MAP-ED AR

PROOF OF CONCEPT

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EXPLORING APPROACHES

Marker-Based Approach

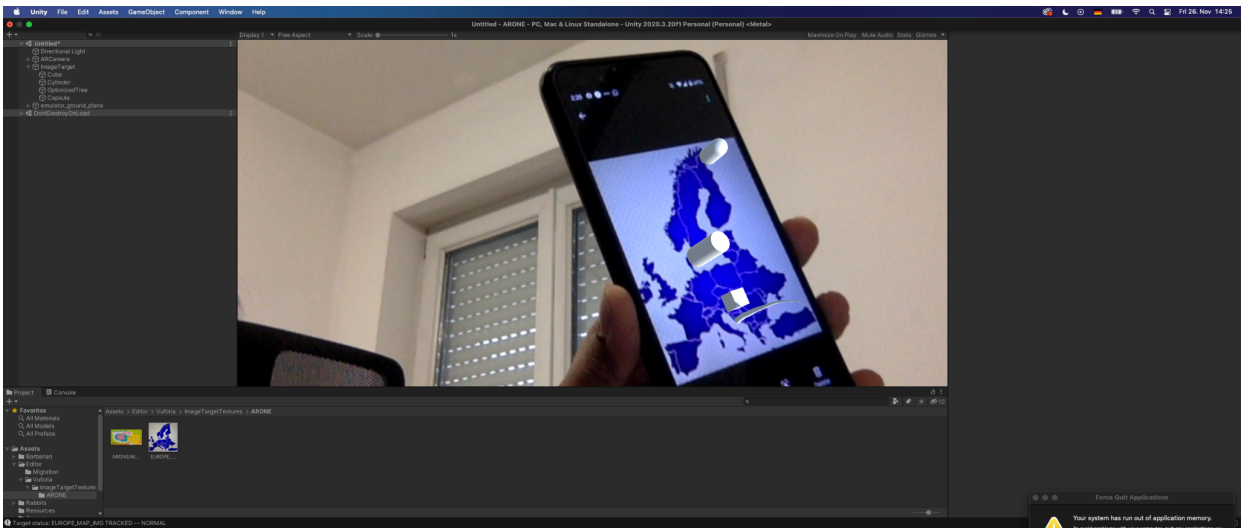
In this approach, we tried to explore marker-based display of map and superimposed 3D models. In this we used an image target to achieve the same.

Markerless approach.

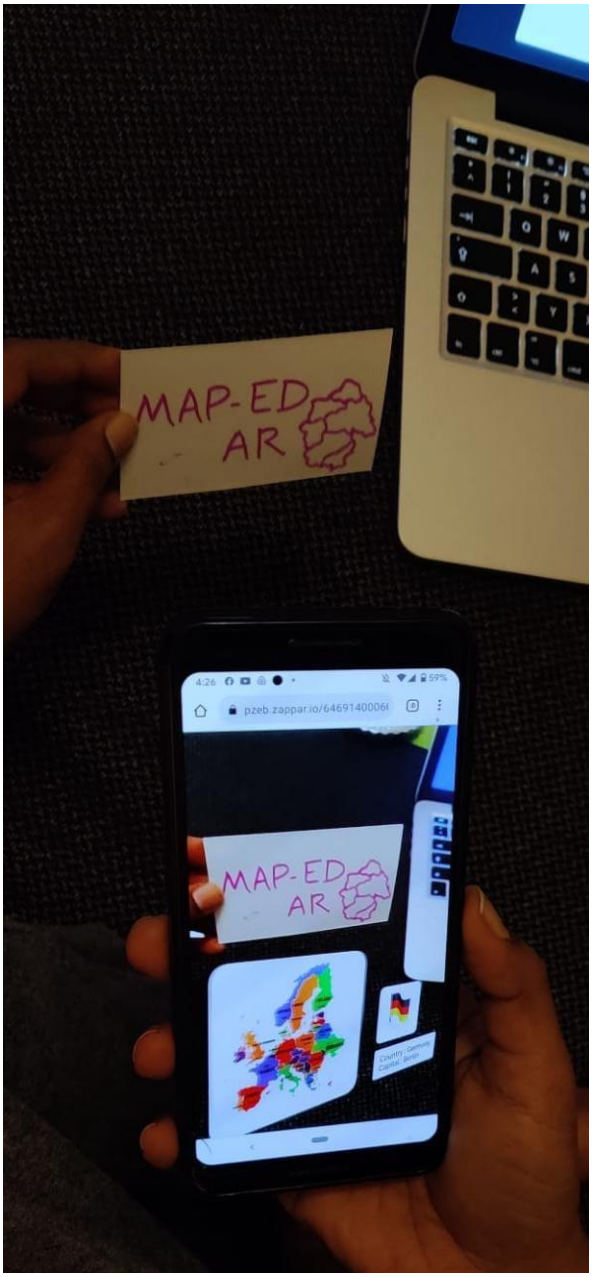
In this approach we tried to create markerless augmented reality using Vuforia Ground Plane. With the ground plane feature, we would display the map directly in the real world.

SCREENS

Using Unity and Vuforia Engine, we made our first marker based prototype having a map image as the image target and laying 3D objects on top of the countries. This is our initial try of building a minimum viable product. Our next step would be implementing the overlay with flags, monuments for some countries.

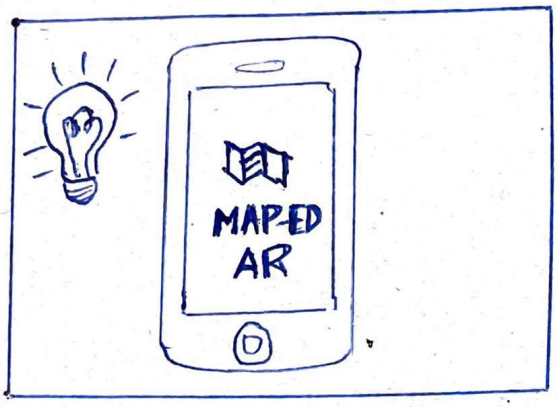


Using Zapworks webAR, we created an experience of marker based card tracking to display the Europe map with the country flag and some information about the country such as Capital, Land area etc.

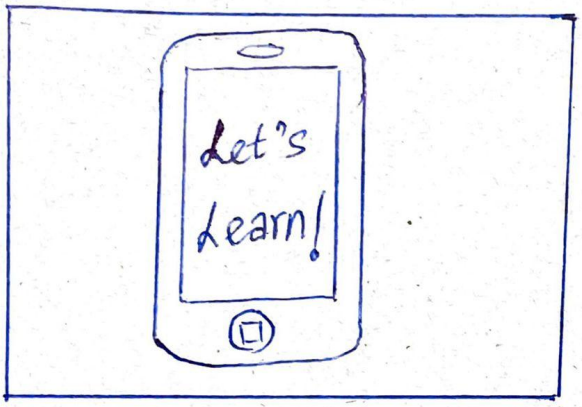


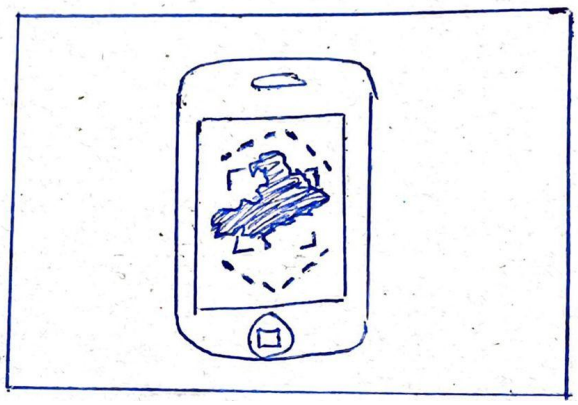
STORYBOARD

KID BORED OF READING GEOGRAPHICAL FACTS

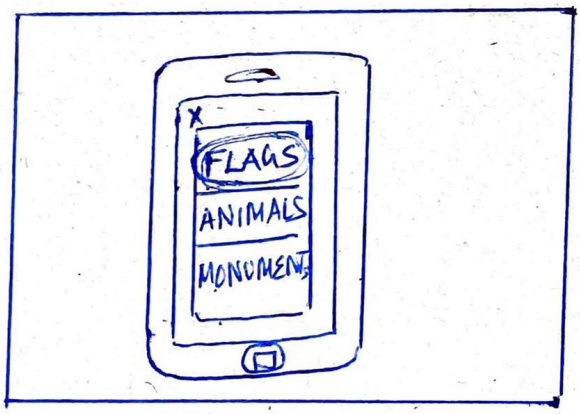


IDEA! USE AN AR MAP TO VISUALIZE COUNTRIES

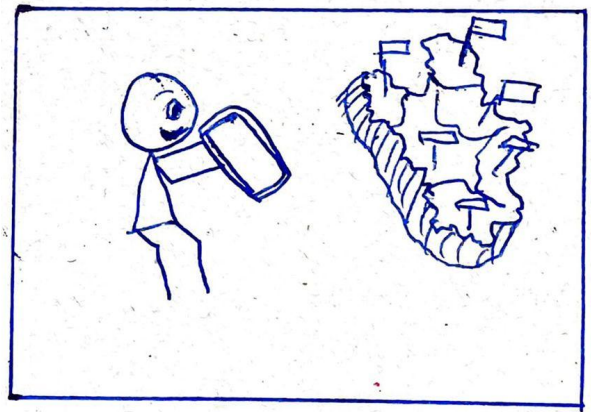




USE THE AR FUNCTIONALITY OF THE APP TO SEE THE 3D MAP PROJECTED IN YOUR PLACE OF CHOICE



MENU TO CHOOSE TYPE OF GRAPHICS ON MAP

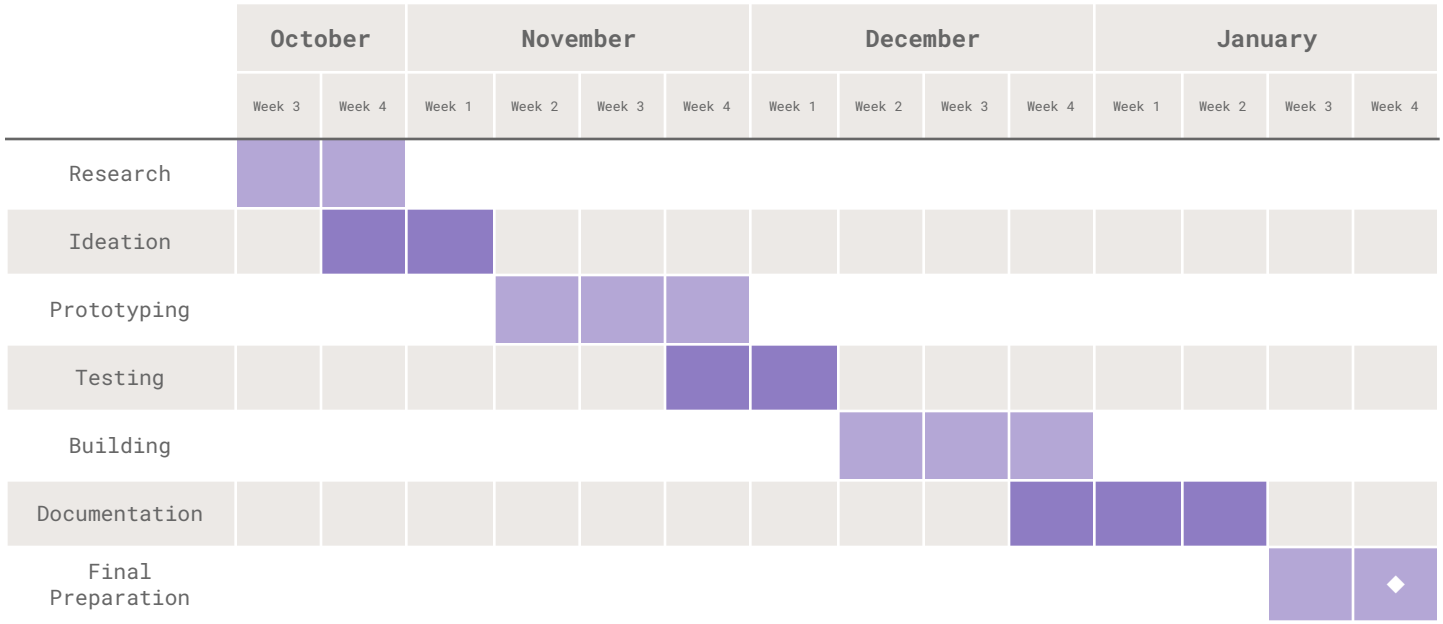


ANIMATED FLAGS OF COUNTRIES COMING TO LIFE!

REQUIREMENTS

The primary hardware requirements for the realization of this project would be a Windows or a Mac system, along with an Android or iOS device for testing the AR app. We would be making use of Visual Studio (C# Platform) for scripting in Unity 3D together for design and development. We would also be using Vuforia for functions such as image recognition, and tracking multiple image targets simultaneously. The proposed technique of interaction is via a smart device that can be carried and used on-the-go as well.

OUTLINE


October
November
December
January
Week 3
Week 4
Week 1
Week 2
Week 3
Week 4
Week 1
Week 2
Week 3
Week 4
Week 1
Week 2
Week 3
Week 4
Research
Ideation
Prototyping
Testing
Building
Documentation
Final Preparation