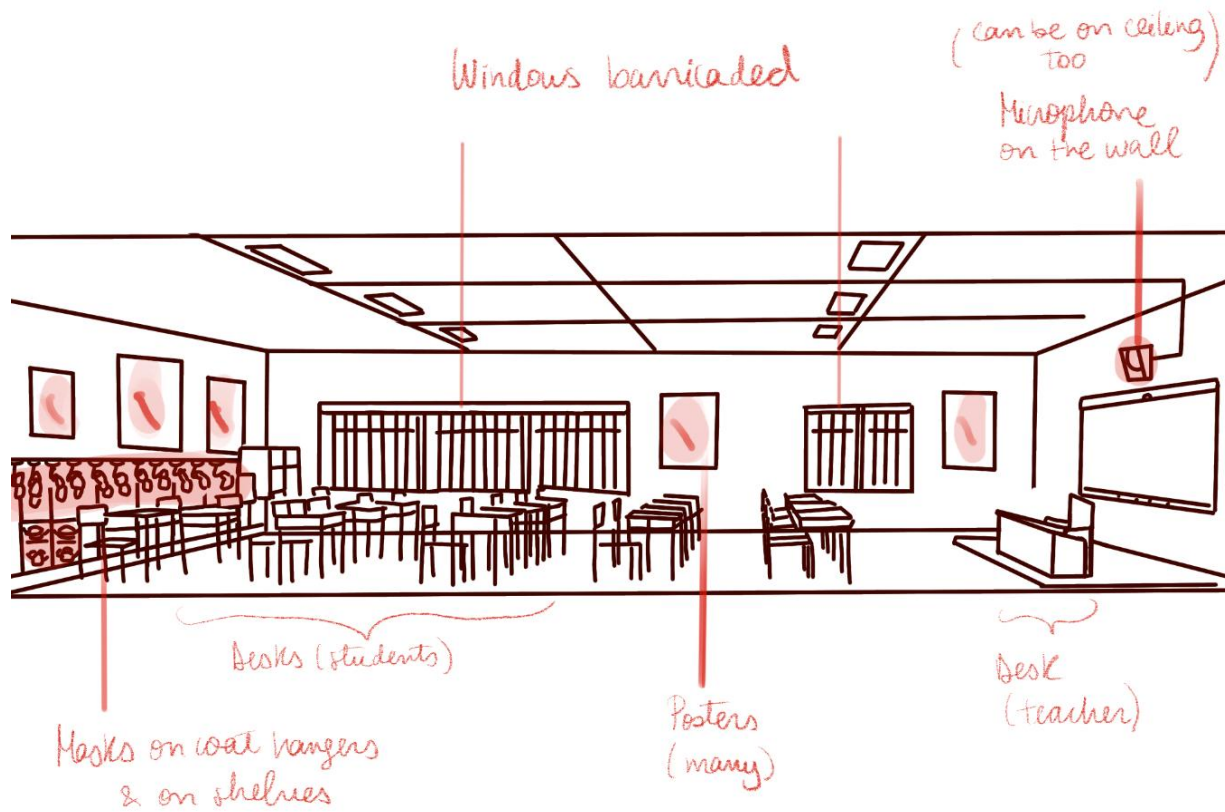


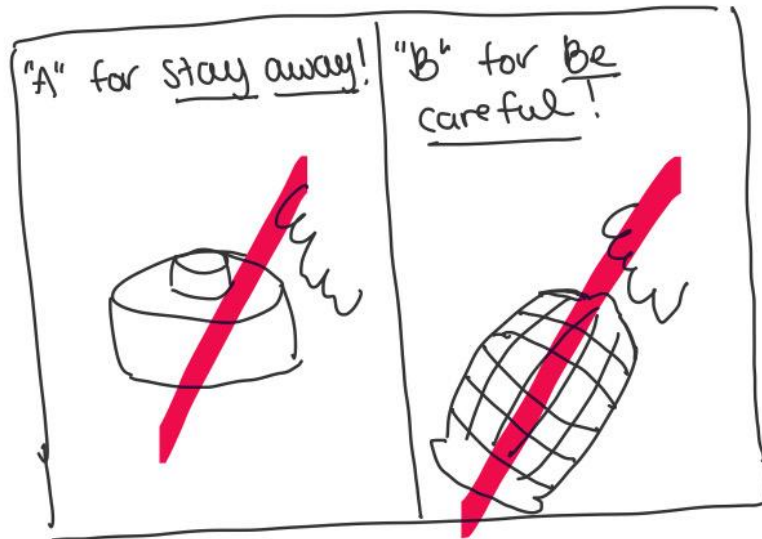
The detailed designs :

The classroom:

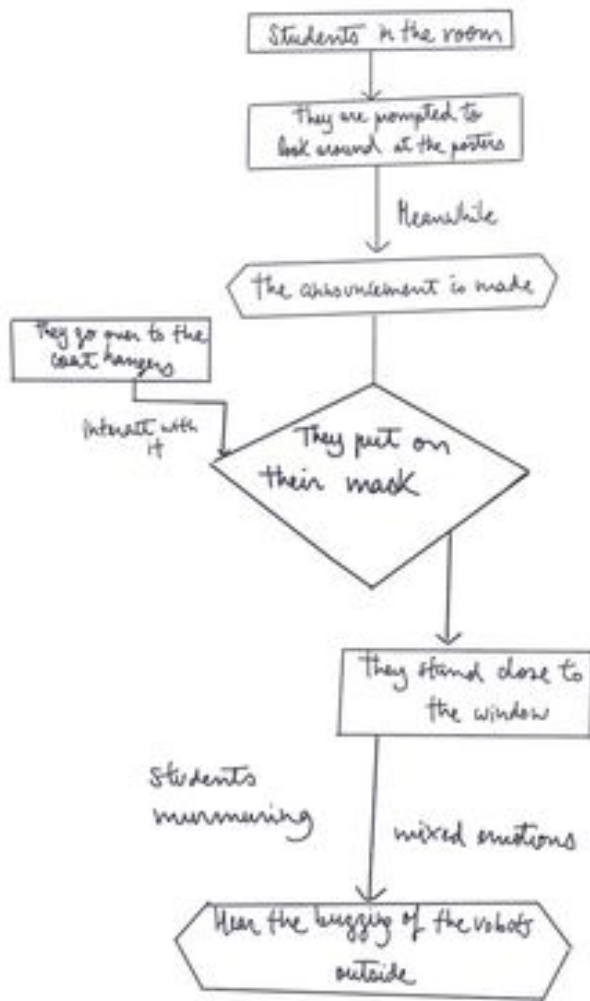
- Chairs
- Desks
- Posters (with warnings on them)
- Speaker
- Coat hangers with masks and suits hanging from them



The posters:



The events



The Budget :

Bill of Materials:

https://docs.google.com/spreadsheets/d/1Mf1_oqJMNrvhs2Uj1vDp62OqZ5fVIdu1Kj1rytefc/ed it?usp=sharing

Bill of Materials				
Item Name	Description	Unit Cost	Link	Total Cost
Classroom Props		\$5	https://assetstore.unity.com/packages/3d/props/interior/classroom-props-22141	\$31
Simple Classroom	Class Room Environment	\$6	https://assetstore.unity.com/packages/3d/environments/simple-classroom-97585	
Wooden Plank	For boarding up windows	\$0	https://www.turbosquid.com/3d-models/free-3ds-mode-woodern-plank/1082125	
Mixamo	3-D Animation Software	\$0	https://www.mixamo.com/#/	
Blender	3-D Computer Software	\$0	https://www.blender.org/	
School Assets	School Asset Pack	\$0	https://assetstore.unity.com/packages/3d/environments/school-assets-146253	
Realistic School Asset	Realistic Urban School Asset Pack	\$20	https://assetstore.unity.com/packages/3d/environments/urban/realistic-modern-urban-school-asset-package-213873	

Equipment list:

A list of equipment (software or hardware) needed to build each prototype should also be included. It can contain temporary materials that are only needed for initial prototyping but are not part of the final design (a breadboard for example or a design software like Onshape).

- Computer
- Design software (Unity)
 - Built in elements
 - 3D objects
 - Spot light (for the lamps in the room)
 - Main camera
 - Unity script
 - Code from lab 5 (Project Specific) to be able to control the camera using our keyboard
 - Code to move the camera around
 - Unity asset store
 - Textures (ex. Wood for the boarded up windows)
 - Premade objects (ex. Kindergarten classroom, posters, cubbies, clothes, etc.)
- Screen recorder software
- Video editing application (to add sound to our video) ex. iMovie (if we don't use Unity to add sound)
- Animation software (Mixamo)
- Environment creation software (Blender)

Risk list :

1. Using VR for long periods of time can cause eye pain/issues, motion sickness, nausea, and headaches

Using a VR set for long periods of time can have negative effects on the physical health of the person. Specifically, staring at a screen that is right in the user's face for a long time can cause eye pain or issues as well as give the user motion sickness, nausea or even headaches. Even though this problem is somewhat avoided as the time using the VR set will be less than 60 seconds, the client will be testing various projects, thus wearing the headset for a long time. To avoid these negative physical effects on the client, having a little presentation before the client tests out the product will reduce the chances of these physical effects as it gives the client the opportunity to rest and be well.

2. Listening to VR at high volumes could pose a risk to ears

Using a VR set at high volumes can pose another physical risk, this time targeting the ears. To avoid this problem, keeping the volume at a minimum would suffice as it would not be painful to the ears and not pose any physical harm to the client. Sparingly using our loud noises at a set high volume that is suitable for the ears will also provide a good solution to avoid any physical harm or damage.

3. Virtual reality can content can negatively affect your perception on reality

This risk ties in with the first issue as using a VR set for a long time can also pose mental harm to the client. Using a VR for a long time can make you feel like you are in a simulation where you can not get hurt or feel anything, thus letting your body go on autopilot and accidentally hurting itself. This, similarly to the first risk, can be avoided by having a little presentation before the client tests out the product as it will reduce the chances of these mental effects as it gives the client the opportunity to rest and be well.

4. VR can pose security and privacy issues

A basic risk that comes with not only using a VR set but even using the internet is the risk of security and privacy. The solution to this problem is simply not giving any information if prompted as the product is an interactive video/game that does not require any information.

5. Not finishing the desired goal in time

The risk of taking on a bigger workload will be a big risk as it is uncertain to truly know if the desired task can be finished on time. The way to solve this problem is firstly by reflecting upon the work, and seeing if it is realistically doable in the amount of time given. The next step would either be to reduce the workload and simplify the task depending on whether or not it will take too much time. The final step is to break the task into doable parts where it will be easy to complete or ask for assistance if needed.

6. Team mates deciding not to do their work, in turn letting the team down

The risk of team mates not doing the desired work is also a risk involved with this project. To avoid this risk, simply adding constant reminders about what tasks are to be done at a certain date, meeting and checkups to see what work has been done, and even asking other teammates for help if the part is too long or not doable will all suffice as potential contingencies to this problem.

Prototypes plan :

Prototypes (in order of priority)	Objective (Why)	Description of Prototype used and of Basic Test Method (What)	Estimated duration and planned start date (When)	Person tasked to make the prototype
1	Making sure that the basic components are functional and feasible. It is also used to get used to create these components and make an analysis of if the concept itself is convincing	The classroom and some posters on the wall. <ul style="list-style-type: none"> - full classroom (with desks and chairs) - coat hangers on the wall - the posters will be blank - the dimensions will be as high fidelity as possible 	October 26th	Caelen

2	Creating a more immersive environment and improving the designs to make the environment look more realistic	<ul style="list-style-type: none"> - Pov cameras within the classroom. - The posters will also be improved . - the coat hangers will have masks hanging from them 	October 26th	Kate
3	Creating an even more immersive environment using sound. This will also entertain the user.	<ul style="list-style-type: none"> - The sounds (ring of a bell) - And the message from the principal - Adding script to let the user know what to do next 	November 3rd	Caelen
4	Refining some elements will help immerse the user	<ul style="list-style-type: none"> - More realistic poster designs on the walls 	November 8th	Caelen
5	Adding more details to the environment to help us tell a story	<ul style="list-style-type: none"> - better desks / chairs design - Adding details to prompt the user to think about the damage that has been done. 	November 3rd	Kate
6	Adding more details will help develop a story and immerse the user	<ul style="list-style-type: none"> - entry from outside the classroom will be added - some warnings outside the the classrooms will be added 	November 8th	Caelen
7	Creating two point of views will help the user feel more immersed	<ul style="list-style-type: none"> - Creating another POV (3rd person) - Being able to switch from first pov to third pov easily 	November 15th	Kate

Prototyping test plan for the first prototype :

Test ID	Test Objective (Why)	Description of Prototype used and of Basic Test Method	Description of Results to be Recorded and how these results will be used (How)	Estimated Test duration and planned start date (When)
		<p>The classroom and some posters on the wall.</p> <ul style="list-style-type: none"> - full classroom (with desks and chairs - coat hangers on the wall - the posters will be blank - the dimensions will be as high fidelity as possible 		

1	To evaluate its feasibility	We will be testing this by counting the amount of time that is required for us to create this prototype. It should not take more than 3 days.	The result will be recorded in a table that will compare the time required for us to create this prototype and the time for us to create the others. It will then be compared with the other values of the other prototype to determine if it is feasible.	This test starts when we start building the prototype and ends when the prototype is finished.
2	Time duration of product	We will be testing this by roughly timing the time that it takes the camera to move throughout the scenarios. This should take us between 10 and 30 seconds, since there will be no interactions for this prototype.	We will do 5 trials, which use different combinations of pathways in order to find the most convenient and efficient one. This will be recorded by using a table, writing down the pathways used for each test and recording the amount of time elapsed.	The test duration should be about an hour. We will be satisfied when the time reaches 20 seconds or when 5 trials are done.
3	Ease of use	This will be tested by counting the amount of time elapsed in order to load the VR environment. It should be between 5 to 10 seconds. We will start a timer when the unity icon is clicked and stop it when the environment is fully loaded and the "play" button is pressed.	We will do 10 trials, to evaluate the consistency and the efficiency of the loading time. The results will be recorded using a table. We will also be recording any special conditions such as the wifi of the area.	The test duration will be about 1 hour. We will stop testing once we achieve 10 trials.
4	Precision of message/ focus on message: Narrative effectiveness	This will be tested by showing people that we have identified in different user personas, our prototypes and asking them 3 questions each : How concerned does this make you feel? Do you understand each of the steps? How much does this motivate you into taking action? Their response will be on a scale of 1 to 10. (1 being the lowest and 10 being the highest) And their suggestions will be noted. This can be done by either showing them the prototype or sending them a recording of it.	We will have at least 10 feedback samples from this test. Each answer to the questions will be recorded using a table. We will make a mean of each column of the table to determine how successful or unsuccessful our product is.	The test duration will be when the prototype is finished to when the deliverable is due (time constraint). However, we do want a minimum of 10 feedback samples.
5	Overall Quality: of the video filmed.	This will be tested by using 2 methods to film our product and evaluating the quality of each. The first method will be screen recording with the computer. The second method will be to use teams as a method of screen recording. Then we will evaluate the frames per second of each method.	We will have a table for each method of screen recording. Each of them will be evaluated using 2 criteria and out of 10. The first is the FPS. The second will be the number of times it stops or glitches (for every stop and glitch it will be deducted 1 point).	The test duration will be about 1 hour and will end when both methods have been tried and tested 2 times each for the most accurate results.

6	Immersion of the user in their environment	<p>This will be tested by showing people that we have identified in different user personas, our prototypes and asking them 3 questions each : How much do you feel immersed? Is this realistic to you? What could be improved? Their response will be on a scale of 1 to 10. (1 being the lowest and 10 being the highest) And their suggestions will be noted. This can be done by either showing them the prototype or sending them a recording of it.</p>	<p>We will have at least 10 feedback samples from this test. Each answer to the questions will be recorded using a table. We will make a mean of each column of the table to determine how successful or unsuccessful our product is.</p>	<p>The test duration will be when the prototype is finished to when the deliverable is due (time constraint). However, we do want a minimum of 10 feedback samples.</p>
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