Game Design Document for:

PROJECT ARCANA (WORKING TITLE)

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1. GAME OVERVIEW – ROBERT J HARPER

1.1 Premise

Invisible Inc meets Magicka. Control a small squad of druids as they infiltrate futuristic research labs to retrieve stolen artefacts. Utilise each character's unique attributes and abilities to evade and overcome foes and obstacles in a variety of ways.

1.2. Target Audience – Lauren Baird

The age range we will be targeting is 16+; we would expect our game to receive an age rating of 15+ due to the mild/moderate violence included in its contents. We believe that this age range are old enough to fully understand, navigate, and enjoy the nuances and challenges of strategy-based gameplay - and that they will have some free time to be able to set aside to play the game.

We will mainly be focusing on targeting the North American and European regions - because we fit into these markets and are familiar with them, we feel we can more effectively target them. Our game will also be in English and does not have any localisation planned - so being able to understand English is necessary to play. The game's visual style uses influences from Celtic culture too - European and North American markets will be more familiar with these motifs.

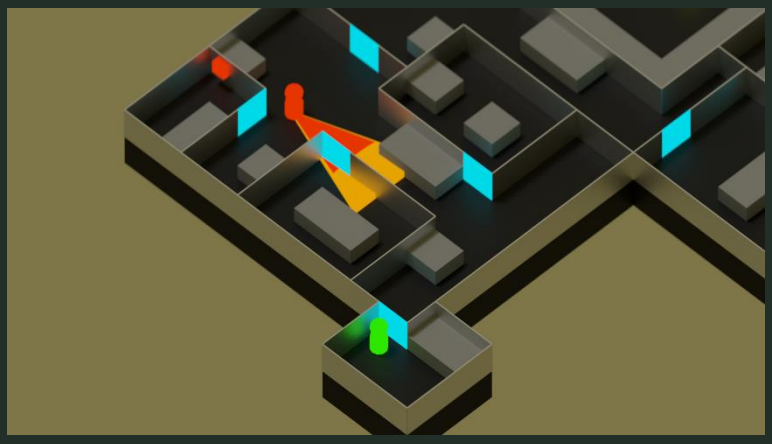
We have chosen to develop for the PC platform for several reasons:

- PC gamers dedicate the most hours per week to gameplay than any other dedicated platform (Frank, A. 2016).
- Strategy is the 2nd most popular genre on PC (Steam 2017), with strategy games appearing multiple times on Steam's platinum sellers list; this genre is non-existent on the top 10 games for Xbox (D'Angelo, W. 2017) and PlayStation (Pereira, C. 2017) markets, so console platforms would not be ideal.
- Developing for the PC will cause less issues for us - we can test easily on PCs as we have the computers necessary for it, and we will be developing using PCs - we won't need any extra peripheral equipment to play.
- Our chosen engine for development - the Unreal Engine - can produce extensive games, and while we do plan to optimise as much as possible so the game runs well, we also want to have impressive graphical effects.
- Our players are considered midcore: they have enough spare time in their daily schedule to set aside to play our game (Mason, M. 2013); they enjoy a challenge, but not an impossible one; and they want some depth to the narrative and art of the game (Graft, K. 2013).
- A 'Gladiator' profile would fit our target audience well: they enjoy the thrill of competition, want to master the skills needed to win the game, and enjoy characterisation and story in games (GameVision 2016).
- The 'Lone Hero' player profile would be suitable, too: these players enjoy action in games, they want to feel like a hero, and prefer solo experiences and storytelling (GameVision 2016).

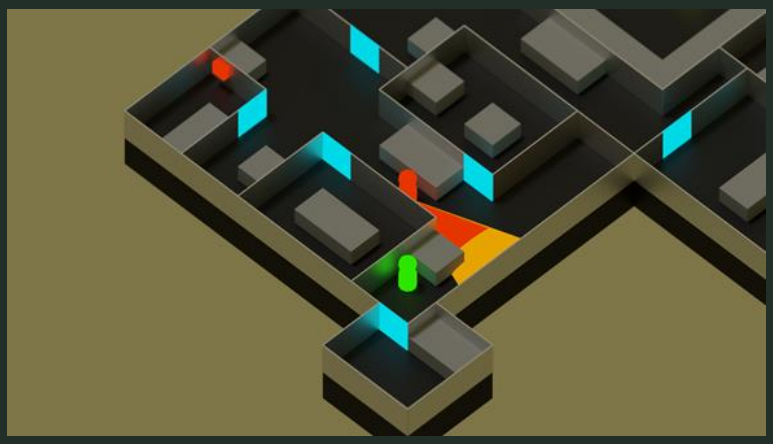
1.3. Game Flow Summary – Lauren Baird and Robert J Harper

A typical gameplay session for this project has been visualised as so:

- Player launches the game and is greeted with the main menu screen – it is simple, contains 4 menu options (Play, Controls, Credits, and Quit), a bold and striking title (Project Arcana), and has a background relevant to the game level with looping animations and/or VFX.
- Players would select the 'Play' option to start the game.
- The gameplay would then begin; the player's objective tracker would read "Retrieve the Stolen Artefact".

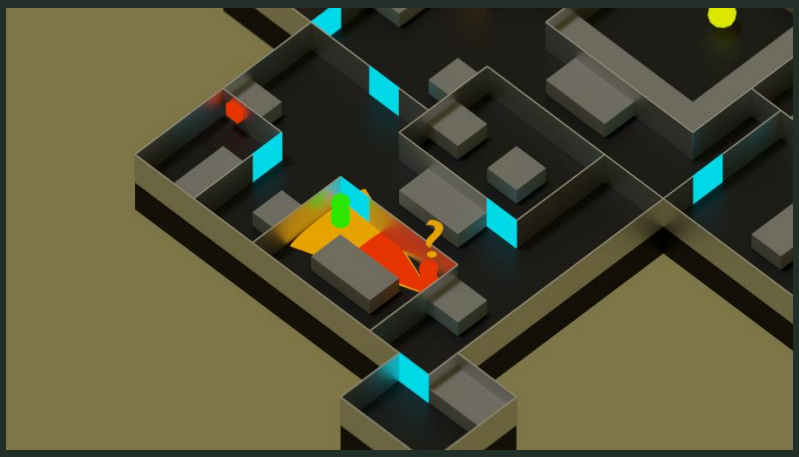


- The player's turn would be first – for a first-time player, they would most likely explore the UI – here they would discover that objects are highlighted as the mouse cursor moves over them.
- The player would then make their move to explore the lab, and towards the artefact.



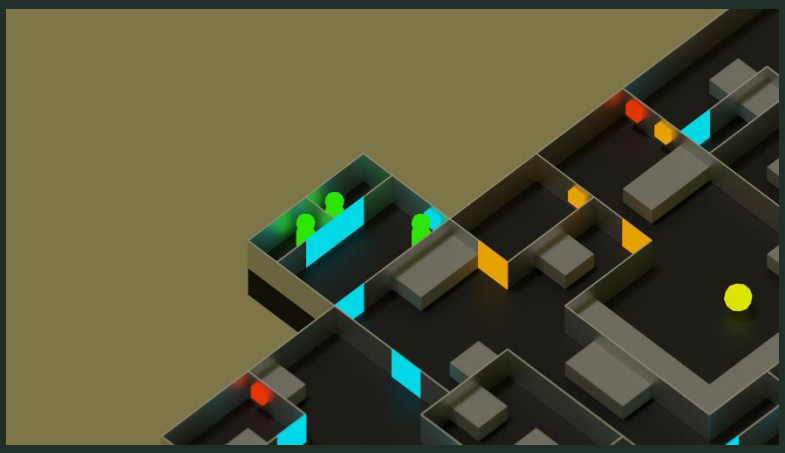
- After taking their turn, they would discover that the enemies then take their turns, but most likely they will only see a couple of enemies – the player would be able to see the enemy characters moving on their patrols.
- Players would make use of the environmental layout to avoid enemies' line-of-sight.
- When they enter another room, they may spot additional enemies, it is here that players realise they can only see enemies in the same room as them.

- If unfortunately caught in the line-of-sight, players would then notice that enemies enter a ‘cautious’ state, and would be on edge and look around the current area extensively, making it more difficult for the player to remain hidden.

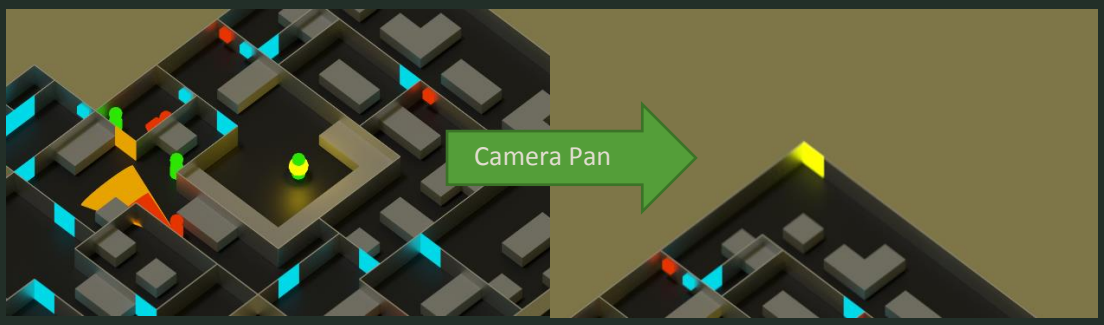


- After a few turns, players would notice that enemies then return to a calm state.
- If players are fully spotted, the enemy will enter ‘attack’ mode. They will chase and engage the player in combat for as long as they are in their line-of-sight. When out of the enemy’s line-of-sight, the enemy will run around looking for the player. After a few turns, they would return to a cautious state – and then to a calm state a few more turns after that.
- When engaging in combat, players would realise that enemies can be damage and killed – but also that enemies have more health and can deal more damage than player characters.
- Exploring the lab environment would allow players to discover there are doors which are locked. Further exploration will reveal a panel connected to it.

- Interacting with this panel will unlock the door, now the player knows how to unlock doors.



- Player will also learn through environment interaction that they can disable the alarms around the lab – these alarms are pulled by enemies when there is one nearby and the enemy is in 'alert' mode, but does not have player in the line-of-sight.
- When alarms are set off, all enemies in the lab are put into a 'cautious' state.
- The environmental hazards and their characters' vulnerability should encourage players to utilise a stealthy approach to completing their objective.
- When the player has collected the artefact fragment, the objective tracker will change to "Escape the lab." And the camera will pan to the exit the player needs to navigate their characters to.



- If players manage to extract with the fragment in their possession they will be taken to the score screen.
- The player's score will be determined by their various actions throughout the level: how many alarms they disabled, how many doors they unlocked, if they were spotted by enemies, how much damage they took, et cetera.
- From this screen, the player has the option of restarting the level, or returning to main menu screen.

2. SETTING & NARRATIVE - ROBERT J HARPER

2.1. Story

In the far future, the world's natural resources are fast reaching depletion. In a desperate bid for humanity's survival, an elite team of scientists from around the world attempt to find a new source of power. In their search, they find ancient relics from a druid tribe they believed to be extinct.

They were wrong.

With their sacred artefact stolen and picked apart, the dormant druid civilisation surfaces for the first time in over a millennium. To recover the fragments of the relic, before their true power is unleashed.

2.2. Game World

Futuristic research laboratories with some overgrowth present on/in the buildings.

2.3. How Narrative Is Communicated

At the start of each mission and with certain mission milestones, characters will comment on their situation. Each character will have their own view on the situation but for milestones it's the instigator of the narrative trigger who will speak. (e.g. found an artefact behind max security.)

MVP: Narrative implementation is not required for the prototype.

3. CHARACTERS – ROBERT J HARPER

3.1. Player Characters

3.1.I. PLAYER CHARACTER 1

Name: Bruane

Personality: Impulsive, cocky.

Archetype: Infiltrator/Distraction

Element: Fire

Base Attack: Staff/Fireball (Melee/Ranged)

Movement Range: High (7 units in a straight line)

3.1.II. PLAYER CHARACTER 2

Name: Uarán

Personality: Competitive, envious.

Archetype: Saboteur

Element: Water

Base Attack: Staff/Ice Spike (Melee/Ranged)

Movement Range: Standard (5 units in a straight line)

3.1.III. PLAYER CHARACTER 3

Name: Saol

Personality: Restrained, wise.

Archetype: Support

Element: Life

Base Attack: Staff/Vine (Melee/Ranged)

Movement Range: Low (4 units in a straight line)

3.1IV. PROTOTYPE PLAYER CHARACTER

The prototype will feature all three characters, although their abilities may not all be present or fully implemented. Furthermore, the characters will share the same model with different colour schemes.

3.1.V. PROPOSED FURTHER DEVELOPMENT

The roster would expand to introduce characters representing more elements (stone, void, electrical etc.)

3.2. Enemy Characters

3.2.I. ENEMY CHARACTER 1

Name: Security

Archetype: Guard

Element: N/A

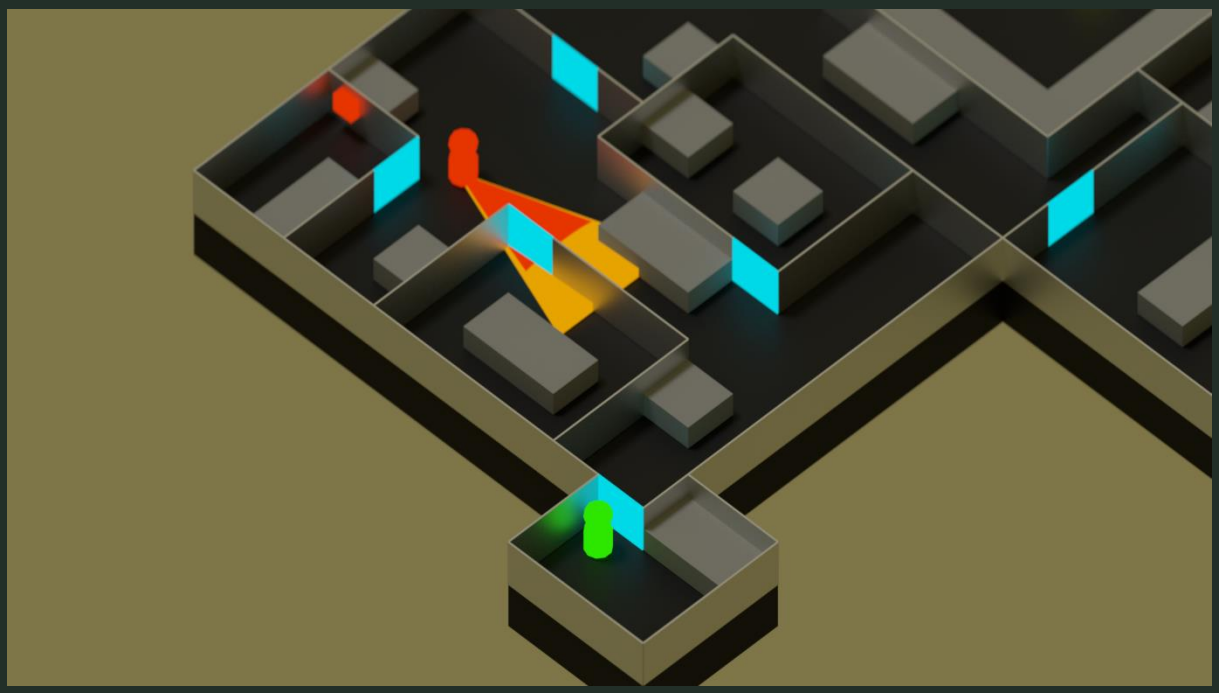
Base Attack: Rifle (Ranged)

Movement Range: Standard (10 units in a straight line)

3.2.II. ENEMY CHARACTER 2

Name: Scientist

Archetype: Civilian



Element: N/A

Base Attack: Scream (Area of effect)

Movement Range: Standard (10 units in a straight line)

3.2.IV. PROTOTYPE ENEMY CHARACTER

Explanation of why we are aiming for the MVP and why we chose this specific character as the player character for the prototype.

The prototype will exclusively feature the Security NPC. As the game's most common adversary, it is most appropriate to prioritise game balance and features against this character.

3.2.V. PROPOSED FURTHER DEVELOPMENT

Some ideas for further development of characters, any other player characters we would like to have or decided to scrap, etc.

Name: Turret

Archetype: Turret

Element: N/A

Base Attack: Shoot (Ranged)

Movement Range: N/A

[Special]: Will instantly trigger alarms upon player sighting.

Name: Inhibitor

Archetype: Turret

Element: N/A

Base Attack: Drain (Area of Effect - Passive)

Movement Range: N/A

[Special]: Will double the cooldown time for abilities of any druid within its influence.

4. GAMEPLAY & MECHANICS – ROBERT J HARPER

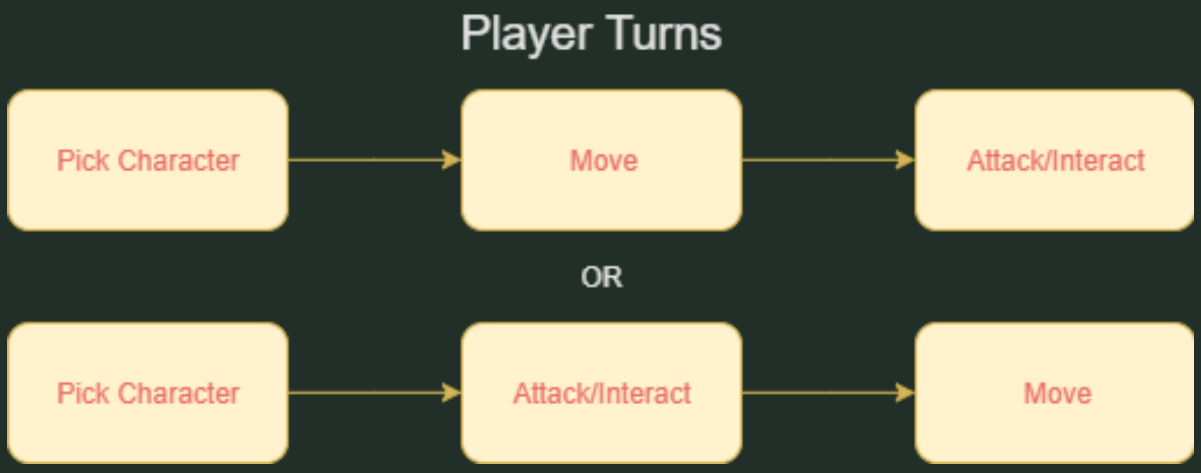
4.1. Mission Structure

Describe the general mission structure: typical gameplay session time, objectives, and obstacles to the player achieving those objectives.

4.1.I. GAME FLOW DIAGRAM

Typical mission structure is as follows:

A player turn is executed like this for each character:



In the first phase of the player's experience through a level, their goal is to find the artefact fragment. When players enter the room that the artefact is kept in, there will be an audio cue to notify the player that they are near the artefact fragment. Along with this, the objective tracker will switch from "Find the artefact" to "Retrieve the artefact", and the camera will pan to the artefact's location and then back to the player character who discovered it.

MVP: Objective tracker changes and sound cues to signify artefact discovery. Camera pan could instead be an instantaneous camera cut or left out altogether.

4.2. Character Controls

4.2.I. MOVEMENT

The levels are set out in a grid, the range of enemy and player movement is measured with the number of tiles they can traverse in a single turn. If players end up next to an obstacle of any kind, they will automatically take cover behind that object.

There are two ranges of movement, each with their pros and cons:

- Standard Range:
  - Crouched movement (takes advantage of half-height cover).
  - Quiet (guards can't hear movement).
  - Limited range.
- Dash Range:
  - Extended range.

- Sprinting movement (does not take advantage of half height cover).
- Noisy (can alert guards).

Regardless of whether players have dashed or not, players are entitled to one movement and one action each turn. That action can be an attack, interacting with the environment, or executing an ability.

MVP: Players move around the map abiding by the grid system. Can crouch behind half-height cover. Dash mechanics are secondary.

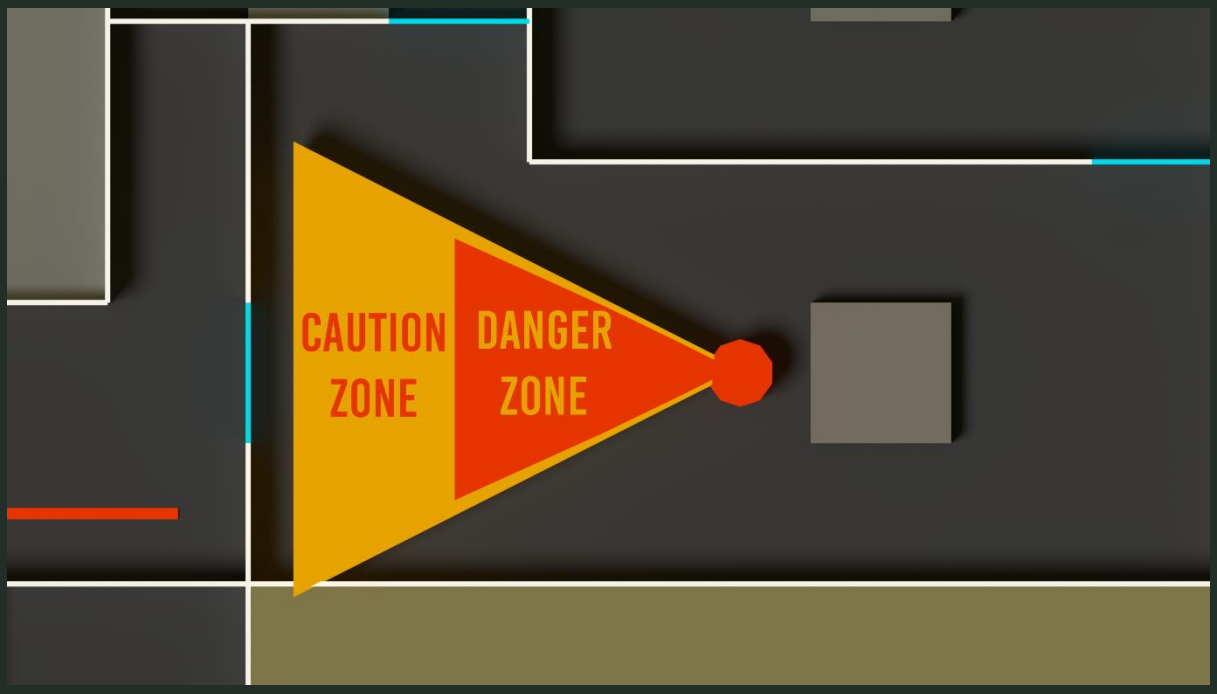
4.2.II. STEALTH SYSTEM

Stealth is key to player victory. While undetected, AI will follow patrol routes, walk to their destinations, and have a reduced line of sight.

A core component to separate this title from its peers is the emphasis on sound. Every player action will produce a certain amount of noise, the amount of noise the action makes will be shown as a radial projection on the player's UI when they are taking their turn. This marker is split into two, the outer rim is the caution zone, where enemies might hear the sound and go investigate. The inner rim is the danger zone, where enemies will hear the sound and rush to investigate with behaviours akin to combat status, however it is not counted as combat mode unless the player is seen.

Visual representation of how the sound mechanics operate. In this case, when disabling an alarm.

Vision cones are similar. The outer region of the cone will draw enemies to inspect the player's location if caught in its influence. The inner region of the cone will instantly put the enemy into alert mode.



Visual representation of the vision cones.

If a character is spotted, and the rest of the party are concealed, then only that character is in peril. Although if an alarm is triggered, the entire facility will be on high alert, making discovery of the remaining party members much more likely. Alarms can be disabled by finding an alarm panel and interacting with it, this will destroy the panel and prevent future activation.

MVP: Vision cones which detect the player if overlapped. Sound sources are a secondary feature but would greatly impact gameplay depending on its inclusion.

4.2.III. HEALTH/COMBAT SYSTEM

Each unit of the party has their own pool of health, this varies depending on the character. As opposed to percentages, health will be defined with hit points.

To attack with their desired character:

- players select the ability they wish to execute
- click on a tile within the highlighted range to execute that ability
- if no ability is selected and they click on an enemy, the character will execute their default attack.

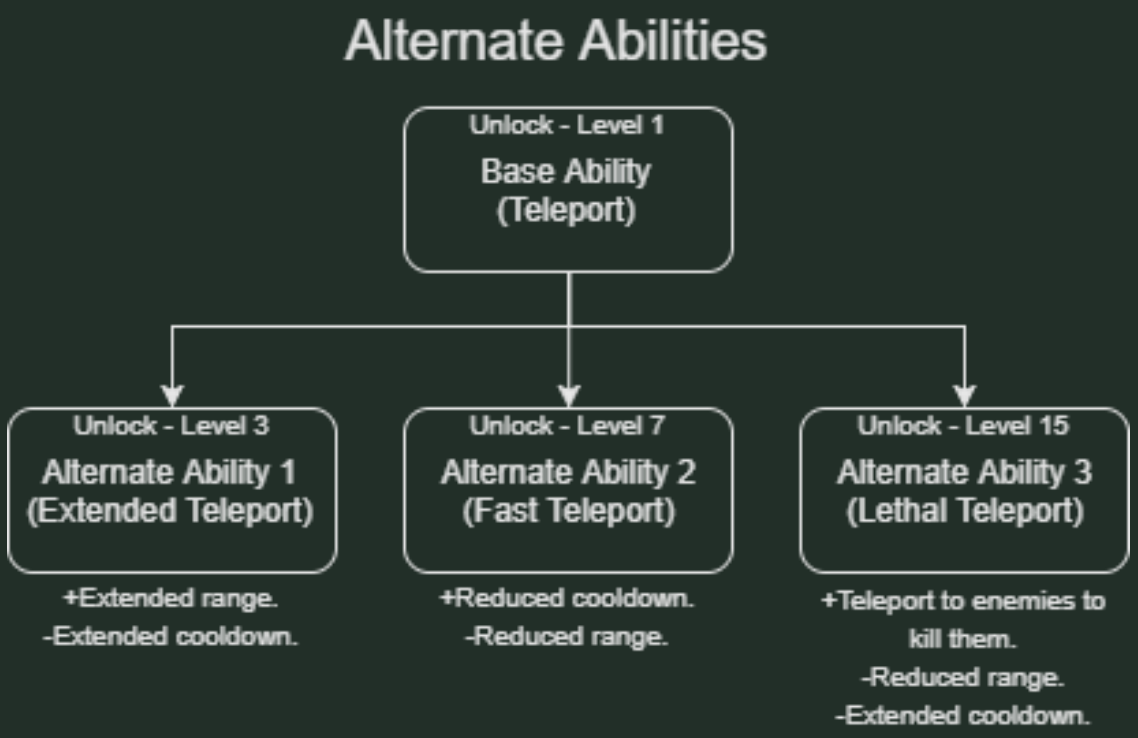
Most characters will have melee and ranged attacks. Melee requires the character to be on an adjacent tile to their target to use. Ranged attacks only require the enemy to be in their line of sight and in range.

4.2.IV ABILITIES

Each character comes equipped with their own set of unique abilities which can be used both in and out of combat.

Usage of the abilities will be restricted with cooldowns. The number of turns required will depend on the effectiveness of the ability.

As they progress through the game, players will unlock alternate versions of their base abilities, each with their own enhancements and drawbacks:



Concept of teleport ability progression.

The examples of abilities available to the player through various characters include:

In the Prototype – The MVP Abilities

Teleport [Fire] - Move to any tile instantly and silently in range. [Cooldown - 3 turns | Range - 5 Units]

Freeze [Water] - Freeze enemies, doors or alarms to temporarily disable them. Cast on floor to make people slide across that tile. Thaws after 2 turns. [Cooldown - 3 turns | Range - 5 Units]

Conceal [Life] - Disguise self (or ally) as an inanimate object. Undetectable by guards while concealed. Removed when character moves. [Cooldown - 5 turns | Range - 3 Units]

Expanded Scope

Ignite [Fire] - Cast on an enemy to set them aflame, causing damage over time and panicked movement. [Combination with Freeze] Cast on a frozen tile to cause an explosion. Cast on a frozen enemy to make them explode. Cast on a frozen door or alarm panel to blow it up. The noise of explosions will place all nearby enemies into alert status. 1 unit wide.

Wave [Water] - A force of water which pushes all in its path across the environment. The noise of the wave will place all nearby enemies into alert status. 2 units wide. Effective range of 6 units.

Wall [Life] - Allows the character to form a wall of roots to obscure enemy vision and obstruct their movement. Highly effective in corridors. 2x1 units wide.

Heal [Life] - Cast on ally to heal a portion of health.

MVP: At least one unique ability for each character. Combination of abilities is secondary. Alternate ability system is **not** in the scope of the prototype.

4.2.V. KEYBINDINGS

Mouse

Mouse axes	Cursor movement (pans camera on screen edge)
Left mouse button	Click - Selection (World and UI) Pan camera
Right mouse button	Click - Execute movement/action
Scroll wheel	Zoom camera

Keyboard

W, S, A, D and Arrow Keys	Pan camera
1 - 9	Hotbar commands
Q, E and <, >	Rotate camera
Escape	Pause
Tab	Switch character

4.2.VI. PROPOSED FURTHER DEVELOPMENT

Have accuracy decay of ranged attacks depending on distance to target. The sense of chance can increase tension in gameplay but at the same time risks player frustration.

4.3. Enemy AI

4.3.I. PATROLS

For security forces, each unit has a predefined patrol path which will consist of a sequence of points which the character reaches before heading to the next one. Some stand in one spot (next to a high security door for instance) and will remain there until they detect something.

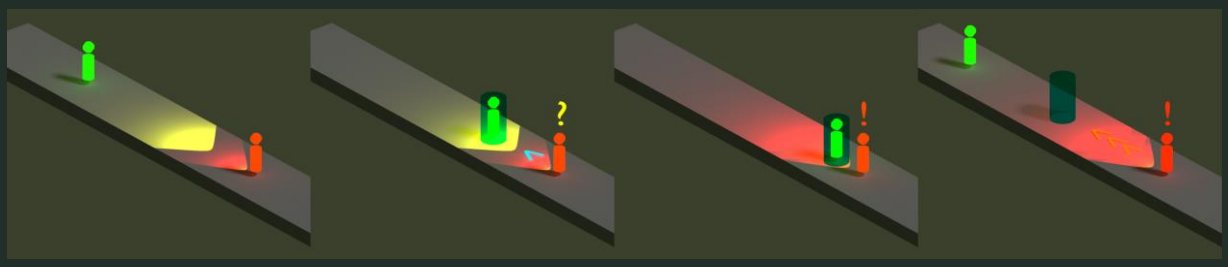
MVP: All guards have a predefined patrol route which they follow until they detect something.

4.3.II. PLAYER DETECTION

The enemy AI has four states:

- Calm - Normal cone of vision, walking movement along predefined path.
- Caution - Normal cone of vision, walking movement to suspicious sight/sound.
- Alert - Extended cone of vision, running movement to suspicious sight/sound.
- Combat - Extended cone of vision, attacking sighted player or sounding alarm.

The escalation of AI state happens like this:



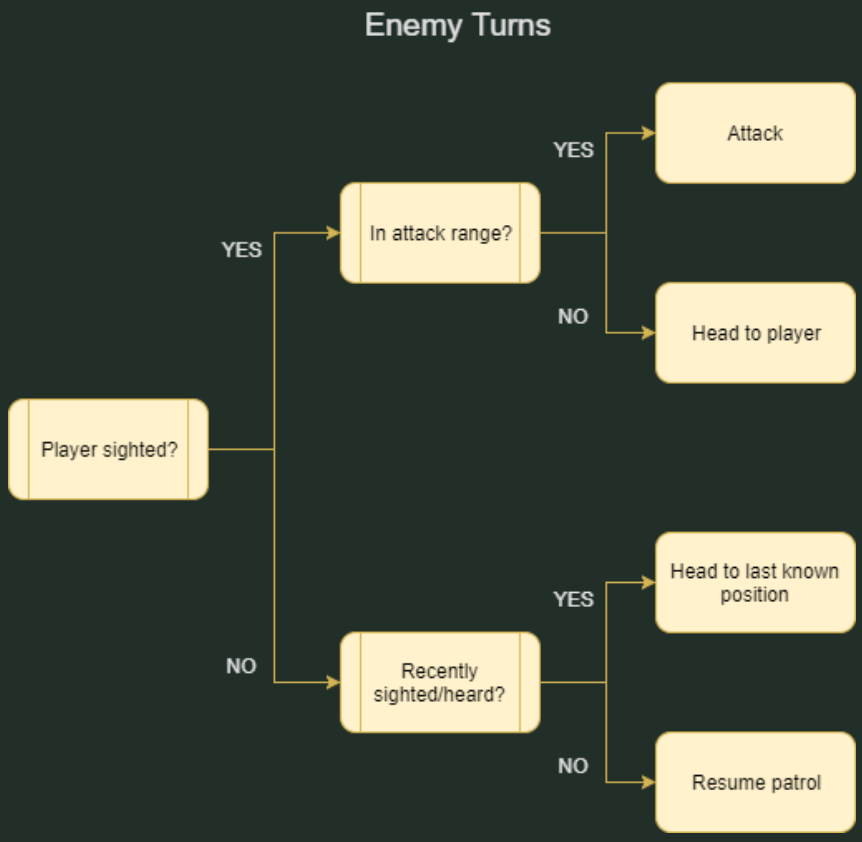
1. Player is undetected. (**Calm** AI)	2. Player enters caution region of cone. (**Caution** AI) [Marker is placed on player which AI will move to.]	3. Player enters danger region of cone. (**Combat** AI) [Cone is now larger. Enemy will attack player until they're out of sight.]	4. Player leaves danger region of cone. (**Alert** AI) [Enemy will rush to marker and will attack on sight.]

State Transitions

Calm to **Caution**	Player enters caution region of cone or enemy enters caution region of sound dome.

Caution to **Calm**	Enemy reaches marker and sees nothing else suspicious.
Any to **Combat**	Player enters danger region of vision cone.
Combat to **Alert**	Player leaves vision cone.
Calm/**Caution** to **Alert**	Enemy enters danger region of sound dome or alarm is activated.
Alert/**Caution** to **Calm**	Player has not been sighted for a couple of turns, at marker, alarm not sounding.

MVP: Calm, Combat and Alert states. But caution is still very important, even if it's a less aggressive version of alert.



High-level flowchart showing the AI behaviour during their turn.

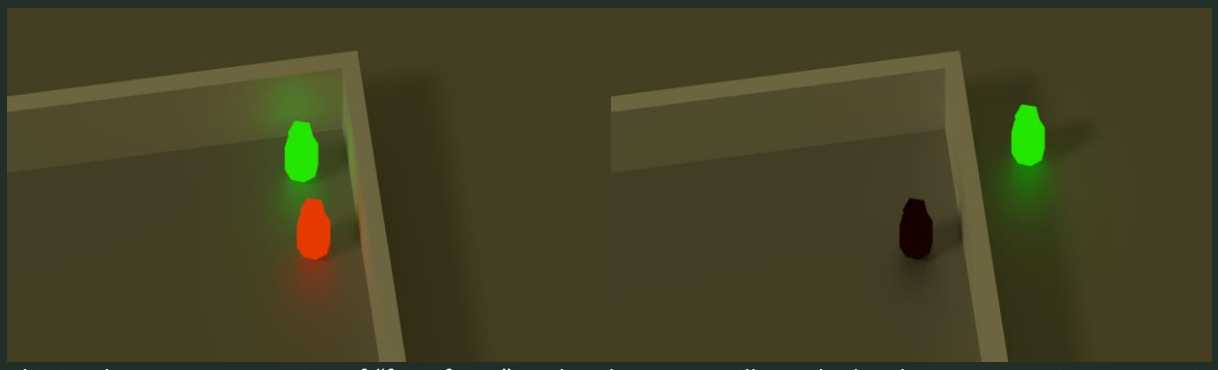
4.4.III. COMBAT

If they have line of sight to a player character they've detected, they will attack them. If the player leaves the enemy's line of sight, they will run toward the player's last known location and look around.

During the enemy turn, if any players are in a combat state AI's line of sight they will be attacked on that turn.

4.3.IV. AI VISIBILITY

To avoid players being overwhelmed with information during the enemy turn, and to increase player tension when making bold moves. AI can only be seen by the player if they're in the same room as them.



This is a less extreme version of "fog of war" as the player can still see the level geometry in its entirety, it is only the enemies and objective entities (like artefact fragments) that are hidden.

Enemy in same room (Visible)	Enemy in different room (Invisible)

4.3.V. AI TURNS

AI turns are handled one unit at a time. There will be a fast-forward button on the UI to quickly advance through the enemy turn.

4.3.VI. PROPOSED FURTHER DEVELOPMENT

To make the AI less predictable when they're patrolling, they could have a random chance of stopping at one of the points on their patrol route and glance around.

4.4. Environment Interaction

Both players and enemies can interact with certain parts of the game world, including doors and alarm panels. Interacting with these will require the player/NPC to be on an adjacent tile (unless a ranged attack/ability is used to interact with it.)

Alarm Panel	**Security Panel**	**Door**
Activates and deactivates alarm system.	Unlocks doors.	Opens and closes

Interactions with objects requires the use of the character's action for that turn and requires them to be on an adjacent tile to that object. Unlocked doors will open and close automatically when a character is on an adjacent tile to it.

The player can see what doors are connected to a security panel by examining the strips of light across the floor which connect them together. Much like the doors and panels, these will change colour when the door is unlocked.

See the [Help System] and [Keybindings] sections for more information on how the player does it from a control/UI standpoint.

4.5. End Conditions

When one unit of the player's party picks up the artefact, an evacuation point will appear on the map. If the character carrying the artefact reaches the evacuation point, the mission is a success. However, players must evacuate the remaining party members before the mission ends. If the carrier of the artefact dies, the artefact is dropped and must be picked up by another party member.

The mission fails when all party members have died.

Unlike XCOM or Invisible Inc, the game will not feature a permadeath system for the characters in the player's party unless the plot dictates otherwise.

4.6. Post-Game

If the player manages to beat a level, the screen will fade to black, and they will be greeted with a screen showing various statistics and how they contribute to the overall score. These metrics include:

Criteria	Point Allocation
Turns Taken	+100 for each turn under par. -50 for each turn over par.
Detections	+300 for no detections. +100 for 1 detection. +50 for 2 detections. No bonus for 3 and above.
Casualties	-200 for each death
Kills	+50 for stealth kill +10 for combat kill
Bonus	+1000 for ghosting the level (no kills, no detections).

Note - These values will most likely be tweaked as the game is iterated during development.

4.7. Game Progression

4.7.I. STORY – LAUREN BAIRD

The narrative is not told explicitly in the game – it is hinted at/suggested through visuals and the wording on in-world text and dialogues.

The backstory of the mission-based gameplay is as so: the player characters are a small enclave of druids who live in vast sacred, isolated forests – ones that have remained largely untouched and unexplored. However, in recent years, modern civilisation has decided they have the funds, equipment, and manpower to explore these hallowed forests and collect whatever resources they feel they need.

A high-tech organisation has found one of the druids faction's relics and is interested in conducting research of the item. Unfortunately, the artefact was shattered in testing – and now the fragments have been distributed to different labs posted around the forest to conduct concurrent research on the magical and mystical properties of the artefact pieces.

Character personality traits are shown through the visual design of the characters, their individual abilities and skillsets, and through the way they move in their animations.

If the game were developed further and more levels were added, the collected fragment pieces from missions would slowly come together and form a full artefact.

The possibility of new fragment pieces adding new abilities or upgrading existing ones has been discussed, but no solid decisions have been made with this direction due to the small scope of the project.

4.7.II. UNLOCKABLES/UPGRADING

The score the player gains from completing a level is equally divided amongst the active party members in the form of experience points. When a certain threshold of XP is reached with a given character, they will level up.

Levelling up will automatically boost core stats such as health and movement speed. It will also provide the character with a new ability (or alternate ability.)

In between missions, the player can change active party members (up to 3) and can also customise the characters themselves.

Customisation includes cosmetic skins as well as managing equipped abilities.

MVP: This system is **not** required for the prototype.

4.8. Saving & Loading Data

The game autosaves at the end of each turn (player and enemy) and at mission milestones. Upon mission failure, players will have the option of retrying from the last milestone or from the start of the mission. If

players quit the game and then resume, they will continue from the end of the last turn. The game will also autosave on mission completion.

MVP: Save system is **not required** for the prototype.

5. LEVEL DESIGN – ROBERT J HARPER

5.1. Grid System

Character placement, movement and abilities along with the base level layout will be confined to a grid. One unit of the grid is equivalent to 2m² (height is not taken into consideration at this time). Players and enemies alike can only move onto unoccupied spaces on the grid.

5.2. Paths

MVP: Predefined patrol routes. The enemies end up in the centre of a grid tile at the end of their movement. Getting to that tile does not necessarily need to conform to the grid.

5.3. Enemy Placement

Enemy placement is predefined in the level's design and will conform to the grid, there is no randomisation in pathing or placement.

5.4. Object Placement

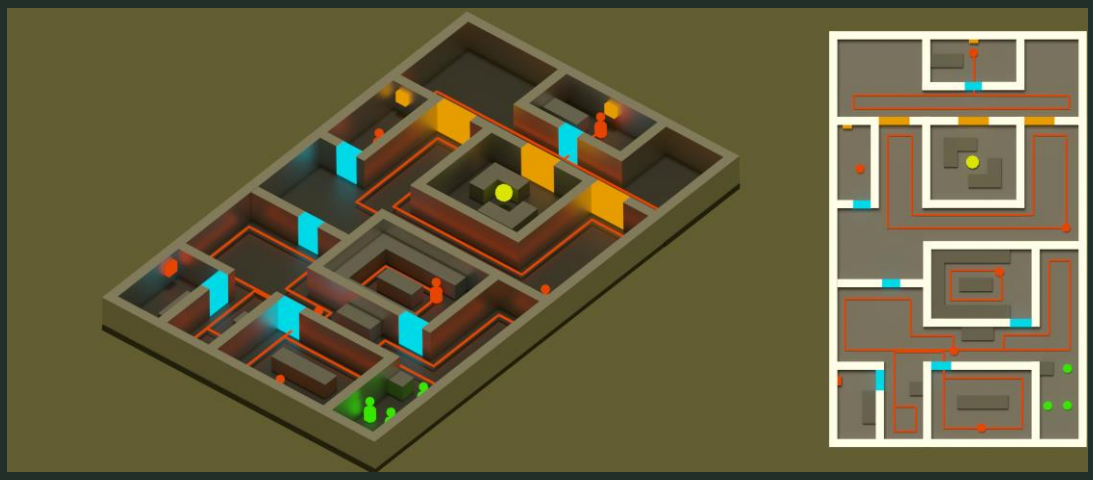
Large environmental objects that will obstruct characters (such as walls, tables, terminals, doors or relics) will fit exactly to the grid. It should be noted that walls will fit on the edges of the grid units and not in the center of them.

Decorative environmental objects (test tubes, computers, cables, vines, branches, screens etc.) will not necessarily conform to the grid layout.

MVP: Implementation of large environmental objects.

5.5. Iterations

Concept 1 - *The original level proposal*



Isometric	Top-Down

Flaws:

-The first corridor guard's patrol route covers too much ground, and might be a bit challenging for new players.

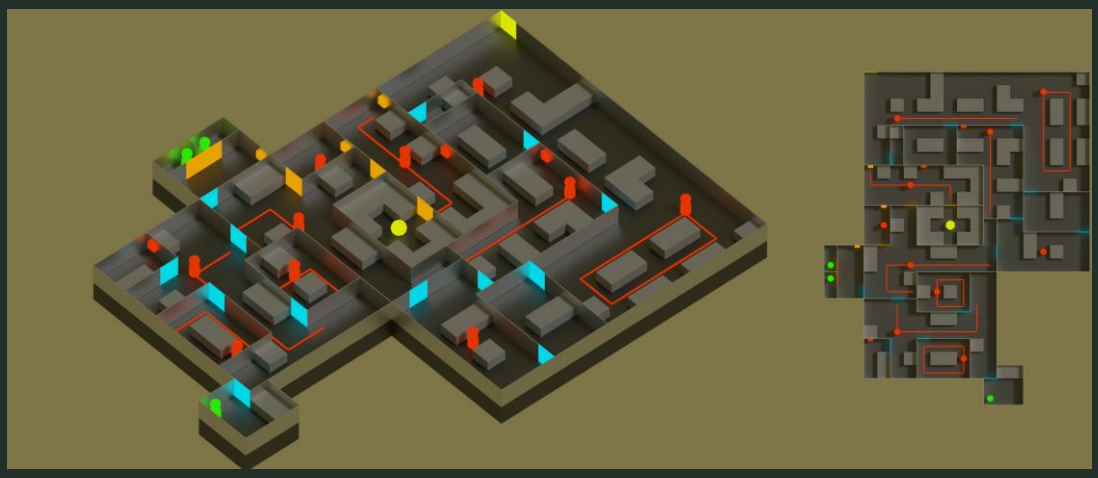
-Only one route through the first half of the level.

-Very sparse second half. Too much breathing space and not enough cover.

-First security panel is too easy to get to.

-Concept does not actually form to a grid, will cause difficulties implementing.

Concept 2 - *Conforms to grid, expanded level, added exit door, player starts with one character.*



Isometric	Top-Down

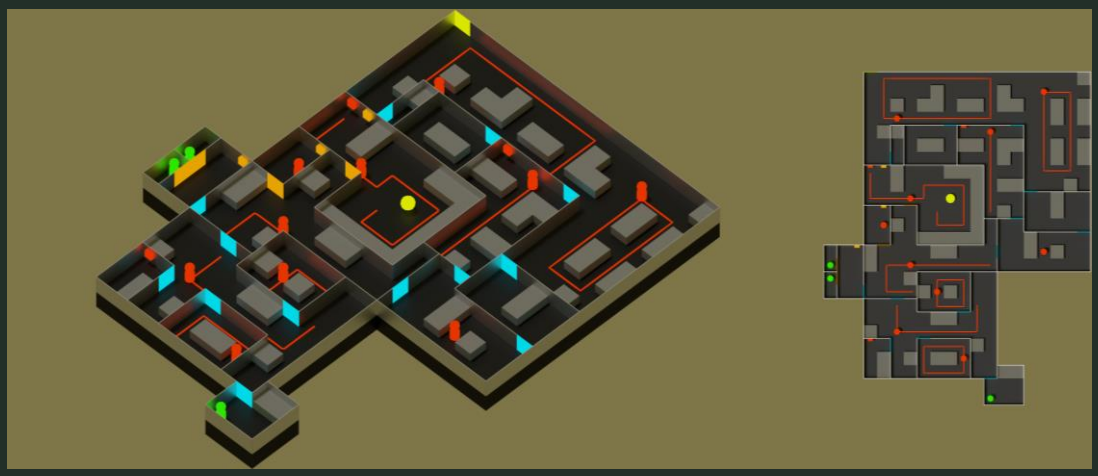
Flaws:

-Will require extra programming to prevent player control of the other two characters prior to freeing them.

-AI paths maybe too simple.

-Only one route through the first third of the level.

Concept Final - *Artefact room opened up, slight patrol route and geometry adjustments.*



Isometric	Top-Down

Flaws:

-If not decorated enough, the artefact room may look empty.

-Only one route through the first third of the level.

Legend

Green Character	Player Spawn
Red Character	Enemy Spawn
Red Line	Enemy Patrol Route
Red Block (Small)	Alarm Panel
Yellow Orb	Artefact Fragment

Light Grey Block	Full height wall
Dark Grey Block	Half height cover
Blue Block	Unlocked Door
Orange Block (Large)	Locked Door
Orange Block (Small)	Security Panel

6. GRAPHICS – ROBERT J HARPER

6.1. Artistic Style – Lauren Baird

The artistic style of the game has been defined by the art team as *stylised realism.* The character and environment models will retain realistic proportions and textures but the overall influence is heavy on science fiction, fantasy, and contemporary fiction elements.

We feel like the game style needs a slightly realistic flavour to it to appeal to our mature audience, while also retaining some originality with our artists' individual styles (not aiming for photorealism also cuts down on production time and the extensively of work – however all produced assets will of course aim to be highly polished).

Influences will be communicated through the artists' use of colour and shape in models. There will be a contrast between the player characters and their artefacts, and the enemy characters and their environment.

This contrast is show through both shapes and colours: player-friendly structures have natural, earthy colours and chaotic, organic shapes and edges. Enemy faction structures have cold, clean colours and lines – the shapes are mostly geometric and have very clean lines and textures.

6.1.I. LIGHTING

Lighting will be predominantly pre-baked to maximise performance as the game's mechanics don't rely heavily on dynamic lighting effects. Additional light sources may appear during some attacks/abilities to accent the particle work.

6.2. Camera

6.2.I. BASIC OPERATION

The camera will use orthographic projection and will look down on the environments at an angle of roughly 45 degrees (this will be tweaked until environments have the right balance of depth and visibility). The player can pan and zoom the camera as they please (within certain thresholds to avoid

clipping or moving out of the map.) The camera can also be rotated around the map, but this will be restricted to intervals of 90 degrees, so players will always be looking at the grid from a diagonal angle.

To maximise polish, the camera should interpolate to different locations/rotations as it moves, as opposed to immediate “snapping”.

6.2.II. CINEMATIC ANGLES

When a character is executing an attack or ability, there is a chance the camera will snap to a cinematic closeup of the character doing the action. When the attack/ability is completed, the camera will snap back to the normal game view.

MVP: Cinematic cuts are **not** required for the prototype.

6.3. UI & Menus

6.3.I. ARTISTIC STYLE

Influences draw from the likes of Blizzard titles (particularly Hearthstone), where minimalist geometry is accented with light materialistic accents (such as rock, vines or ice) to give personality to the game’s UI without appearing overly garish.

6.3.II. IN-GAME HUD

Note-This does not reflect the UI artwork, this is only to represent layout, effects and functionality.

Function	Visual

Turn Counter - Keeps track of how many turns the player has taken over the course of the mission.	
Objective Tracker - Displays the current mission objective.	
Hotbar - Displays the character name and the abilities available to them. Clicking on these will toggle the ability activation. - Ability statuses (From left to right) - Available ability (unselected). - Ability in cooldown. - Available ability (selected). - Ability in cooldown (selected). - Ability being executed. (w/ particle animation).	
Health Bar - Displays the amount of health the character has remaining. Divided into segments to give a clear indication of HP.	
Character Portrait - Displays bust of active character.	
Tile Highlight - Shows the tile the cursor is hovered over, along with the path the character will take to get there. This will turn red if it is outside of the character's movement range.	

Enemy Highlight - Shows the enemy that an attack or ability will affect. Like Tile Highlights, the highlight will turn red if they are out of range. *Note - Interactables (such as alarm panels) will be highlighted in a similar manner if the player cursor hovers over them.*	
Enemy Health Bar – Shows the amount of health an enemy has remaining.	

The primary aim is to have the UI kept to the edges of the screen wherever possible, this is to maximise player immersion and prevent overwhelming the player with information.

Another aim is to have the characters be as distinctive from each other as possible. On the UI side of things, this will be achieved with the character portraits, along with different colour schemes for each character.

MVP: All UI elements present but with neutral/greyscale colours. Particles are not required. Enemy highlight does not have to be displayed with an outline; a ring around their feet would suffice.

6.3.III. IN-GAME OPERATION

By default, the player's right mouse button will move the player character (click on empty tile) or use their default attack (click on enemy occupied tile). If the player left-clicks an ability from their hotbar, the ability icon will be highlighted (by increasing the icon's brightness) and the cursor will change to visualise the ability effect (area of effect, path to take etc.). Right-clicking on an applicable tile will execute that ability.

6.3.IV. MENUS

Main Menu - Initial screen the player encounters when they boot up the game.

Option	Function
Continue	Takes the player to the save selection screen. From there, they can choose which campaign to load.
New Game	Takes the player to the save selection screen. From there, they can choose which slot to place their new campaign in.
Challenges	Boots up the challenge mode level selection screen, from there they can choose which challenge they would like to tackle.

Options	Takes the player to the options screen, where they can tweak graphical, audio and accessibility settings.
Quit Game	Boots up confirmation dialogue, “Yes” Closes the application. “No” closes the dialogue.

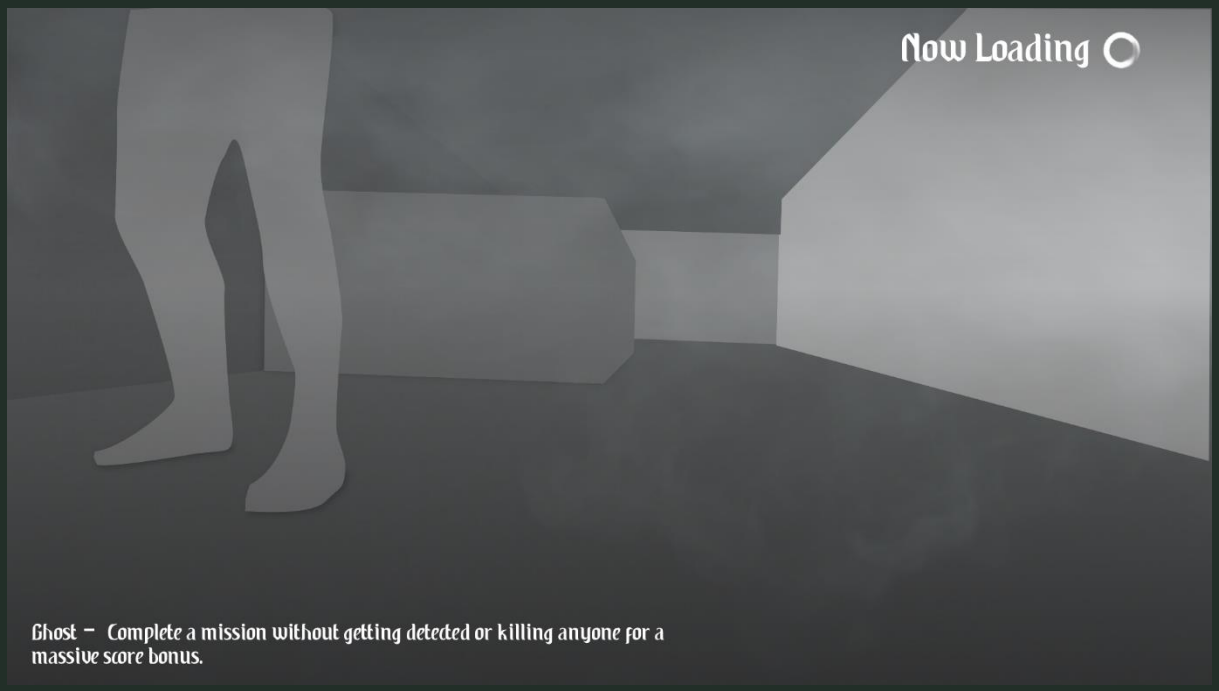
Pause Menu - Can be accessed during gameplay by pressing the pause button.

Option	Function
Resume	Closes the pause menu and resumes gameplay.
Options	Takes the player to the options screen where they can tweak graphical, audio and accessibility settings.
Restart Mission	Reloads the level and takes the player back to the start.
Quit	Boots up confirmation dialogue, “Yes” returns the player to the main menu. “No” closes the dialogue

MVP:
While the prototype does **not** require a menu system of any kind. A simpler system could be implemented:
Main Menu will have two options - Start Game and Quit Game. Start Game will immediately place the player into the level, Quit Game will close the application.
Pause menu will have two options - Resume and Quit Game. Resume will continue gameplay as it were prior to the player pausing the game, Quit will return the player to the main menu.

6.3.V. LOADING SCREENS

The loading screens will consist of background art, ambient particles which scroll across the screen, tips and a spinner. The art will be divided into two layers: foreground and background. Moving the mouse will apply parallax movement between the layers, to give the impression of moving a camera within a confined 3D space.



Concept of Loading Screen Layout – Not representative of final artwork.

MVP: A loading screen with a static background. If a loading screen is required.

6.3.VI. HELP SYSTEM

As the player moves their cursor around the screen, available tiles, interactables and enemies to attack will be highlighted underneath it.

When a player clicks on whatever they want the character to interact with, the highlight will remain on that tile/entity until they click again. If the mouse is elsewhere on the screen, it will remove the highlight, if it is still over the highlighted tile/entity, the action will be executed.

In summary:

Mouse hovers over map.	All accessible tiles/entities will be highlighted underneath it.
Right Click on tile/entity.	Execute action/movement

All inputs will have some sort of feedback, even if they are invalid to show that the game recognised their input. Examples of invalid input are as follows:

Clicking on an ability in cooldown	Ability icon flashes red
Clicking on an invalid tile	Tile flashes red
Clicking on an invalid target	Target flashes red

MVP: While important to minimise player confusion, invalid input feedback is not a priority.

6.4. Visual Effects

The game will make use of particles during both ability use and on the druid weapon models themselves during idle states to highlight their element. The particles will conform to the colour palette of each character and will complement their element's aesthetic. (Leaves for life guy, sparks/flames for fire guy, vapour for water guy.) Enemies will also have particles, but this will be limited to their weapon fire.

MVP: Red, green and blue sparks for each player character as they execute abilities. Muzzle flash (or orange sparks) for enemy rifle attack.

7. AUDIO – ROBERT J HARPER

7.1. Music

The music during gameplay will compose of three tracks, all of which carry the same melody and structure, but have varying intensities. The tracks will crossfade between each other as the player's situation escalates between Calm, Caution to Alert/Combat. Since they all carry the same structure, crossfading between tracks will give a unified and seamless feel to the game's score.

MVP: One track for calm, one track for alert. Does not necessarily have to match up.

7.2. Environment Sound Effects

The ambient soundscape will be made up of idle hums and beeps of the facility's systems. To increase immersion, these sounds will be produced from the actual environmental assets themselves. And will attenuate depending on the camera's location to the sound source.

MVP: A basic ambient "track" that loops during gameplay. 2D audio.

7.3. Character Sound Effects

As they move across the level, all characters will produce footstep sounds. That will change depending on the surface the character is moving across.

Characters will be voiced, and will say voice lines depending on the what they are doing. These include:

- Mission milestones (such as finding the artefact).
- Executing attacks/abilities.
- Switching characters.
- Getting hit.
- Alarm getting triggered/disabled.
- Death (of self and others).

There will be multiple voice lines for each action so that characters won't repeat themselves too often. And there will be a chance where they say nothing at all.

While this may serve little to the core functionality of the game, the inclusion of voice lines will add extra feedback to player actions.

MVP: Footsteps, ability SFX, attack SFX, impact SFX, death SFX. Voice lines are **not** required.

7.4. UI & Menu Sound Effects

The sounds from UI interactions should sound organic: metallic clinks, pages turning etc. to tie in with the organic aesthetic of the player's characters. Switching between different characters will be accented with a sound effect corresponding to their element (breeze/waves for water guy, crackle for fire guy and leaves/birds chirping for life guy).

MVP: Sound for selecting menu items, sound for executing action, generic sound for switching characters (perhaps a swoosh), sound for invalid input.

8. MARKETING – LAUREN BAIRD

8.1. Social Media

The team has two channels of social media, currently:

Twitter:

YouTube:

We intend to post promotional videos and images on these channels, as well as any relevant commentary to the production process to retain transparency and honesty, and to show where we are with our progress.

We are interested in interacting with stakeholders and consumers – our interactions will be friendly and honest.

Twitter and YouTube both have Scheduling Features – so we can create posts and queue them up to be posted onto the social media platform at a later date. This is so we don't have to worry about setting time aside to post any weekly/scheduled updates or released content.

Twitter will primarily be used to show development process, to interact with stakeholders, and to post very short videos (or long ones, linked from YouTube), and to post photos.

YouTube will be used less frequently than Twitter – here, we will post videos of our prototypes and our production process. These take a lot of time and work to create and edit, so this social media channel will not be as active as the Twitter account.

8.2. Promotional Media

As mentioned above, our promotional media will consist of:

Promotional videos

Prototype/test videos

Promotional art materials (posters, icons, sketches and concept art)

Audio files (tests/prototypes, outtakes of audio, and any created music/soundtracks)

8.3. Event Attendance

We have considered using event attendance to promote the game – this however, will require a build. There is also the issue of the genre of our game – strategy games often take dedicated gameplay sessions to enjoy and complete. We will come back to this consideration later in development, after multiple QA Play-It sessions and code and design reviews, and we will see how our game could possibly play as a demo at events.

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