Find Closest Defibrillator

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Introduction

Using AR, We introduce a mobile App to navigate to the closest Defibrator in the Technion Campus
• By Starting The App, The app will calculate the closest Defibrillator depending on the user current location.

• The App provide 2D and 3D graphical and vocal instructions to the user until he reaches the Defibrillator.
Challenges

• How can we figure out our current location?
• How do we find and calculate the closest path to the Defibrillator?
Challenges

• Solution: We use CoreLocation in order to determine our location.

• Having our location in hand, we use MapKit (which is build above Apple Maps) in order to calculate the closest Defibrillator and get the path to it.
Challenges

• How can we synchronize the current user's location and the navigation instructions?
Challenges

• Solution: by using MapKit Api, we build multiple regions. Each region resemble a certain change in the direction.
• Upon reaching each of these region we update the UI of the app with the updated direction.
• And broadcast the appropriate vocal instruction.
Challenges

• How Do we Know That we reached the desired Defibrillator?
Challenges

- Solution: Using Object Detection Through Reality composer we train our App to detect each Defibrillator And point to it in the user Camera.
Future Ideas

- Add the ability for authorized users to add defibrillators location for the Technion and other locations.
- Adding the ability to update the user's path upon taking a wrong way.
- Add a feature in which users can contact Emergency Services.
- Expand the current App to include other services for the Technion community (Libraries, Restaurants, etc....).
- Indoor Navigation.
Thank You

- Questions?

Project Web Site:
https://hsameer051.wixsite.com/definion