## #YoNoMeCuelgo Israel Figueroa, Tahiri Fuentes, Nelson Alemar israel.figueroa1@upr.edu, tahiri.fuentes@upr.edu, nelson.alemar@upr.edu

#### 1. Introduction

UPRM students often obtain bad grades because they don't know to ask for help or because trying to find a tutor or study groups is difficult. For tutors, the only available source of information, in terms of finding them, is by luckily coming across a piece of paper posted on a wall or bulletin board throughout campus.

#YoNoMeCuelgo is a web and mobile applications that will facilitate the communication between students and tutors at the UPRM campus. Considering that there are students who prefer to form study groups with fellow classmates instead of going to the tutors, the application will also allow just that: Students will be able to create groups with other classmates in order to obtaining their contact information and establish a form of communication between themselves.

The app, as mentioned before, will be available for web and mobile because we want to be able to reach all possible users. Some students or tutors might not have access to a computer, rendering the web useless. Therefore, we decided to do both. This way, those users who prefer to use computers will have the same access to the application as those users who prefer to use mobile devices.

The application will be developed in HTML, CSS, JavaScript, Angular Material Design, mySQL, Java Play, and Firebase Cloud Messaging.

### 2. Client App Description

The client side of the web app will be developed using HTML, Angular Material Design, and Bootstrap. It should comply with the following capabilities:

- 1. Students and Tutors will be asked to sign up the first time they use the app
- 2. Tutors will be able to choose which courses they can help in and if they are available
- 3. Students will be able to join the courses they are currently taking
- 4. Once they join the course, Students are able to search for tutors and see their contact information
- 5. In the courses, Students will also be able to create and/or join groups for either studying, projects, or others
- 6. Within the groups, Students will be able to see the contact information of others in the group
- 7. Students will be able to pay the tutors (donation)

# 3. Server Side Description

For the authentication system, everybody can request to sign up to the application using an email address; then, after Firebase Cloud Messaging validates the email, we ensure that it belongs to an upr.edu domain. If it fulfills the mentioned requirement, Firebase Cloud Messaging will send an email verification link to the user email account and finish the authentication process.

Once logged in, if it is a new user, we ask if it is a student or a tutor and we store its settings, such as name, picture, groups (only for students), and phone number (only for tutors), on an SQL table.

The application will contain a Firebase Cloud Messaging table for user authentication and the following SQL database tables:

- 1. Users
- 2. Students
- 3. Tutors

- 4. Student Settings
- 5. Tutor Settings
- **6.** Undergrad Courses
- 7. Student Courses
- 8. Student Groups
- 9. Tutor Reviews
- 10. Tutor Courses

We will use Java Play for the model, while AngularJS will do the controller job. This process will consist of retrieving the SQL data as a JavaScript Object Notation(JSON) using AJAX requests.

#### 4. Division of Labor

Task		Member	Resources
Authentication System		Israel Figueroa Tahiri Fuentes Nelson Alemar	HTML, CSS, JavaScript, Firebase Cloud Messaging
Student Branch	Home Page	Tahiri Fuentes Israel Figueroa Nelson Alemar	HTML, CSS, JavaScript mySQL, Java Play
	Groups	Tahiri Fuentes	HTML, CSS, JavaScript, mySQL, Java Play
	Courses	Israel Figueroa	HTML, CSS, JavaScript, mySQL, Java Play
Tutors Branch		Nelson Alemar	HTML, CSS, JavaScript, mySQL, Java Play