000D

Optional Objects: 2   13 XP   Reward loot will appear here

Total: 70 XP

| Retry | Lobby |

Result screen

In Result screen, it tells the user the detail statistics and allows user to retry.

Protocol

00:09:25
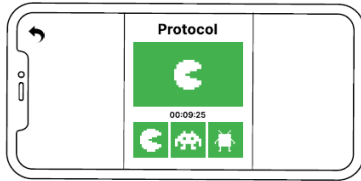
Hacking

A hacking minigame, this is just an example. It will not be the final minigame.