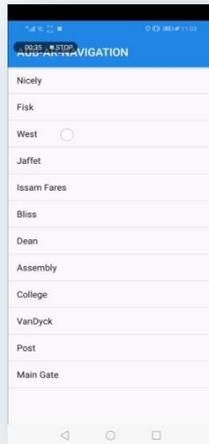




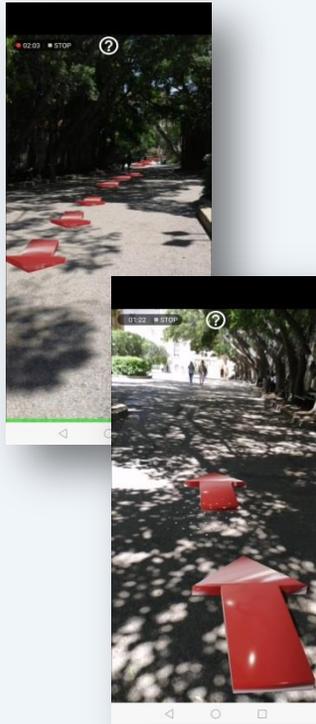
We integrated **AR** in navigation to help you find your way to any building at AUB!

## Features:

### 1- Destination Selection:



### 2- 3D Path Visualization:



### 3- Arrival Note:



## Tools:

### 1- Augmented Reality (AR):

“A simple combination of real and virtual (computer-generated) worlds. Given a real subject, captured on video or camera, the technology 'augments' (= adds to) that real-world image with extra layers of digital information.”

### 2- ARCore:



“ARCore is a software development kit developed by Google that allows for augmented reality applications to be built.”

### 3- QRZxing:



“ZXing ("Zebra Crossing") barcode scanning library for Java, Android.”

## Limitations:

### 1- GPS Accuracy:

“GPS-enabled smartphones are typically accurate to within a 4.9 m (16 ft.) radius under open sky. However, their accuracy worsens near buildings, bridges, and trees.”

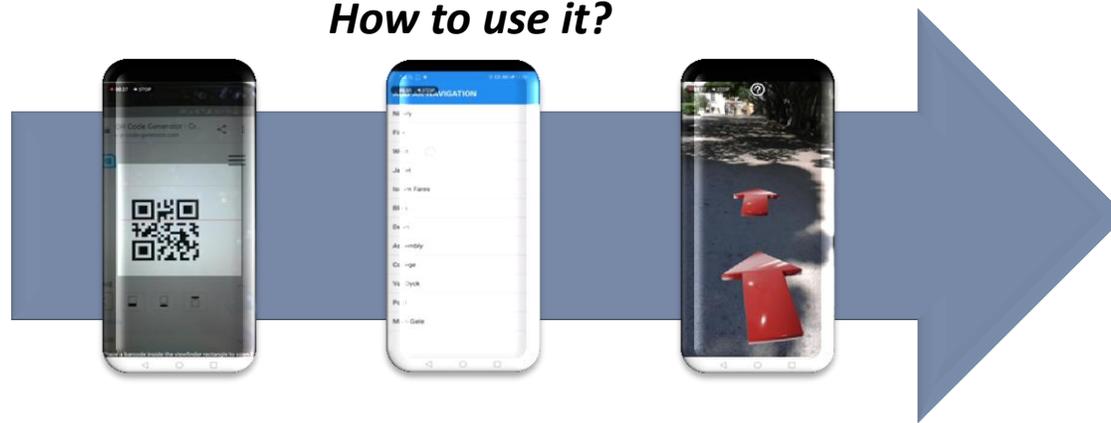
### 2-Sensors Accuracy:

Sensors in smartphones have a big tendency to give inaccurate values (hardware deficiency).

### 3-AR Accuracy:

Plane detection is dependent on light, flat surfaces, and the angle in which the device is held.

## How to use it?



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