



# MAP-ED AR

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## INTRODUCTION

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The MAP-ED AR app features visualizations of flags, animals, and monuments on a kid-friendly map. The augmented 3D map can be projected in any place of the kid's or teacher's choice. This fun and educational AR app makes geographical facts come to life, thus making it easier for kids to retain the information they learn. Kids can learn interesting facts about countries through any smart device of their choice.


The target group for this app would be children in Grades 5-6+ (ages 10 and older). In these grades, elementary-age and preadolescent children are able to use maps with different symbol systems. These symbol systems may include color and abstractions, different projections, and different themes. Sixth graders usually perform equally well on tasks that use abstract symbols (e.g., points, lines, and polygons) as they do on tasks that use real-world symbols (e.g., giraffes, roads, areas of a park), so both abstract and real-world symbols can be used at this grade level[1].

[1]<https://www.nationalgeographic.org/article/map-it-young-children/>

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# PERSONAS

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**JEANNE LAURENT**  
AGE: 14  
LOCATION: PARIS, FRANCE

## PRIMARY USER

### MOTIVATIONS

CURIOSITY ●●●●●○ MOBILE APPS ●●●●●○  
AUGMENTED REALITY ●●●●●○ MAPS ●●●●●○

### GOALS & NEEDS


**Samantha is a visual learner.** She saw an AR demo at the science museum and wants to try it at home.

### FRUSTRATIONS

**Text book are static and boring**, and lessons are difficult to understand.

"I wish lessons at school were **easier and more exciting.**"

<https://todaysmama.com/parenting>



**EMILY ALLARD**  
AGE: 29  
EDUCATION: SOCIAL SCIENCE  
OCCUPATION: TEACHER

## SECONDARY USER

### SKILLS

TEACHING ●●●●●○  
GEOGRAPHY ●●●●●○  
IMMERSIVE TECHNOLOGY ●●●●●○

### GOALS & NEEDS

I want to use better and innovative **teaching tools** for lessons.

### FRUSTRATIONS

Willing to try new technology in her class **but not completely confident.**

### PERSONALITY

"I want to make learning more fun for young students."

<https://www.telegraph.co.uk/women/life>

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## USER STORIES

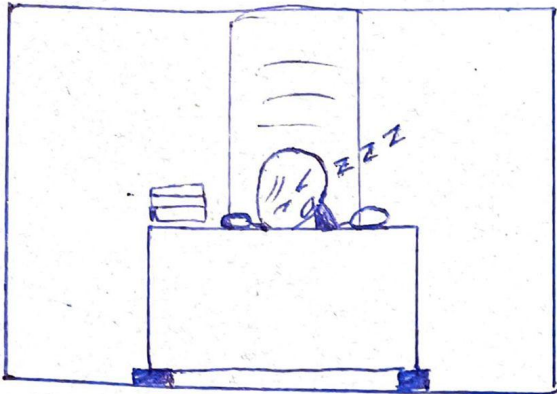
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<b>USER STORY 1</b>
As a visual learner, I want to visualize what I learn better so that I remember facts better.
<b>ACCEPTANCE CRITERIA</b>
Visualise facts   Multimodal Learning

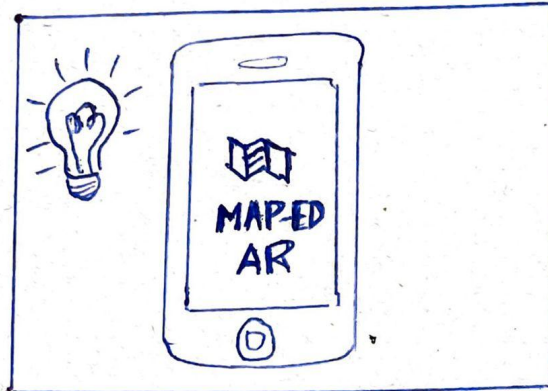
<b>USER STORY 2</b>
As a technology enthusiast, I want to integrate modern e-learning methods into teaching so that my teaching is more effective
<b>ACCEPTANCE CRITERIA</b>
Mixed Reality   Educational Apps

## STORYBOARD

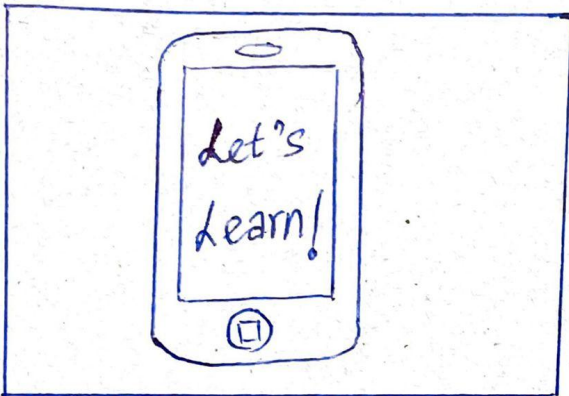
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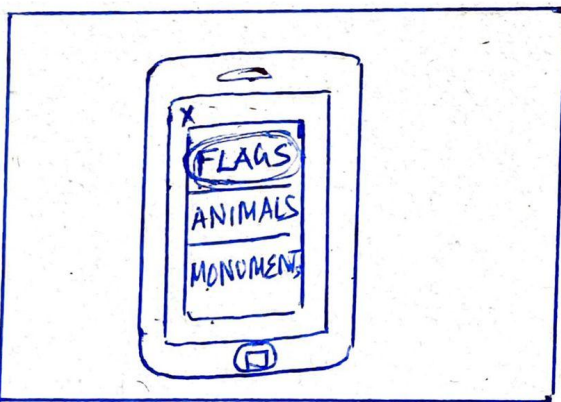
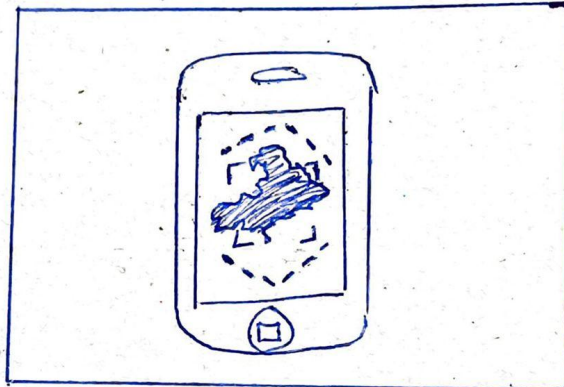
KID BORED OF READING GEOGRAPHICAL FACTS



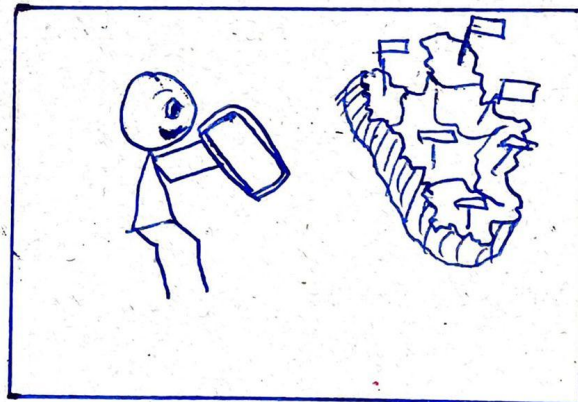
IDEA! USE AN AR MAP TO VISUALIZE COUNTRIES



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!

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## REQUIREMENTS

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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.

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