

# Initial Project Description

**Team Name:**

Group 15 (for now)

**Team Members and email addresses:**

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**Contact:**

Yarden Tamir

**Project Description:**

This projects takes the audacious task of combing the real and the virtual world. We plan to create a mobile application written for Android to bring the age of mobile gaming into the new augmented reality world. Following in the footsteps of the wildly successful Pokemon Go, we plan to create a mobile application using Google's new ARcore augmented reality API. The game that we will create will be a scavenger hunt like game in which a user or group of users will be able to pick a location or use the one that they are currently at and have their world transformed into a new realm where a winner will be decided based on the type of game that they decided. We are choosing to undertake this task because we see that this is the future of the mobile application landscape and wish to be on the frontier of innovation.

## Project Milestones

### First Semester

- Finalize project idea **October 23, 2017**
- Complete Project Proposal and Video **October 23, 2017**
- Complete Project Documentation and Specifications **November 6, 2017**
  - Class Diagrams
  - Use-Case Diagram
  - Gantt Chart
- Initial Testing of AR capabilities **December 4, 2017**
  - Geolocation services
- Evaluations **December 4, 2017**

### Second Semester

- Designing 3D Objects **January 2018**
- Implement Database **February 2018**
- Creating groups and scavenger hunts **March 2018**
- Final Cleaning, Debugging, Adding additional features **April 2018**
- Unit Testing **May 2018**
- Evaluations **May 2018**

## Project Budget:

We will currently host our database services on the EECS department system, though that is subject to change to a cloud based service. Our specific expenses:

- Hosting/Database:
  - Cost: Free (Varies with higher usage)
  - Vendor: Amazon Web Services
  - Time: Throughout the development process
- Software Licenses:
  - Cost: Varies
  - Vendor: Android SDK, Unity (Plugins + Assets), Third party programs, APIs and libraries
  - Time: As needed through development cycle.
- Unity Subscription:
  - Cost: Free (\$35/month pro version)
  - Vendor: Unity
  - Time: As needed through development cycle.
- Github Subscription:
  - Cost: \$5 per month
  - Vendor: Github
  - Time: As needed through development cycle.

## Work Plan:

- Finalize project idea - Whole team
- Complete Project Proposal - Whole team

- Complete Project Documentation - Whole Team
  - Class Diagrams - Shawn
  - Use-Case Diagram - Alec
  - Gantt Chart - Yarden
- Initial Testing of AR capabilities - Rebekah , Yarden , Stephen
- Implement Database - Alec , Yarden
- Design 3D Objects - Shawn
- Testing group and location functionalities - Shawn, Stephen, Alec
- Final Cleaning, Debugging, Adding additional features - Whole team
- Unit Testing - Whole team

**Github link**

<https://github.com/ytamir/AugmentedRealityApplication>