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<u>GNG1103 – A.R.C.</u>

Deliverable H Prototype 3 and Customer Feedback 26/11/2020

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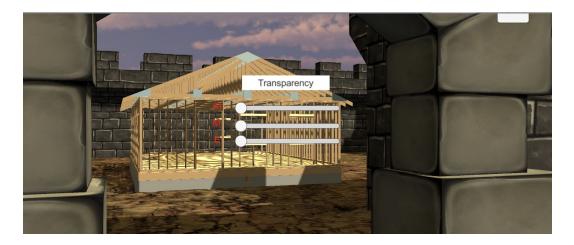
1. Introduction

For the last deliverable, Polar Devs built upon their latest prototype to have the final prototype heading into the last week of development. With this iteration the group introduced saving annotations as well as improvements to the menu, save / upload and 3D object view. With a good foundation from the previous prototype the group was able to rework and implement some new features for this prototype. This will make further development much easier coming in to design week, as only final touches need to be made.

2. Prototype 3 Features

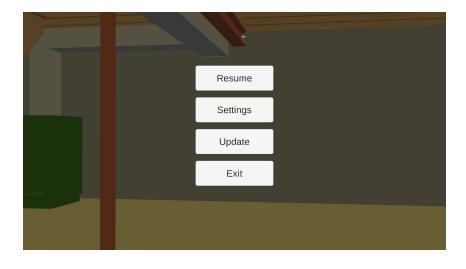
2.1 3D object Enhanced Layer Settings

Added the ability to change the transparency value of each model, electrical, mechanical and structural, to allow the user to view each component simultaneously despite obstruction. To change the level of transparency, the user needs to move the slider up or down. By doing so to the selected component, it will change in transparency.



2.2 Intuitive Interface

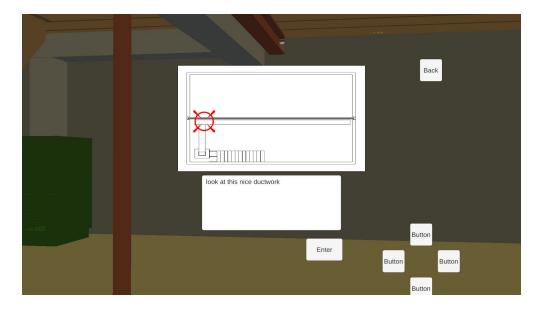
The intuitive interface has been updated since the first prototype. We have added multiple new menus into our file in the form of canvases. Some of which include the save file, the updated main menu, annotations menus as well as the settings menu. Icons are being developed to help reduce the amount of text needed in the various interfaces. The ability to ascend and descend within the 3D space has now been added, enabling the user to venture between different floors and viewpoints.





2.3 Annotations

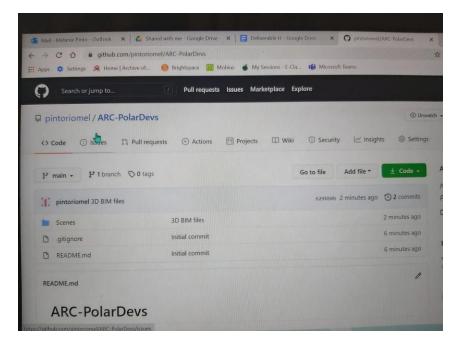
Since numerous functional systems have now been developed, the time has come to start implementing systems to save annotations. To accomplish this, a screenshot of the current game view is captured and saved within the app under a semi-user defined name. The user is then prompted to enter the annotation notes into a text field, above which lies a map of their current floor. Here they can align a cursor over the location of interest on the floor before hitting enter to save another screenshot of both the map as well as the annotation itself. These screenshot annotations files will then be uploaded to the Github repository. See in-app screenshots below showcasing the annotations menus.



Back
and this furnace
Button
Enter Button Button
Button

2.4 Update/Save Models

With this prototype we have updated the save and update feature for the app, using github. Github is a platform for version control and collaboration, that allows users to work together on a project from any location. Users are able to clone the repository to their devices so that they can work on the updated files. Changes to the files can then be made and uploaded/committed to the repository so that other collaborators will be notified. This will also provide an opportunity for users to save their annotations locally so that others may be able to view their notes made on the updated 3D models.



Mail - Melanie Pinto - Outlook × Shared with me - Google Drive × E Deliverable H - Google Docs × O ARC-PolarDevs/Sca ← → C △ ≜ github.com/pintoriomel/ARC-PolarDevs/tree/main/Scenes				
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pintoriomel 3D BIM files				
E FilleMenu.unity	3D BIM files			
New Model scene.unity	3D BIM files			
Cld Model.unity	3D BIM files			
Older Model.unity	3D BIM files			

3. Prototype 3 Test Results

Task	Pass/Fail Condition	<u>Result</u>
3D object Enhanced Layer Settings	Be able to change transparency value for each model	Pass
Intuitive Interface	Implement functional toggle buttons opposed to manual scripts	Pass
Annotations	Being able to record notes, screenshot and location	Pass
Updated/Save Models	Users can upload their files to a repository which can be accessed with any other device	Pass

4. Reviews/Feedback

Prototype 0.1

Anonymous Tester #1: "I like that I can ascend and descend now. The structure is pretty cool"

Anonymous Tester #2: "Simple to navigate, files are easy to go between."

Anonymous Tester #3: "I like the fact that you can choose to see specific views, like the

mechanical view or the electrical view."

5. Conclusion

Prototype 3 has been tested and built upon using the criteria table seen in section 3 Prototype 3. The test cases for each feature have passed the testing phase.

With them passing it will be added to our final build for the app and give us a good foundation heading into design week. With only final tweaks and integration of a few extra features into the main application, the team is confident in the quality of the final product for the final presentation.