GNG1103 – Project Schedule and Cost for Development of a VR Climate Change Simulation

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Abstract

This document plans out the timeline and required materials and equipment for prototyping a VR climate change simulation. The project is scheduled primarily around implementing baseline functionalities and testing the anticipated critical failure modes. Budgeting accounts for all assets needed both for testing and the final product, but is kept to below $100 with the small project scope and most expensive equipment being provided. Testing is executed across three prototype phases, each ending with a demonstration to and feedback from the client at provided deadlines. Full details on all planned tests are included at the end.

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1 Introduction

Having defined the problem and the surrounding design criteria to then ideate several potential solutions and numerous subsystems, the project now moves to the prototyping and testing phase to predict, discover, and correct flaws in the chosen solution. While the previous conceptual design stage picked “Search and Rescue” as the optimal concept, this has been changed to “Fire Inspector” following feedback from the client. This begins by illustrating the conceptual solution in detail to effectively define its features and reveal some of the potential design issues. The anticipated development schedule and bill of materials are next laid out to define, time, and assign all expected prototyping tasks and list the physical and digital items that will be needed throughout the project, respectively. Finally, all equipment to be used for testing is listed with all currently planned tests detailed in full to explain the purpose, methodology, parameters, and consequences of each one.

2 Design Drawing

Considering this product is purely software rather than a physical item, the simulation is modeled in a detailed design drawing by the series of scenes that compose its story. The subsystems that define this solution are included within their relevant scenes and drawn separately only when necessary. Considering new client feedback, the “Fire Inspector” simulation is developed with a renewed focus on using the scanner and companion subsystems to discover and personably convey how climate change relates to the wildfires.

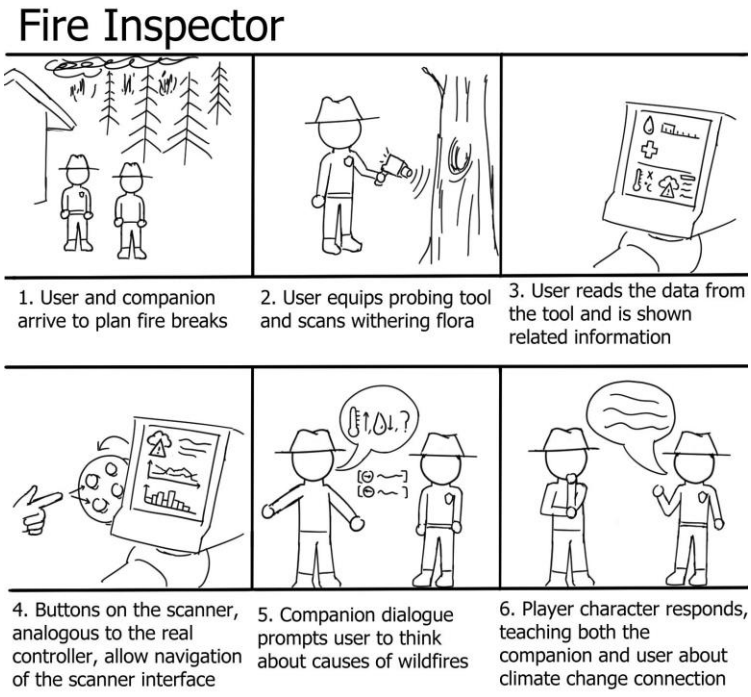


Figure 1. Design drawing of the simulation

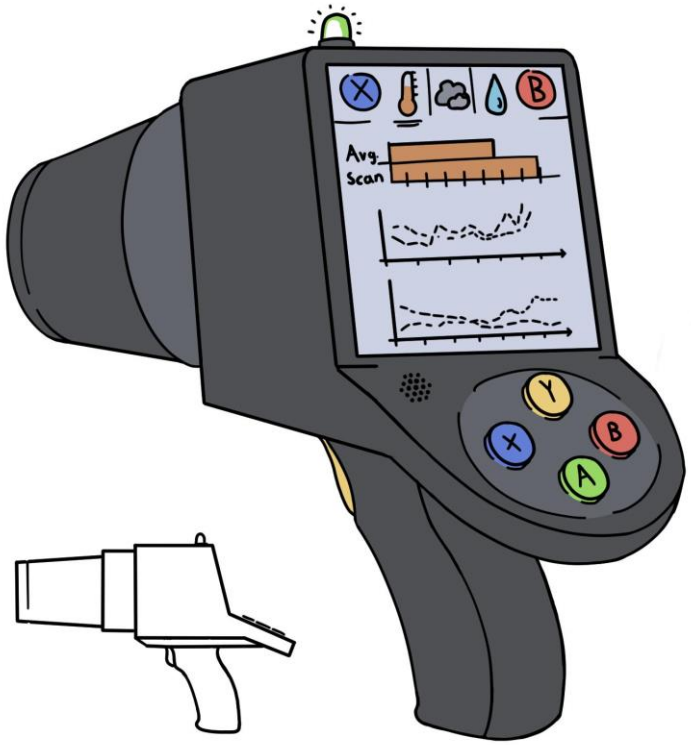


Figure 2. Scanner tool drawing

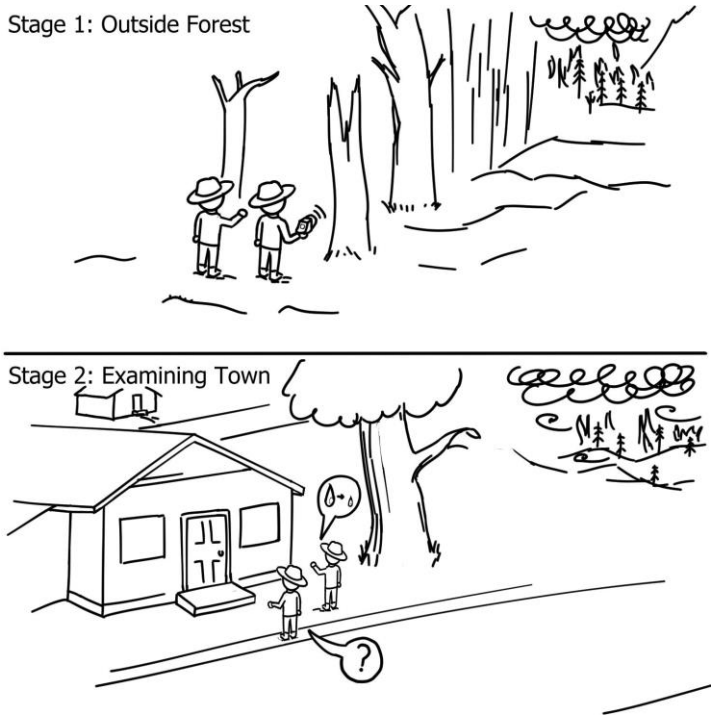


Figure 3. Environmental theme drawing

The scanner has been updated with several features that should make it more believable and intuitive to use. A small light bulb has been added on top of the device to indicate when it is currently pointed at a scannable object. This may still be paired with a UI marker on top of the object, but the light at least reduces the need for such a marker to be so obvious and obtrusive. The button pad is a fixed part, and as before, the buttons on the virtual scanner map directly to their real-world analog on the user's controller. When the simulation directs the user to give a certain input, they can see that on their avatar and use tactile senses to find the button, which should help those who are not already well-versed in the control scheme as they don't need to guess or look down at the controller. The scanner's UI will always show which buttons are currently usable and indicate their function, usually with an icon.

Detailed Storyline:

- Select language menu and welcome, two buttons for language choice.
- Menu changes to three survey questions. Radio button responses navigable with move keys (up/down to choose a question, left/right to change value). Confirm button is selectable after all questions are answered.
- Survey quickly fades out and ambient audio fades in to replace it. Menu backdrop fades out to reveal the scene. The user (Inspector) and their companion (Deputy) are at the outskirts of a forest near a small town, set in a low point around some hills. The town is moderately far away, enough to indicate the user should not try walking there.
- The forest is thick with trees and bushes, many dead and dry. Around the edge of the forest, the user can see the wildfire already burning in the distance, with a thin haze of smoke already drifting through and making the sky darker. Deputy comments through dialogue on the state of the fire and suggests the user to start gathering data to find out how fast it will spread so they can plan fire breaks.
- User has a hidden time limit of 1 minute. Companion suggests they have to leave soon halfway through and says they have to leave now a few seconds before time runs. After this time, the scene change is triggered.
- Overlay fades into the bottom of the screen to pictorially show the controls. The avatar pulls up the scanner and the user is now free to move and act. On the scanner, the player is guided to inspect the trees, bushes, wind velocity, humidity, and water quality.
- Two scannable elements are in scanning distance when the simulation starts. The indicator light on top of the scanner should flash when hovering over something scannable.
- On scanning, the scanner UI updates to display info on the object and plays a short confirmation sound. Deputy and Inspector have a short dialogue about how the object got to that condition (leading towards climate change) and its implications. The user can navigate the scanner UI to view more data.
    - Effects to consider: lowered humidity, erosion from unnatural rain, water pollution, air pollution, fauna depopulation, shrubbery overgrowth, tree crowding

- After scanning all items, play a short dialogue to further suggest how this links to climate change and fade out/fade into the next scene. Three possibilities are in town before or after the fire sweeps through, and the forest outskirts.
    - In town pre-fire, the civilians have been evacuated, leaving the place eerily desolate. Include dialogue on this point. The fire has moved much closer, and the user has to scan buildings to see how readily they will go up in flames. The scanning is now more of a secondary focus, with this period used to reflect on the coming loss of life and property.
    - In town post-fire, most buildings nearer the forest have been burned down, the sky has gone dark, and smoke and ash choke the air. The user briefly explores the husk of the town, which should be in minute or less. User and companion discuss the damage and how this will keep happening.
    - Outside forest post-fire, many trees are still smoldering or bleached/burnt and ash is still thick in the air. User scans objects to see how much worse they have gotten, such as air and water quality. Include dialogue on how the loss of forest may further contribute to climate change and propagate more fires.

3 Prototyping and Testing Schedule

The prospective schedule for developing prototypes and conducting tests is outlined below, based on current estimations of the team's abilities, understanding of the Unity engine and virtual reality, and predicted time buffers to account for unexpected failure points. Tests are referenced by number and can be seen in the appendix (section 9) for full details.

Table 1. Project schedule for prototyping and testing

Start Date	End Date	Task	Member Responsible	Estimated Duration	Risks and Contingencies
Feb 15	Feb 17	Build and execute Test 1 (Scanner display)	James	2 hours	Time to develop scanning interactions is largely unknown.
Feb 15	Feb 17	Build and execute Test 2 (Scanner SFX)	James	1 hour	Conditional on success of Test 1. Skip collision test if Test 1 fails.
Feb 16	Feb 17	Execute Test 12 (Scanner stress-test)	James	0.5 hours	No expected risks.
Feb 17	Feb 19	Draft survey questions	James	1 hour	No expected risks.
Feb 17	Feb 20	Program and execute Test 9 (Selectable languages)	James	3 hours	Forgetting to implement this in all

					future text presents a bug risk.
Feb 20	Feb 22	Develop pre- and post-simulation menus	James	3 hours	Menus may cause bugs in scenes built by other members.
Feb 20	Feb 22	Build and execute Test 6 (Avatar movement)	Mohammad	3 hours	Characters built would not be suitable for storyline
Feb 20	Feb 23	Build and execute Test 7 (Character movement)	Mohammad	3 hours	Movement is not fluid and precise
Feb 16	Feb 18	Build and execute Test 4 (Light and shadow around objects)	Malcolm	1 hour	Effects aren't consistent with areas/artstyle
Feb 16	Feb 18	Build and execute Test 8 (Ambient SFX)	Malcolm	2 Hours	Audio is poorly made and don't fit in well
Feb 23	Feb 26	Build and execute Test 3 and 4 (Environment scaling)	Krithivaas	2 hours	unrealistic environment would cause navigation issues
Feb 23	Feb 26	Build and execute Test 3 and 4 (Lighting)	Krithivaas	2 hours	Fire lighting may appear unnatural
-	Mar 2	**Submit Deliverable F - Prototype 1**	Everyone	-	-
Mar 3	Mar 6	Develop new scanner UI	James	4 hours	Might not work with existing UI code. If so, revert to first UI.
Mar 5	Mar 9	Draft script for user/companion dialogue	James	6 hours	May unintentionally profile the characters in undesirable ways.
Mar 3	Mar 6	Build new characters and implement character dialogue	Mohammad	5 hours	NPC character design avoiding stereotypes and compiling with ethical standard
Mar 6	Mar 9	Improve the character movement and design scene transportation	Mohammad	5 hours	Scene transportation might not be fluid and could develop issues with the surrounding environment

Mar 6	Mar 9	Ensure Character engagement with the environment and changes in lighting and effects and user interaction.	Krithivaas	4 hours	Character scale may not be proportional to environment. shadows of fire
Mar 3	Mar 6	Implement how the fire triggers will work	Malcolm	3 hours	They might not activate properly or interfere with other elements of the simulation
Mar 6	Mar 9	Layer all the audio on top of each other and put them all in one prototype	Malcolm	4 hours	Audio might not be synced properly or the correct volume
-	Mar 9	**Submit Deliverable G - Prototype 2**	Everyone	-	-
Mar 9	Mar 11	Research specific data for use with the scanner	James	3 hours	Availability of data currently unknown. Scale of data may be impractical for this project.
Mar 10	Mar 13	Populate environment with scanner data sources	James	3 hours	Intersection of multiple sources or spaces with no sources may cause scanner bugs.
Mar 13	Mar 14	Revise survey questions	James	1 hour	No expected risks
Mar 14	Mar 22	Finalize dialogue script	James	3 hours	May unintentionally profile the characters in undesirable ways.
Mar 10	Mar 13	Improve character dialogue, design and interactions. Dialogue and interaction mechanics must be implemented	Mohammad	5 hours	Dialogue and interaction mechanics could be slow and faulty
Mar 13	Mar 16	Adapting character to surrounding environment	Mohammad	5 hours	The character is not proportionate to their surroundings.

Mar 10	Mar 13	Adding triggers and effects to the environment	Malcolm	4 hours	There could be an issue of the NPC characters messing with the triggers
Mar 13	Mar 15	Adding sound and music to the overall simulation	Malcolm	4 hours	Audio might have compression, layering and/or volume issues when all being put together
Mar 13	Mar 16	Touch up on fire behaviour and environment scaling and change upon user interaction	Krithivaas	4 hours	Character movement in the environment feels unnatural.
-	Mar 23	**Submit Deliverable H - Prototype 3**	Everyone	-	-
Mar 23	Mar 25	Final run of Test 11 (Character movement bounds)	James	1.5 hours	Late bug fixes may break other elements that take yet more time to fix.
Mar 23	Mar 25	Final run of Test 12 (Scanner stress-test)	James	0.5 hours	May be insufficient time to fix bugs
Mar 23	Mar 26	Final touch-ups on character interaction	Mohammad	5 hours	Character interaction timing might not be very fluid
Mar 23	Mar 26	Final touch-ups on character movement and adaptation to environment	Mohammad	5 hours	Unexpected bugs or lagging issue during scene transportation
Mar 23	Mar 25	Final touch up on fire behaviour and environment scaling and change upon user interaction	Krithivaas	4 hours	Character movement in the environment feels unnatural.
Mar 23	Mar 25	Final touch ups on fire triggers	Malcolm	4 hours	Potential new bugs with everything else being implemented
Mar 23	Mar 25	Final touch ups on sound design	Malcolm	3 hours	Unexpected issues with the layer could appear
-	Mar 26	**Design Day Submission**	Everyone	-	-

4 Bill of Materials

The following table lists all materials that are planned for use in the prototypes or expected to be used in the final product. Virtual items, such as scripts, plugins, models, and textures, are counted once for each team member expected to be working with or on that item directly. For instance, if one person is responsible for all music and sound effects, then audio assets would only be counted once. As most assets are virtual and will only need to be procured for one member, costs are listed per instance of that item rather than the total for purchasing all of them, which is calculated and added to the final cost estimate at the end.

Table 2. Bill of materials for development of the simulation and prototypes

Part #	Count	Cost	Item Name	Link
1	4	$0	Unity 6 Game Engine	https://unity.com/download
2	1	$452	Meta Quest 3S VR Headset	https://www.meta.com/ca/quest/quest-3s/
3	2	$50	Meta Quest 2 Remote Controller	https://www.meta.com/ca/quest/accessories/quest-2-controllers-refurbished/
4	4	$0	Particle Pack	Particle Pack - VFX
5	4	$0	Music - Sad Hope	https://assetstore.unity.com/packages/audio/music/music-sad-hope-157746
6	4	$0	Minimal UI Sounds	https://assetstore.unity.com/packages/audio/sound-fx/minimal-ui-sounds-78266
7	4	$0	Dry Tree Asset	https://assetstore.unity.com/packages/3d/vegetation/trees/dry-trees-86967
8	4	$0	FREE Casual Game SFX Pack	https://assetstore.unity.com/packages/audio/sound-fx/free-casual-game-sfx-pack-54116
9	1	$15	Fristy Stylized Autumn	https://assetstore.unity.com/packages/3d/environments/fristy-stylized-autumn-249817
10	4	$0	Survivalist character	https://assetstore.unity.com/packages/3d/characters/survivalist-character-181470
11	4	$0	Free Fire VFX - URP	https://assetstore.unity.com/packages/vfx/particles/fire-explosions/free-fire-vfx-urp-266226
12	1	$75	Zibra Smoke & Fire	Zibra Smoke & Fire | Physics | Unity Asset Store
13	1	$5	Floating Dust & Falling Ash	https://assetstore.unity.com/packages/vfx/particles/environment/floating-dust-falling-ash-175524
14	4	$0	Animated Sun Skybox	https://assetstore.unity.com/packages/2d/textures-materials/sky/animated-sun-skybox-98447

15	4	$0	Starter Kit | Movement, Camera & AI	https://assetstore.unity.com/packages/3d/characters/starter-kit-movement-camera-ai-18071
16	4	$0	Haptic Feedback	https://assetstore.unity.com/packages/tools/integration/haptic-feedback-308330
17	4	$0	UK Terraced Houses Pack FREE	https://assetstore.unity.com/packages/3d/environments/urban/uk-terraced-houses-pack-free-63481
18	4	$0	Town Houses Pack	https://assetstore.unity.com/packages/3d/environments/urban/town-houses-pack-42717
19	4	$0	Dry Trees	https://assetstore.unity.com/packages/3d/vegetation/trees/dry-trees-86967
20	1	$10	Fire Extinguisher Pack	https://assetstore.unity.com/packages/3d/props/industrial/fire-extinguisher-pack-41697
21	1	$5	Fire Safety Equipment	https://assetstore.unity.com/packages/3d/props/tools/fire-safety-equipment-117684
22	1	$35	3D Rural Houses Set	https://assetstore.unity.com/packages/3d/rural-houses-set-95289
Total Cost - All Assets		$647	-	-
Total Cost - Planned Assets		$60	-	-

The cost listed for Planned Assets is the target for the budget, which are part 9, part 13, part 21, and part 22. These cover the asset needs for houses, terrain, flora, and atmospheric effects where available free assets do not suffice. The total cost includes items that are to be used but may be procured through rental rather than purchase, as well as assets that may be desirable for purchase but could be replaced by free alternatives. Some assets listed are intended to be used in the production and/or testing of the simulation, but do not need to be procured for the listed price as they may be rented from the university.

5 Prototype Planning

Having established the schedule and required materials, the methodologies and objectives of the prototyping and testing stages are detailed.

5.1 Requisite Equipment for Prototypes

The software needed for prototyping and building the simulation are the Unity game engine, openXR and XR Interactions plugins for use of the VR headset, and Mixamo.com for character models and animations. All of these are anticipated to be used both in tests and the final product. Also for both stages, the hardware to be used is a computer capable of running the Unity engine, which each member already has, and an Oculus Quest 2 or 3S VR headset with controllers.

5.2 Prototyping Test Plan

See the appendix (section 9) for the full test plan. Due to the constrained space of the document, the table can not be shown fully in this section. Note that, for the “Kind of Prototype” column, physical prototypes refer to any functional model or script in the simulation.

6 Conclusions and Recommendations

With the new design concept confirmed, a plan was developed for the prototyping, testing, and production of a VR simulation on wildfires as a consequence of climate change. Team members decided on general roles to specialize in specific elements of the simulation such as sound, lighting, environment design, user control, user interface, and interactive objects. Due to the team's currently limited experience with the Unity engine, early development is focused on learning the software and building stable prototypes of the core systems and those that are foundational to other systems. Later development moves to implementing the narrative, building a complete scene, fleshing out the core systems, and improving the previous audiovisual effects. The final stage is taken up with completing any tasks left incomplete before, polishing existing work, and running more comprehensive tests to find and fix unexpected failure modes.

7 Future Work

The plans made in this document were made on the yet imperfect knowledge of each team member's future availability or setbacks. As skills and experience are gained, new predictions of the time and resources required for the various tests and prototypes may demand these plans be amended, but until then they will simply be monitored.

8 References

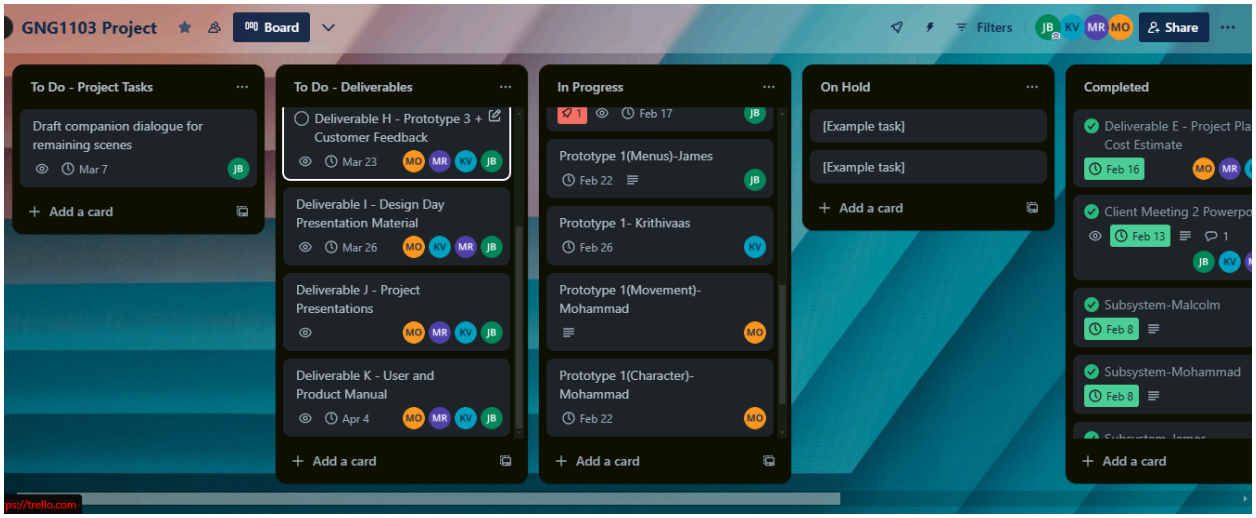
1. *Unity Asset Store*. The Best Assets for Game Making. (n.d.). https://assetstore.unity.com/

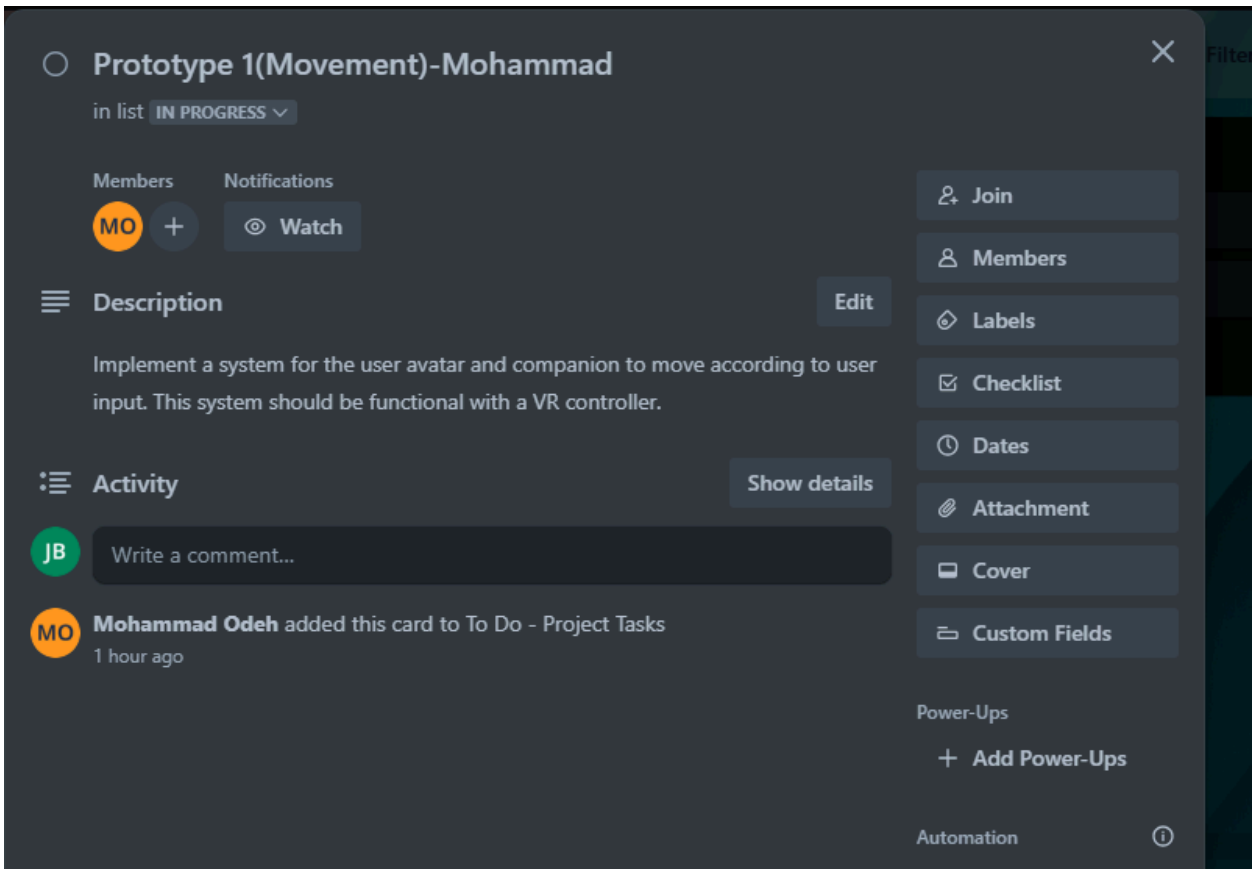
2. S. Raja, “The Concept of Trigger in Game Mechanics and Medicine”, Linkedin, 28 May 2023, Available at https://www.linkedin.com/pulse/concept-trigger-game-mechanics-medicine-shahnawaz-asif-raja

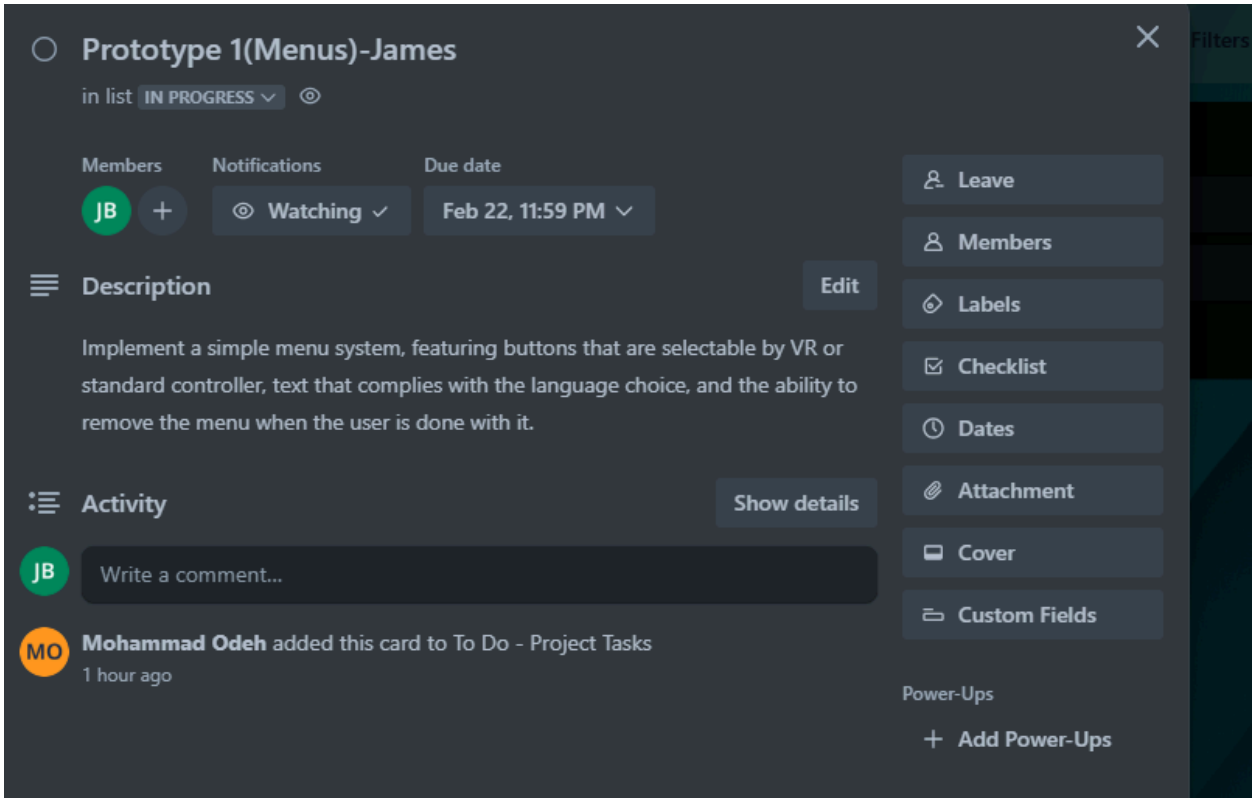
9 Appendix – Prototyping and Testing Plan Table

Design Concept: "Fire Inspector" Simulation			User takes the role of a fire inspector with a companion to explore how wildifres can be caused by and propagate climate change								
Test Number	**Probable Critical Issue**	**Test Objective**	**Test Description**	**Analysis Method**	**Determine Measurables**	**Metrics**	**Level and Fidelity of Prototype**	**Kind of Prototype**	**Results**	**Interpretation and Feedback**	**Notes**
	What assumption are you testing?	*Communication, Performance Measurement, Risk Management, or Learning and Understanding*	*What specifically will you test? What is your hypothesis?*	*Specifics of how the test will be run, what it uses, pass/fail criteria, and how data is collected*	*What are you testing with the concept (focus on measurable attributes)*	*What metrics will you test and what are the associated units?*	*High or low fidelity? Focused or comprehensive?*	*Visual, Physical, or Analytical*	*Observe and record results*	*Pass or fail, why, and other feedback collected*	
1	Scanner correctly updates the display when targeting objects of interest	Performance Measurement (of scanner)	Collision test: Update text UI when a line intersects with different simple geometries	Make a crude scanner model and scene with two copies of each simple geometry mesh: one interacts with the scanner, one doesn't. For each object, tag it with the scanner while it is on the default text and try again when it has the reading from a different item. Estimated 30 min. to build scene, 10 min. to test all items.	Collision interaction with all simple geometries	Reading text on UI, Yes/No for correctness	LoFi Focused	Physical			Consider using a player-facing PNG and for the light and glow texture overlay on the surface to simulate the indicator bulb instead of actual dynamic lighting.
2	Scanner plays correct sound effect when scanning and navigating UI	Performance Measurement (of scanner)	Sound test: Scan objects from Test 1 and listen for sound effects. Listen for correct sound effect on each of 4 menu navigation buttons	Update test 1 to include sound in the interaction functions. Repeat Test 1, marking which interactions do and don't play sound and any new fail conditions. Estimated 10 min. to test all items.	Presence and volume of sound effects from scanner	Yes/No for presence, test group feedback on volume	LoFi Focused	Physical			
3	Simulation environment is realisitcally proportioned	Communication (of setting)	Visual test: Establish a frame of reference for further setpieces relative to avatar height and camera position	Place cars, houses, and tree assets in a scene along with user avatar that carries the camera. Scale objects to look appropriate to the avatar. Run the simulation and view objects from three different angles and distances. Estimated 10 min to build scene, 5 min. to test.	User approval of setpiece sizing	Yes/No for approval, collect and interpret other specific feedback	LoFi Focused	Visual			
4	Lighting and shadow effects from the fire appear believable	Communication (of setting)	Aesthetic test: Lighting from fire effects and the shadows cast around objects look realistic	Place a few fire assets in the scene from Test 3. Run the scene and observe the effects, checking whether for issues such as shadows not being cast away from the light source, or surfaces facing the source not being illuminated. Distribute to test users to gather feedback. Estimated 5 min. to build, 10 min. to test per user.	User approval of lighting effects	Yes/No for approval, collect and interpret other specific feedback	LoFi Focused	Visual			
5	Simulation runs smoothly with particle and lighting effects from the fire	Performance Measurement (of framerate)	Performance test: Check framerate does not fall to the point of looking choppy	Build a scene with several of each simple geometry, placed randomly in a loose cluster. Place instances of the chosen fire asset within this cluster 10 at a time. Run the simulation and move the avatar around the cluster for several seconds, then record the lowest stable framerate. Repeat until this falls below 30 fps. Estimated 30 min to build and render scene, 10 min. to test.	Average framerate and instances of severe frame loss	Observe and record framerate, units of frames per second (FPS)	LoFi Focused	Physical			
6	Character features suitably fit the image portrayed in the storyboard description	Communication (of characters)	Visual Test: The character is well designed with appropriate features and clothing	Build a simple character based off a real human figure, the figure will be adjusted to approproiate specifications in order for character to appear porportional comapred to the surrounding area. The character must have appropriate clothing that fits their role. Test will be visual and will be shared to the group to verify opinions and prespectives on potential improvements.	User approval of character asthetics	Yes/No for approval, collect and interpret other specific feedback	LoFi Focused	Visual			
7	Character movement is seamless, the character can move in all directions	Performance Measurement (of movement	Performance test: Check that the character has the freedom of movement in a space	Character movement setting will be set to move in all directions in the avaialble space. Run the simulation and attempt to have the character move around, record all movement pros and cons for future develpoment.	User approval of character movement	Observe and record movement precision and fludity	LoFi Focused	Physical			
8	Environement sound effects and music fit into the world	Communication (of setting)	Sound test: Interact with different objects to gauge how well they sound	Build a small scene with many little interactible objects, bushes, trees, doors, etc., and give them all the respective sound effects needed. From there, just try and play the simulation like normal and see how well they sound in fit into the game world. Add different music tracks in the background and see if they're too distracting or if they fit well. Estimated 30 min. to build, 20 min. to test.	User approval of audio quality	Yes/No for approval, get group feedback for what fits best	LoFi Focused	Visual			
9	Language selection appropriately changes in-game text	Performance Measurement (of text objects and UI)	UI test: Text in each section of the simulation matches the language chosen by the user	Build two scenes, each with a text object containing a line in either English or French. Make a HUD button that changes the language. Run the first scene and choose English, check the displayed language matches the button. Check that text on the scanner language matches or all menus. Change to next scene while running and repeat. Run all again starting in French. Estimated 2 hours to program, 10 min. to test.	Right or wrong language on different elements consistent, i.e. not reset, between scenes	Mark which elements do and do not change language during test. Mark whether language changes itself on scene change.	LoFi Focused	Analytical			This may be doable either by overlaying two text objects and switching visibility or potentially by adding code that changes the text field of the object.

10	Scenes load in quickly and smoothly	Performance Measurement (of scene change functions)	Performance test: All scene elements load in within 3 seconds, tested by timing how long it takes to do this on starting the simulation and changing scenes	Using scenes built for the latest prototype, run the simulation in whole. Time how long it takes to change from one scene to the next. The scene is considered "loaded" once all objects are loaded in and the framerate stabilizes. Pass if the scene takes less than three seconds to load. Estimated 10 min. total to test 5 trials.	Load time between scenes	Load time (seconds)	LoFi Comprehensive for early prototypes, moves to HiFi for later versions	Physical			
11	User is appropriately confined to the story area	Learning and Understanding (of level boundaries)	Constraint test: The user can not take themselves out of the intended areas, nor do they clip through collision objects	Using scenes built for the latest prototype, run the simulation in whole. Move the avatar all along the bounding wall and into all collision objects. Observe which, if any, the character moves through. Make note of any other unexpected physics interactions with the avatar, e.g. slingshotting, falling through the ground. Estimated 20 min. total to test 3 trials.	Presence of non-functioning collisions	Yes/No for faulty collisions of each object	LoFi Comprehensive for early prototypes, moves to HiFi for later versions	Physical			
12	Scanner is stable for all variety of user inputs	Performance Measurement (of scanner stability)	Input test: The scanner UI follows its intended controls even when subjected to unintended user input patterns	Test "bad" input patterns of using unassigned keys, spamming the same key, spamming different keys, holding keys, using an assigned key while holding down another, and simultaneous inputs, each for 10-15 seconds. Between each trial, check that all scanner menus can be navigated to. Estimated 15 min. to test all patterns in each scene.	Presence of bugs or non-functional UI navigation on the scanner	Yes/No for marking a bug after each trial	HiFi Focused	Physical			


GNG1103 Project
Board
Filters
Share
To Do - Project Tasks
Draft companion dialogue for remaining scenes
Mar 7
Add a card
To Do - Deliverables
Deliverable H - Prototype 3 + Customer Feedback
Mar 23
Deliverable I - Design Day Presentation Material
Mar 26
Deliverable J - Project Presentations
Deliverable K - User and Product Manual
Apr 4
Add a card
In Progress
Feb 17
Prototype 1(Menus)-James
Feb 22
Prototype 1- Krithivaas
Feb 26
Prototype 1(Movement)-Mohammad
Prototype 1(Character)-Mohammad
Feb 22
Add a card
On Hold
[Example task]
[Example task]
Add a card
Completed
Deliverable E - Project Pla
Cost Estimate
Feb 16
Client Meeting 2 Powerpo
Feb 13
Subsystem-Malcolm
Feb 8
Subsystem-Mohammad
Feb 8
Add a card


Prototype 1(Movement)-Mohammad
in list IN PROGRESS
Members
Notifications
Watch
Description
Edit
Implement a system for the user avatar and companion to move according to user input. This system should be functional with a VR controller.
Activity
Show details
Write a comment...
Mohammad Odeh added this card to To Do - Project Tasks
1 hour ago
Join
Members
Labels
Checklist
Dates
Attachment
Cover
Custom Fields
Power-Ups
Add Power-Ups
Automation


Prototype 1(Menus)-James
in list IN PROGRESS
Members
JB
Notifications
Watching
Due date
Feb 22, 11:59 PM
Description
Edit
Implement a simple menu system, featuring buttons that are selectable by VR or standard controller, text that complies with the language choice, and the ability to remove the menu when the user is done with it.
Activity
Show details
JB
Write a comment...
MO
Mohammad Odeh added this card to To Do - Project Tasks
1 hour ago
Leave
Members
Labels
Checklist
Dates
Attachment
Cover
Custom Fields
Power-Ups
Add Power-Ups