Sri Lanka Institute of Information Technology

Assignment 04

Interactive 3D/VR/AR Application/Car exhibition based on Faculty of Computing (FOC) main building premises

IT4020 - Modern Topics in IT

Year 4, Semester 1

(2023) – Weekend Batch

Group Details

Group ID -> **MTIT-011**

Project Name -> **Interactive 3D/VR/AR Application/Car exhibition based on Faculty of Computing (FOC) main building premises**

Batch -> **2023 -Y4S1**

Registration Number	Student Name
IT20147396	**Peiris B M G**
IT20178154	**Dilshan P A D S D**
IT20122782	**Amani M P N**
IT20081416	**Ahamed M M Z**

The Scenario

Certainly, here's a brief introduction to an AR application based on a **Car exhibition** in the virtual exhibition gallery of the SLIIT Malabe campus. The SLIIT Malabe campus is a hub of activity that provides students with a comprehensive learning experience. As part of this experience, the Faculty of Computing (FOC) main building premises offers an Island Area that is home to a variety of facilities and amenities, including an Open Space Virtual Exhibition Gallery. To enhance the experience of visitors to the exhibition gallery, an AR application has been developed that allows users to explore the gallery and interact with its exhibits in a virtual environment. The application features an accurate and well-detailed 3D model of the exhibition gallery, complete with interactive elements that users can explore.

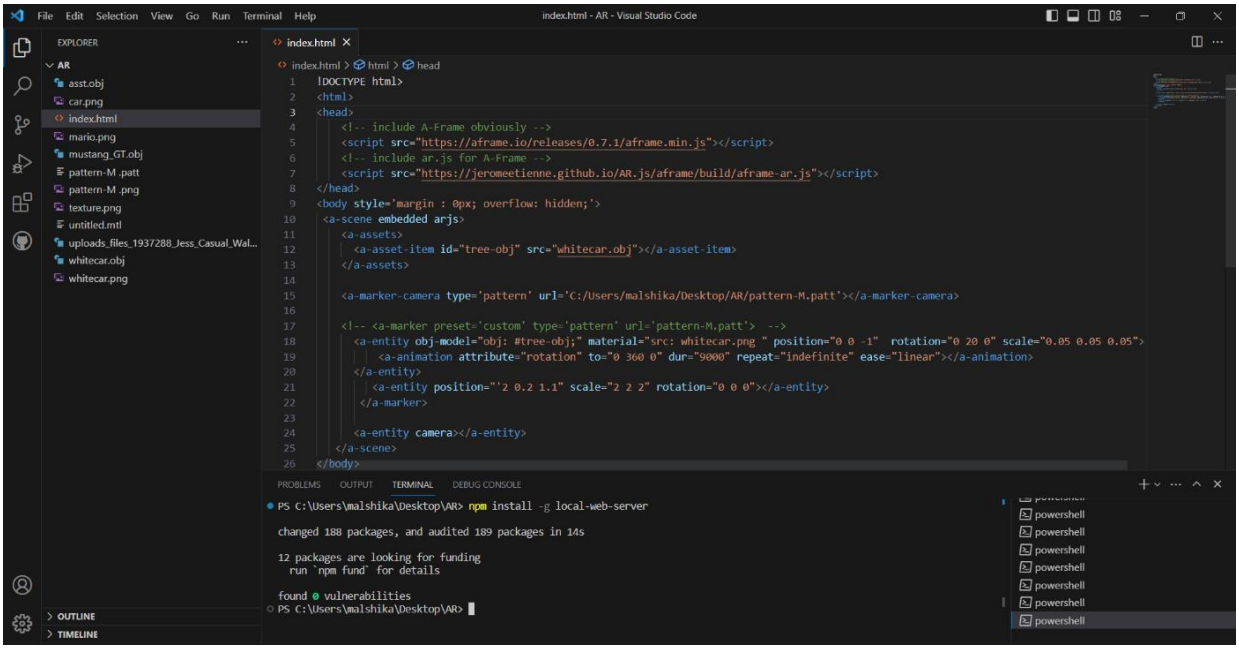
One of the interactive elements of the application is a car exhibition located within the virtual exhibition gallery. The car exhibition features a range of vehicles, from vintage classics to modern supercars, each accompanied by detailed descriptions and specifications. Users can explore each car in detail using the AR application, viewing the cars from all angles and examining their features up close. Users can also interact with the cars in the exhibition by customizing their colors and features. For example, they can change the car's color, switch out the rims, and even adjust the suspension settings. This provides a fun and engaging way for users to personalize the cars and see how different customization options would look. This AR application provides an immersive and interactive way for users to explore the SLIIT Malabe campus and interact with the car exhibition within the virtual exhibition gallery. By offering a range of interactive features, the application provides a dynamic and engaging experience for users, helping to bring the exhibition to life in new and exciting ways.

IT20147396	Peiris B M G

Step 1

We need a secure server to host the app as it will access the camera of our mobile. Therefore, open the terminal and install the below local web server.

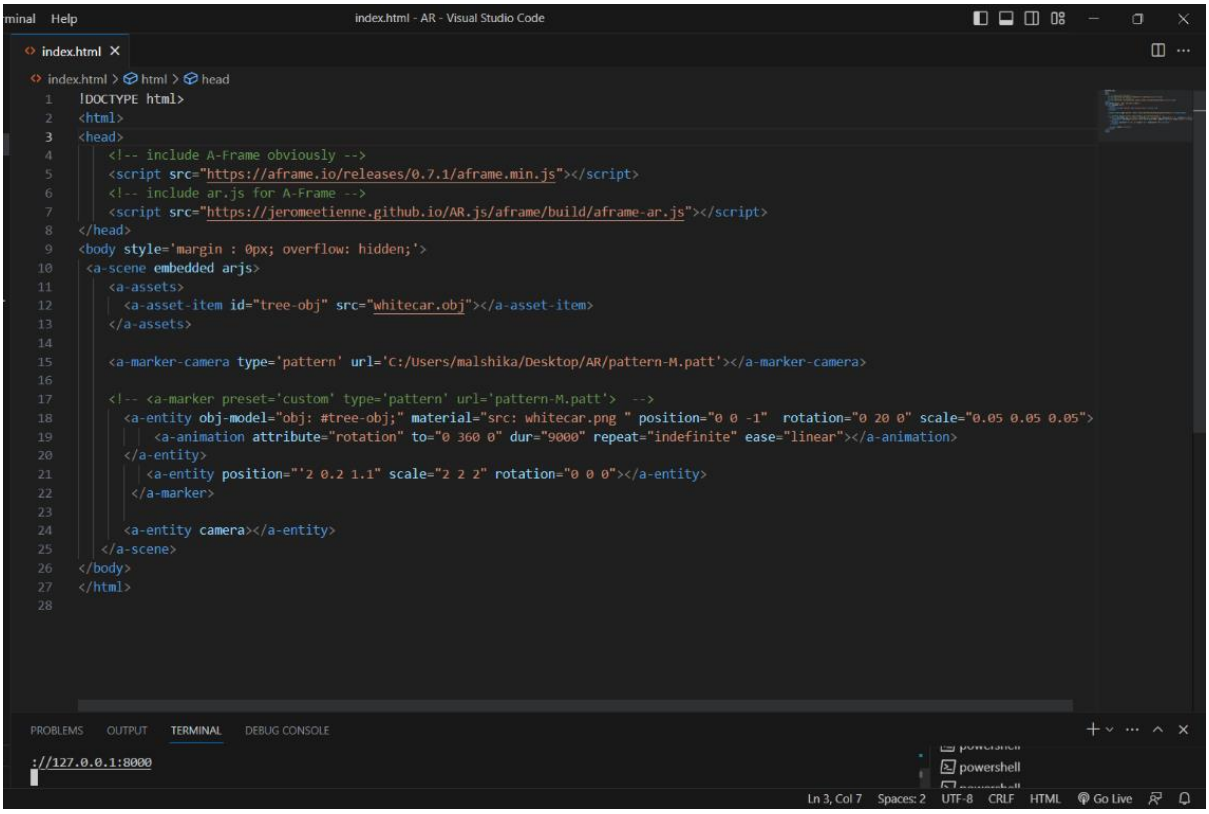
npm install -g local-web-server



Step 2

Create our AR application

- After the creation of the local server, create a new folder, which will be the AR project folder.
- Inside the AR project folder, create a text document in an HTML format.
- Name the text document as an Index.html

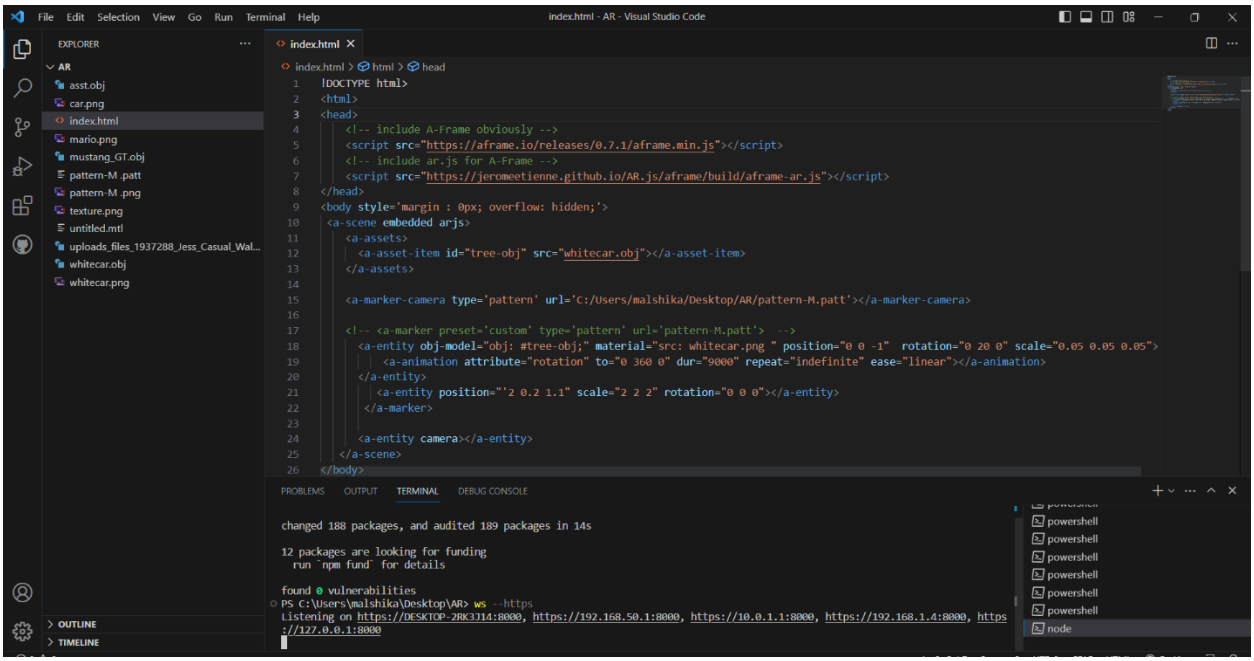


Step 3

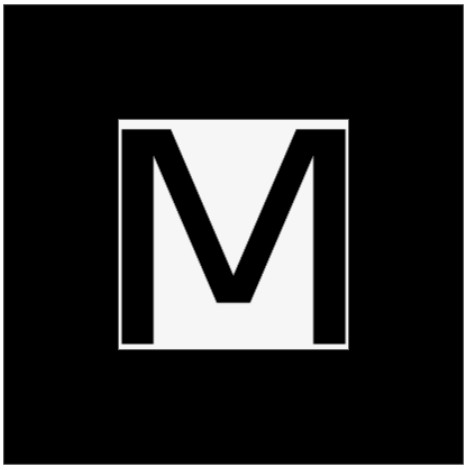
Run a server

- Open the terminal via on AR project folder
- Run the local host server following the command

ws –https



Marker



My name is Malshika .M represents my name. This is my own marker.

Output

Drive Link

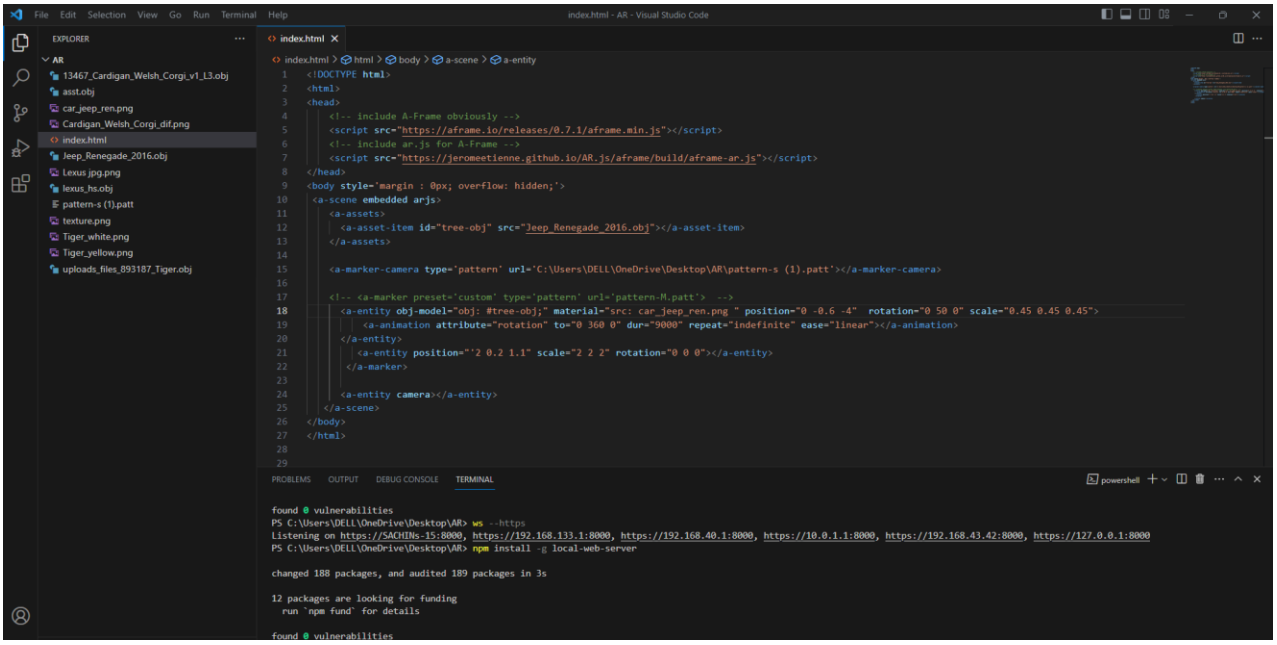
https://drive.google.com/file/d/1edc7edbSRnw6kIPdqMwZ_tyH7y1gUdRk/view?usp=sharing

IT20178154	Dilshan P A D S D

Step 1

We need a secure server to host the app as it will access the camera of our mobile. Therefore, open the terminal and install the below local web server.

npm install -g local-web-server



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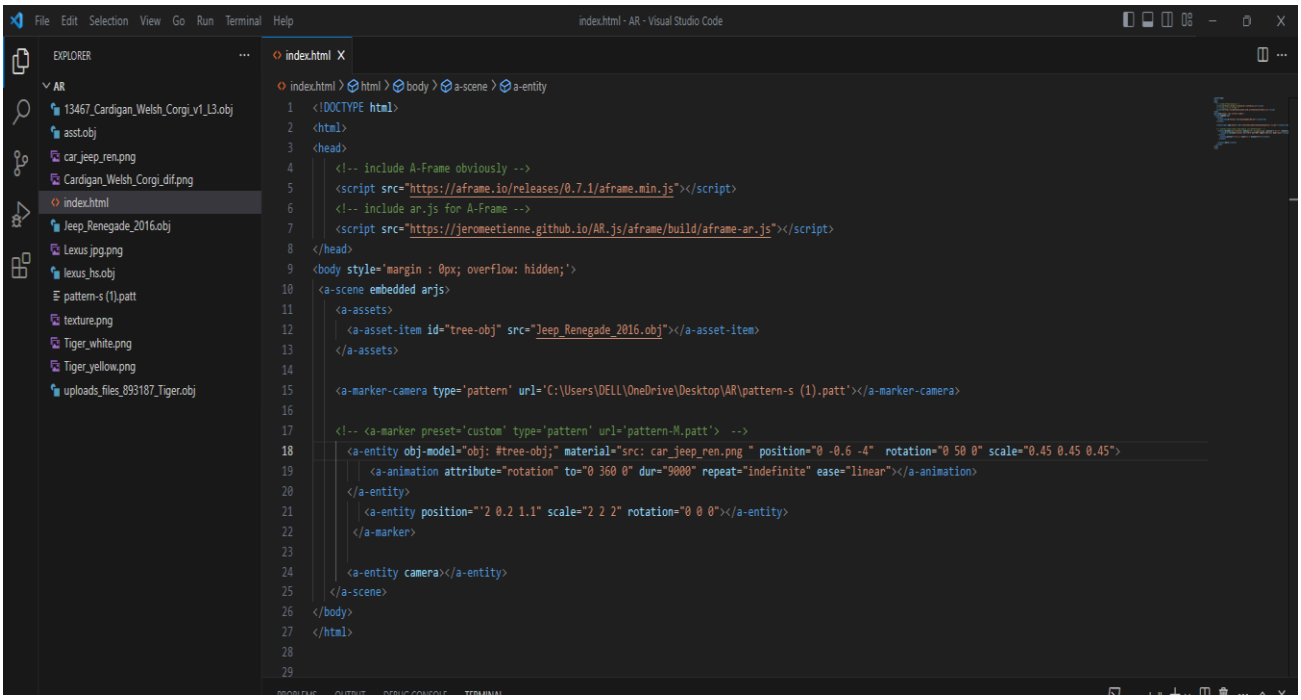

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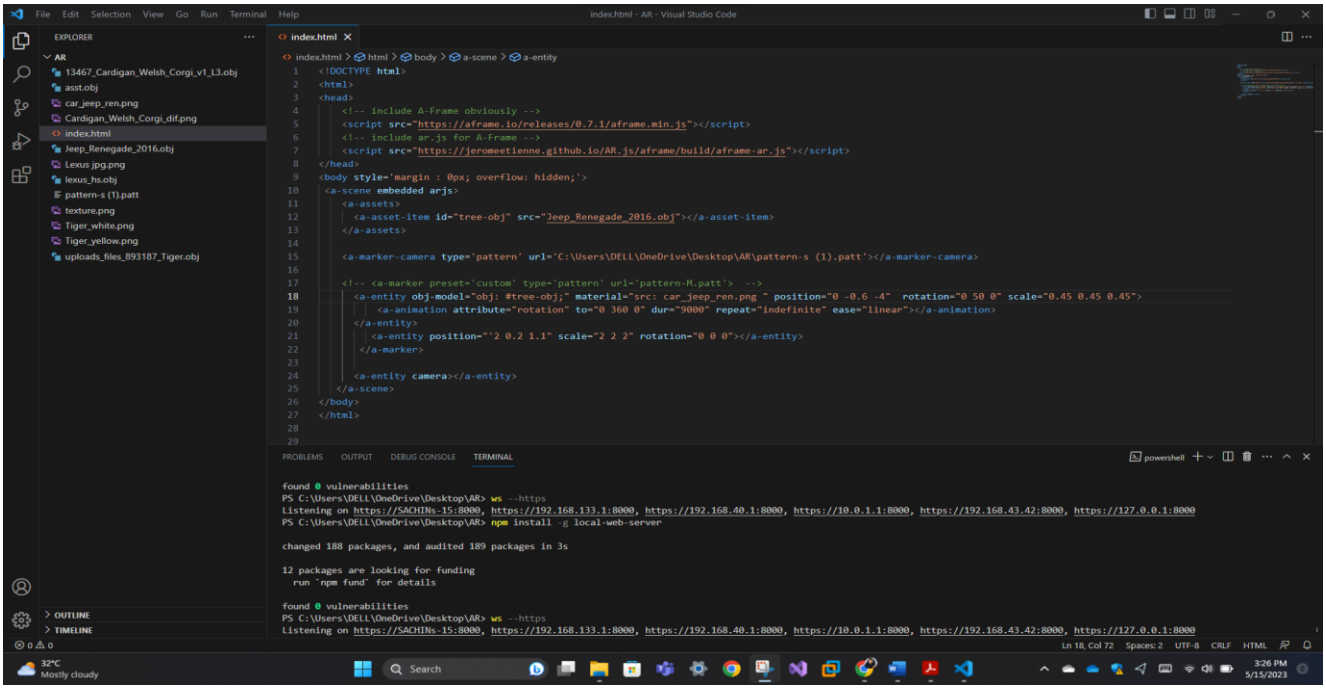


Marker

My name is Sachin .S represents my name. This is my own marker.

Output

Drive Link

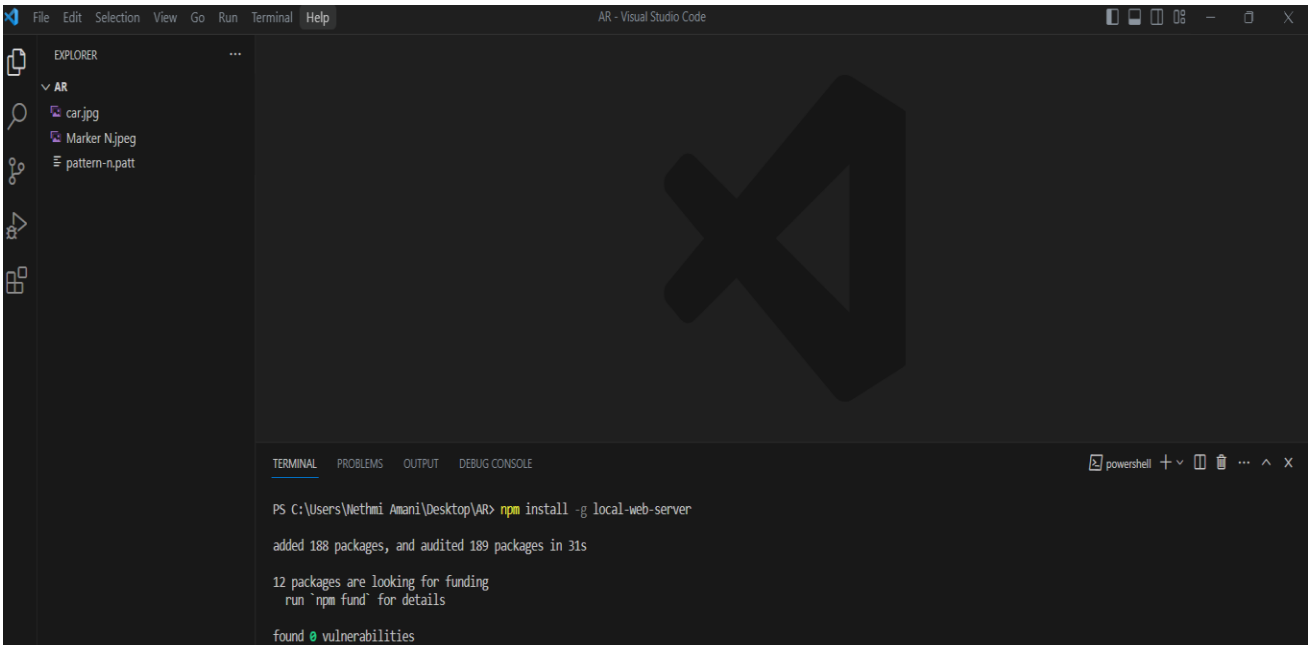
https://drive.google.com/drive/folders/19_bIkHuy95Tgmy_j_DV6b-IyjlR9gQ1m?usp=sharing

IT20122782	Amani M P N

Step 1

We need a secure server to host the app as it will access the camera of our mobile. Therefore, open the terminal and install the below local web server.

```
npm install -g local-webserver.
```



Step 2

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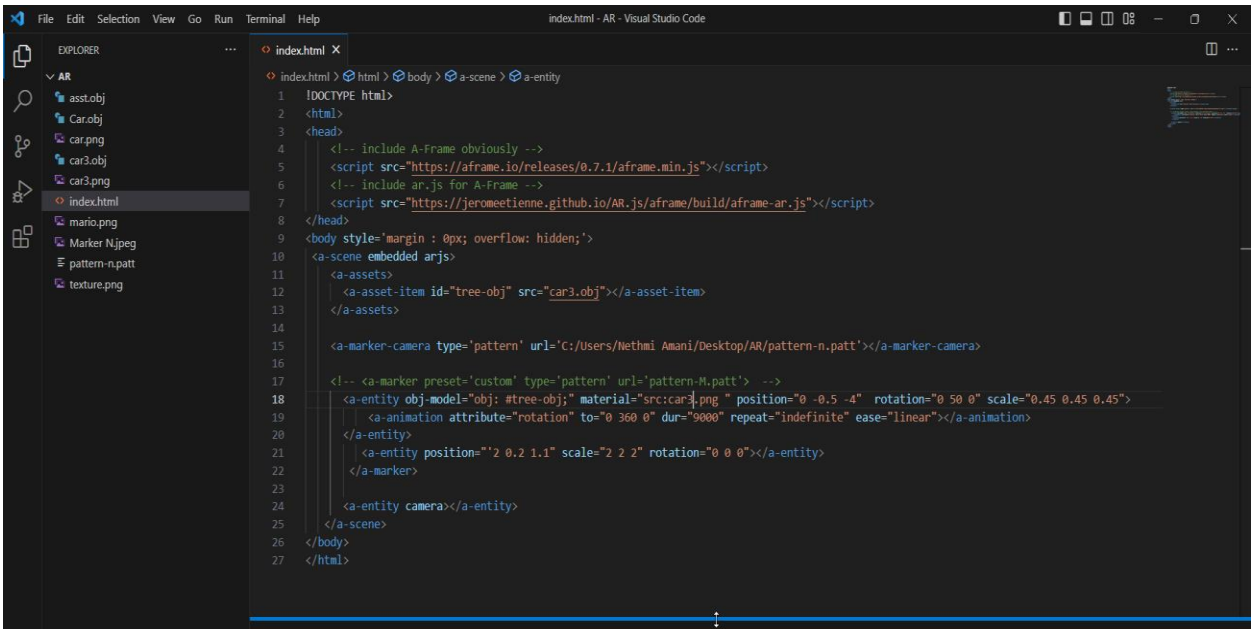

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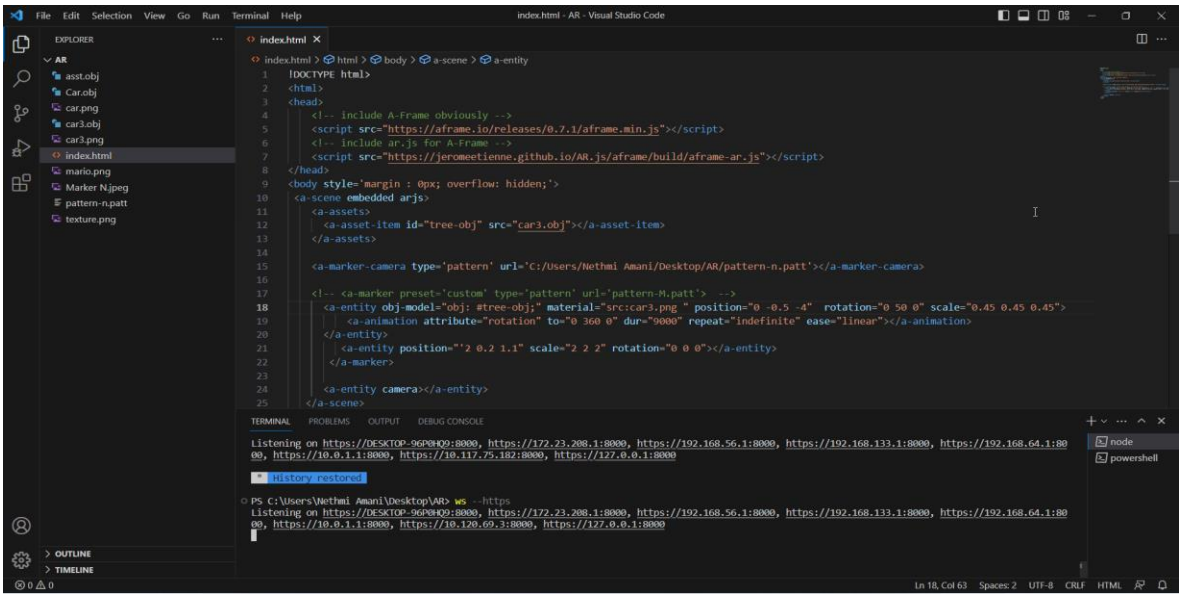
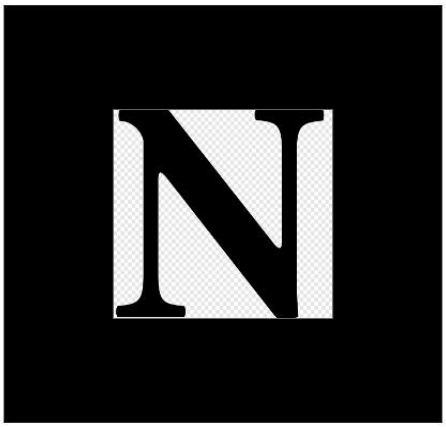


Marker



My name is Nethmi .N represents my name. This is my own marker.

Output

Drive Link

https://drive.google.com/file/d/10oma7LeyR80tMs8knujD0KK9CqzMDodG/view?usp=sharing

IT20081416	Ahamed M M Z

Step 1

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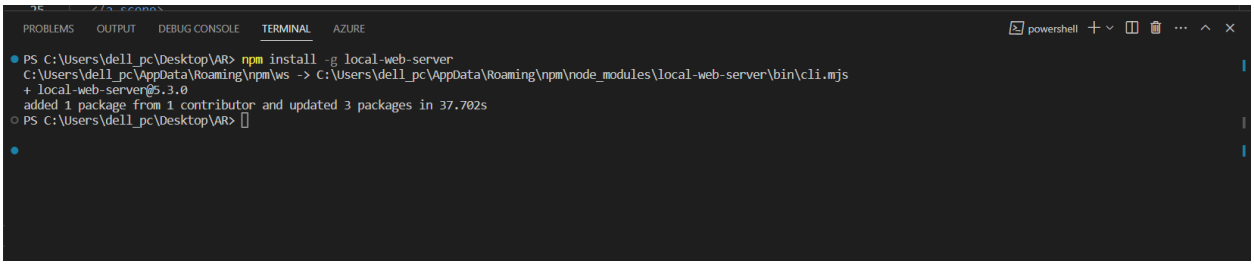
npm install -g local-webserver.



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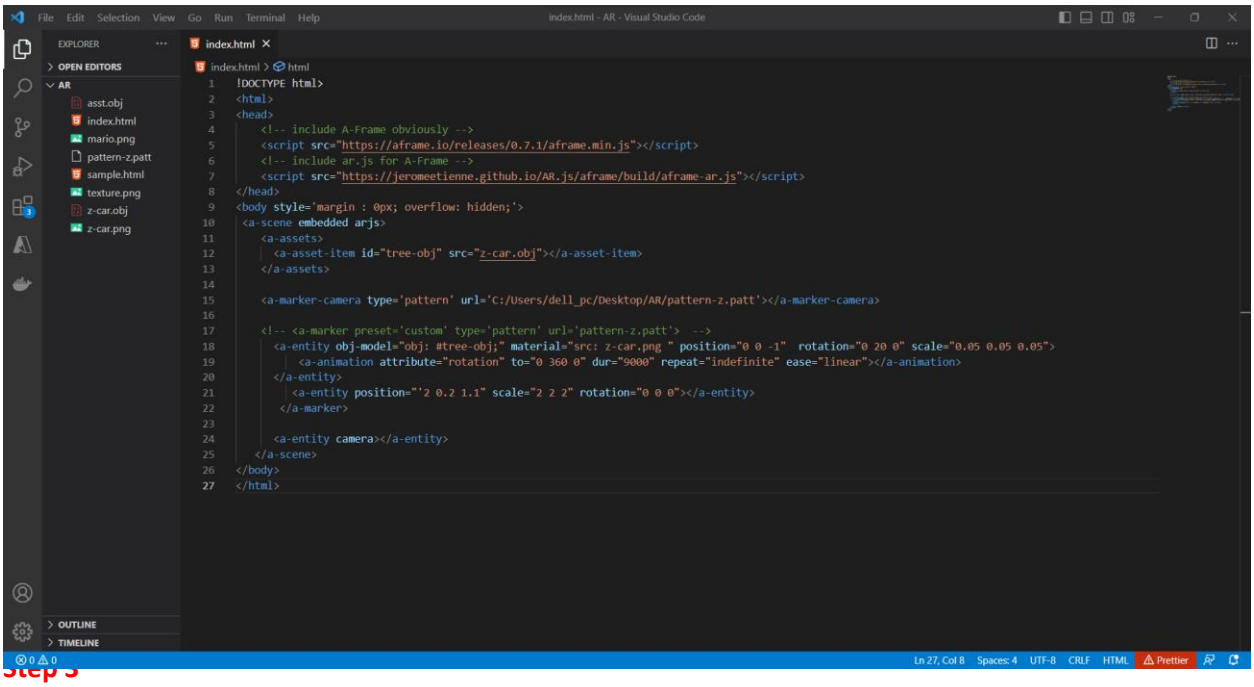

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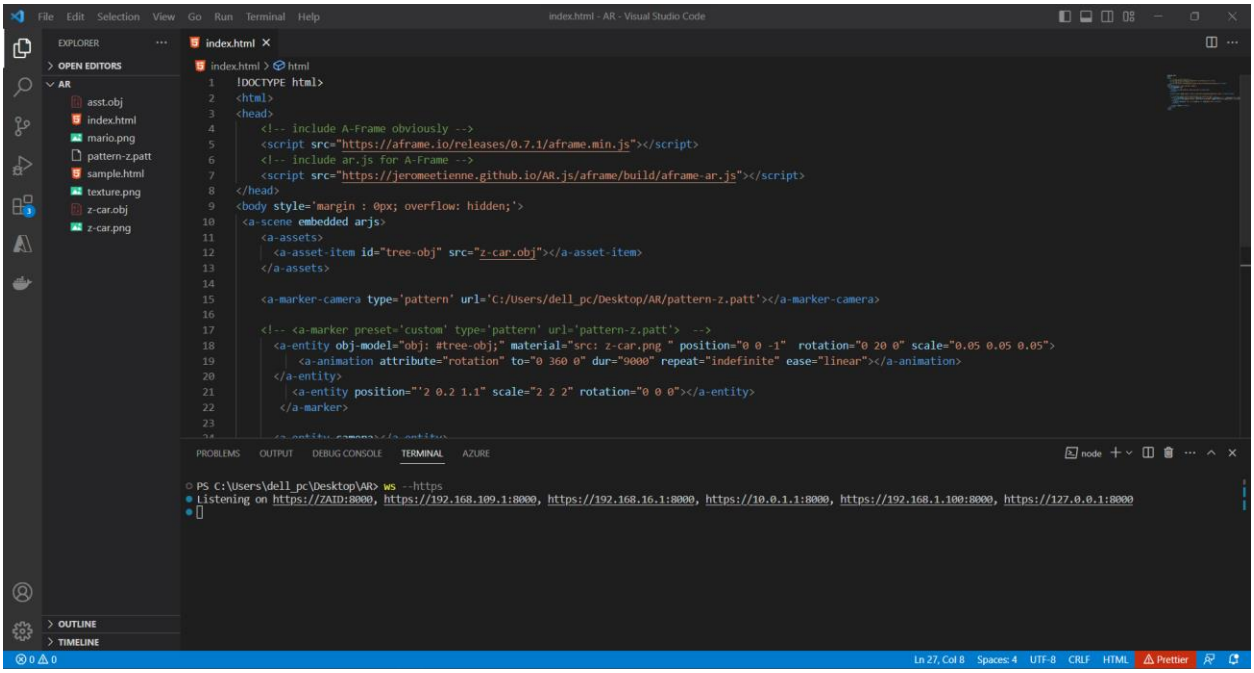
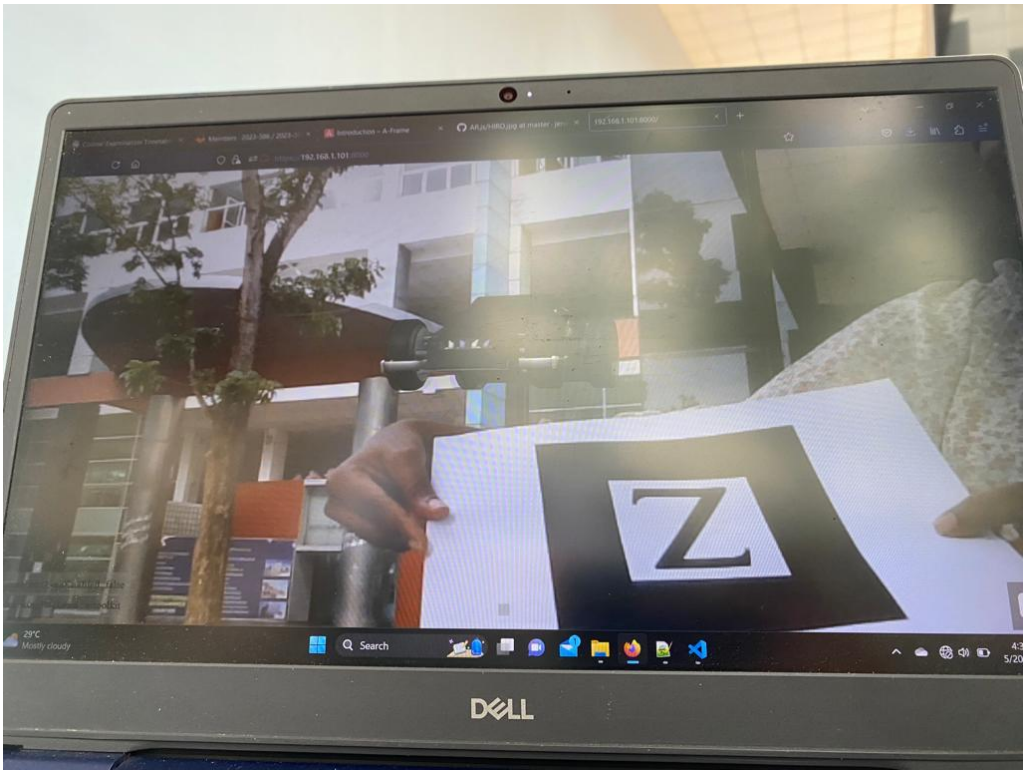
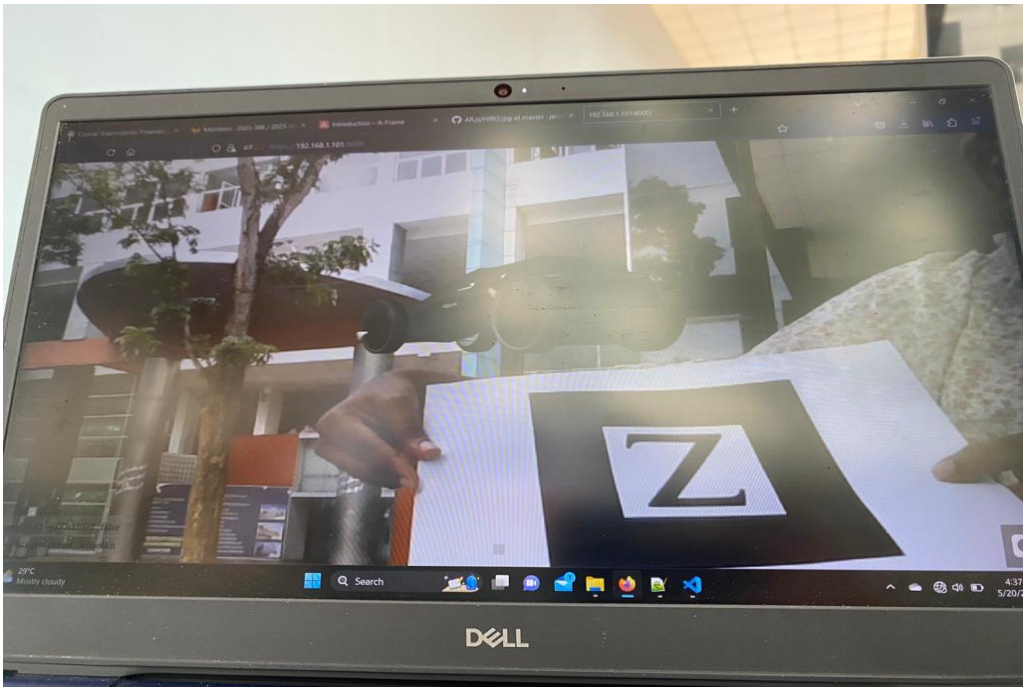


Marker

My name is Zaid .Z represents my name. This is my own marker.

Output





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