INTRODUCTION:

The Give and Take Android application is a sharing social application that allows users the ability to upload requests and watch others’ requests based on location.

PROJECT GOAL:

To support a platform for users to “give and take” help and post events, easily based on location. For example, a partner for solving a math task, to study to sociology test or to seek volunteers for helping elderly near the campus

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- Google Maps, with database storing- Google Firebase Real Time database, to create a system dedicated for Ariel University’s students and staff

METHODS

* Java Android components
* 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 responsive 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/ pre-determined location  
    
  ADMIN PRIVILLIAGES:
* block users and delete requests
* add an event with a special icon
* watch users’ list & users’ requests’ list  
    
  SECURITY:
* two-factor authentication
* Requires university email verification to register users
* Requires phone number verification by SMS code
* Displays a notification on the phone about a new request or event according to the user's preferences.