

# **FITARNA Evaluation 2 Presentation**

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**Milestone 3**

# Milestone 2 Review

# Milestone 2 Task Matrix

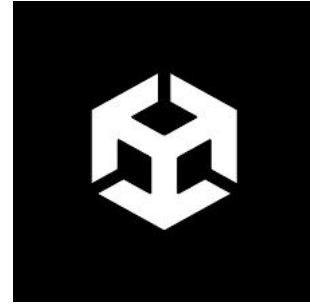
Task	Completion	Dathan	Ethan	Jacob	Vincenzo	To-Do
1. Importing and Integrating 1st Library Floor Plans into Unity	80%	20%	20%	20%	20%	Redo certain scans that may have came out bad
2. Compiling details for each room and facility on floor 1 for informational pop-ups and getting them approved by the library.	50%	12.5%, Pop-up info for floor 1	12.5%, Pop-up info for floor 1	12.5%, Pop-up info for floor 1	12.5%, Pop-up info for floor 1	Gathering more data for our app
3. Start Development on app version 1.0 and importing the floor 1 model for the first floor.	80%	20%, Scanning	20%, Pathfinding/ Recognition	20%, Image Tracking / Recognition	20%, Creating pathways, localization, and tying features together	Finish fully implementing the first floor into the app along with proper recognition

# Task 1: Importing and Integrating 1st Floor Plans into Unity

Using Vuforia Creator app, we used the LiDar in the iPhone 13 pro to take scans of the first floor of the library.

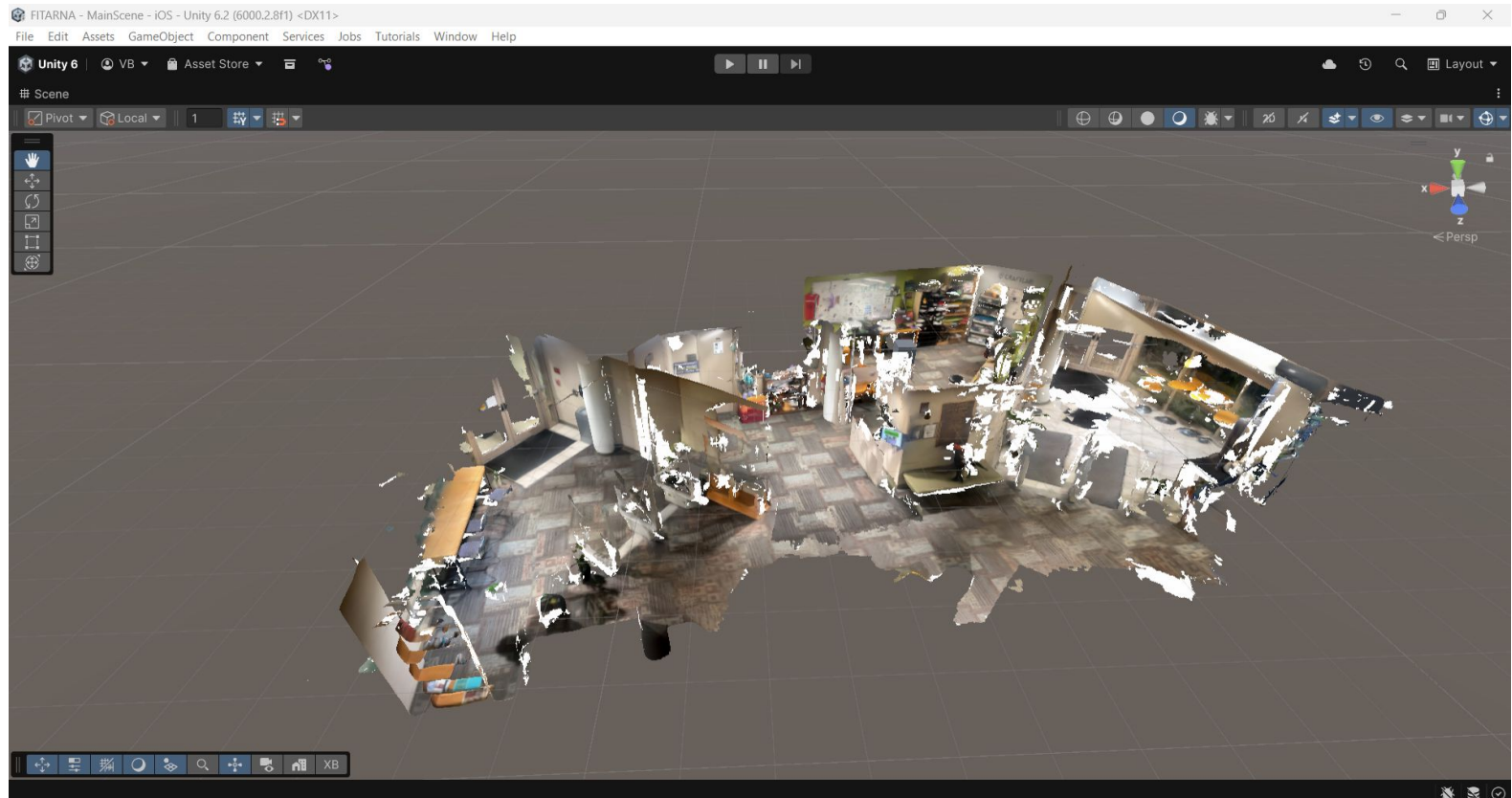
Then we generated area targets of those scans in Vuforia Engine - Area Target Generator.

Then took said area targets and align them in Unity to start our baseline for AR navigation.



vuforia™

# Task 1: Importing and Integrating 1st Floor Plans into Unity



## Task 2: Compiling Details and Getting Library Approval

- We met with Library officials who then gave us some details that they wanted to us in their virtual tour of the library.
- Using those we have some information for the first set of pop-ups but we need more for subsequent pop-ups.

## Task 3: Start Development on app version 1.0

- Began development on first working version of FITARNA.
- Right now, our program works with the scans we took and has functioning localization.
- However we still need to finish the rest of the scans and implement pop-ups to have version 1.0 up and running.



# Milestone 3

# Task 1

- We need to create the pop-ups that we will use for our app.
- We will create these pop-ups in Unity using the built in textmesh pro feature.



## Task 2

**Take and implement scans of the 2nd floor of the library.**

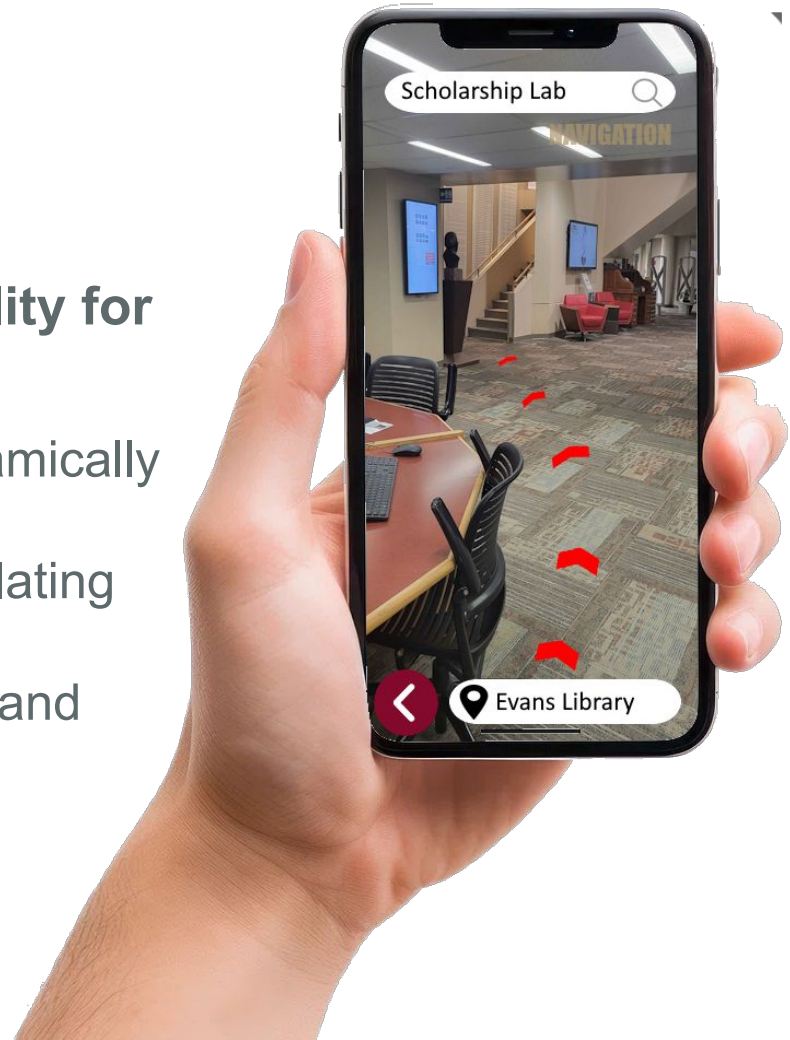
- Take scans using Vuforia Creator iOS app.
- Use the Vuforia Engine - Area Target generator to generate area targets from the scans.
- Import the area targets into Unity and align them.



# Task 3

## Implement Navigation Functionality for the First 2 Floors

- Implement AR overlays that dynamically update as users move
- Integrate A\* pathfinding for calculating routes
- Allow users to select destination and end navigation



# Milestone 3 Task Matrix

Milestone 3 Tax Matrix:

Task	Dathan	Ethan	Jacob	Vincenzo
1. Creating pop-ups in Unity to display in-app	25%	25%	25%	25%
2. Take scans of the 2nd floor and Stairs	25%	25%	25%	25%
3. Implement navigation functionality	25%	25%	25%	25%

Questions?