INTRODUCTION:

Requests and events often depend on location, for example seeking a partner in the university library solving to solve a math task, to study to sociology test or to seek volunteers for helping elderly near the campus. There’s a need to conveniently filter opportunities by location.

PROJECT GOAL:

To supply a sharing social platform for Ariel University students/staff to connect better, to “give and take” help and post events, easily based on location.

CONSIDERATIONS  
THE SYSTEM NEEDS…

* requests to be browsed and stored real time
* location visualized
* to be kept an exclusive, safe place
* Users allowed to communicate
* Admin users managing the app

METHODOLOGY

Combining the power of a map service using Google Maps, with data storing using Firebase Real Time database, to create a system dedicated for Ariel University students and staff, where they can place events on a shared map

METHODS

* Java Android components
* HTML, CSS for Client UI
* Cloud Database
* Python server API
* Map service integration
* GPS sensor activation

MODULATION

Using MVC Pattern for Android developing and 3-Tier Architecture:

FUNCTIONALITIES

* THIS PLATORM PROVIDES…users to create requests and delete their own
* user registration and login with stored details
* a reliable, live and interactive map shared by users
* communication between the users of the application
* requests display by dedicated icons on map
* “Locate me” option on map
* notification of a new request or event according to the user's preferences, on a chosen radius of live or pre-determined location  
    
  ADMIN PRIVILLIAGES:
* block users and delete requests
* add an event with a special icon
* watch users list & users requests list  
    
  SECURITY & SAFETY:
* two-factor authentication
* Requires university email verification to register users
* Requires phone number verification by SMS code