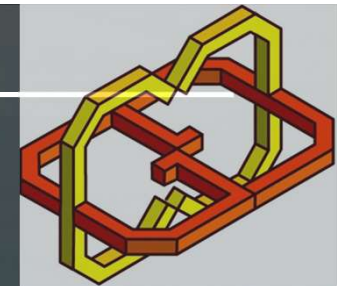


# Find Closest Defibrillator

Sameer Hamada

Shadi Abu Saleh

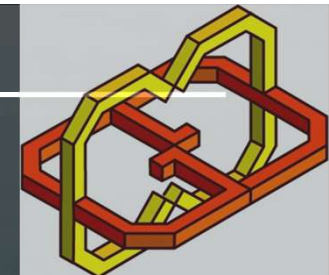
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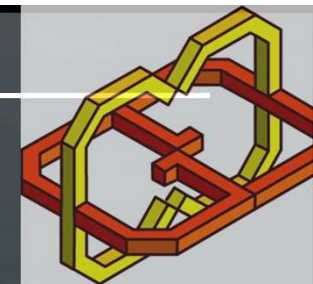
# Introduction

Using AR, We introduce a mobile App to  
navigate to the closest Defibrator in the  
Technion Campus

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- 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.

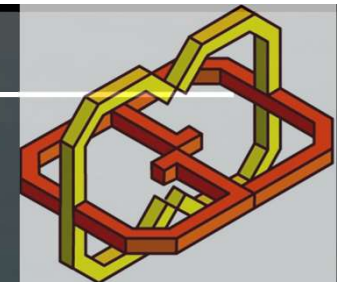


# Challenges

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



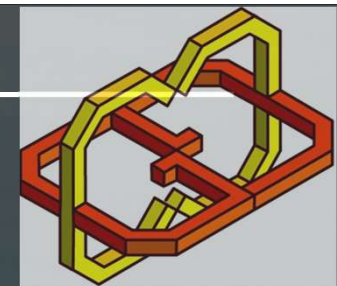
# Challenges



- 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



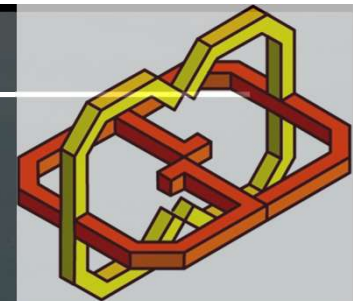
# Challenges



- How can we synchronize the current user`s location and the navigation instructions ?



# Challenges

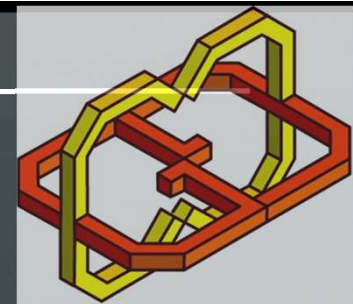


- Solution: by using MapKit Api, we build multiple regions. Each region resemble a certain change in the direction.
- Upon reaching each of these region we update the UI of the app with the updated direction.
- And broadcast the appropriate vocal instruction.



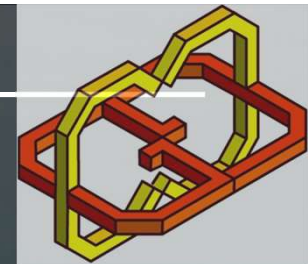


# Challenges



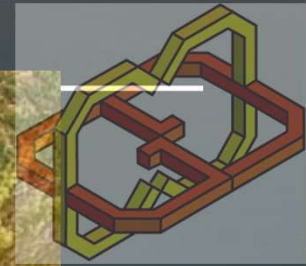
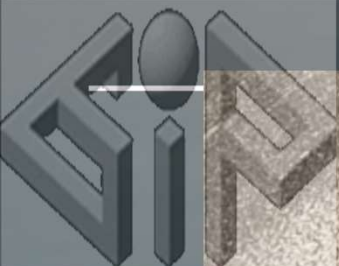
- How Do we Know That we reached the desired Defibrillator?

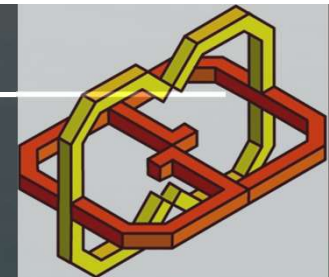




# Challenges

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



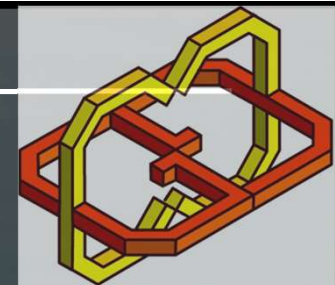


# Future Ideas

- 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.
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# Thank You



- Questions ?

Project Web Site:

<https://hsameer051.wixsite.com/definion>

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