CS683 Project Assignment   
Iteration 0: Project proposal  
WeFriends – A friend making App for college students  
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**Instructions**

* Please name your report as CS683\_<Last Name><First Name>\_<ProjectTitle>\_Iter0. It can be either a PDF or Word document.
* Please provide your feedback in the “Add comments” section when submitting your lab report. Thanks!

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# Overview

WeFriend is an App for students in college who want to make friends who’s studying in the same college. Because of the outbreak of the cov-19, most schools are holding online courses. It will be hard to make new friends in the new semester. WeFriend will help the user to find someone who study in the same college/major/class. Then the user can send a request to that person, and if that person accept the request, they can start chatting. The potential customer is college students who want to make friends in the new semester.

# Related Work

There are many Applications on market have similar functions, the most popular two are: Tinder [1] and Facebook/Facebook Messenger[2].

For Tinder, it has the function of match up and chat, but it’s more for dating purpose. Users use this App to find their dates. WeFriend is designed for college students to find friends in the same college that has same major/class/hobbies.

Facebook allows users to find group which shares similar interests, but it works more like a blog than a chatting App. WeFriend will emphasize more on chatting. Facebook Messenger is a very popular chatting App, but it lacks the functionality of searching people. WeFriend will be kind of the combination of those two.

# Proposed High level Requirements

* 1. Essential Features:

1. Creating account and login

The App should let users to create their own account and the user should be able to login to that account after it has been successfully created.

The users will be able to create an account with their email address and a confirm the creation after submitting the request. The users will be asked to fill basic information like name, gender, school year, school and college name...etc. The system will match up only other users from the same school.

1. Uploading pictures

The App should be able to allow the users to upload their pictures and set up their profile picture.

1. Searching up people

The App should be able to let users to search people in the same college with different major/current courses/hobbies...etc.

1. Matching up functions

When the user finds someone he/she interests on, he/she might send a request of being friend to that person. If that person accepts the request, they are matched up and will be able to chat.

1. Chatting function

The App should allow users to chat with their friends after they successfully match up.

* 1. Desirable Features

1. Sending images and emoji’s

The App is good to has sending images and emoji’s function. For any chat Apps or chat software, they all have the function of sending images and emoji’s.

1. Uploading videos

The App is good to has uploading videos to users’ profile function. The user can upload videos to their profile in order to better introduce themselves to other who may see his/her profile.

* 1. Optional Features

1. File sharing

This function is optional because it is not necessary in a chatting App, but it will be good if the App has it. The user should be able to send files via chat function of the App.

1. ID check

This function is optional but very good to have. As a fully functioning App, security is always an important thing to consider. This is an optional feature because it will not affect the demonstration of the App. If the time is plenty, this App might implement the ID check function, which will ask users to upload a picture of their school ID’s. The accounting creation will not be verified until the ID check is done.

# Android Components and Features To Be Used

* Database: The account registration and login functions will use an online database. All account information will be stored in an online database.
* Firebase: This component is for chatting feature of the App.
* File sharing: This is an optional function for the App. This component is used in the chatting function.
* Camera: When creating account, the user can choose to take a selfie directly with the App as the profile image.
* Some more features might be added after further study about Android development.

# Timeline

(Please provide a detailed plan to specify when the above requirements and android features will be implemented)

|  |  |  |
| --- | --- | --- |
| Iteration | Application Requirements(E/D/O) | Android Components and Features |
| 1 | User Interface | Activities, Animations |
| 2 | Login and account functions | SQL Database, Google Sign-In[3] |
| 3 | Search functions and query | SQL query |
| 4 | Match up and chatting function | Firebase |
| 5 | Push up notations, Debug and test | Media players(optional) |

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# References

1. "‎Tinder". App Store*. Retrieved 2020-05-19*.
2. "Facebook Messenger". *App Store*. Apple Inc. 1 April 2020. Retrieved 19 May 2020.
3. “Google Sign-in API”, website: <https://developers.google.com/identity/>