Project Work Friend Finder (PWFF)

Team Name: Project Friend Finder

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1. INTRODUCTION

a. Description of the Issue

Primary school students that enter Secondary schools all face difficulties, especially in adapting to a new learning environment. Students are mostly used to being guided and 'spoon-fed' in Primary School, with their teachers instructing them to do everything. However, having entered Secondary School, the students have a new subject called 'Project Work', where they will learn to find and form groups, and work cordially with each other to get the work done. Finding and making friends in a new environment is already difficult, so finding like-minded friends to be project mates will be even more difficult. This would be especially hard for the students who do not know anyone that comes from the same school that they can ask for guidance; so, they would struggle in finding like-minded members for their project groups.

b. Rationale of the Project

    i.   To allow new Secondary 1 students to find like-minded people with the same interests to form project groups. With an avenue to make the process simpler, this will allow students to integrate into Secondary School life and find and make new friends for their project work groups.

    ii.   If successfully completed and implemented, the process of getting the project moving and completed will be less tedious.

c. Focus of the Project

i. Target User

Secondary 1 students who need to find project members of the same interests.

ii. Solution

This project creates an application that allows students to create their own profiles and continually update that profile. They will indicate their strengths and weaknesses, skillsets and preferences, and allow their profiles to be viewed by other students on the application.

d. Scope of the Project

The application lists out the different users and shows their profile. Once a user finds a like-minded person, he can add the person as a project group member. Then, a request will be sent, with the option to accept or reject the request by the receiver. Should the receiver accept the request to join, both parties would be able to see each other's email addresses, and the requester can continue to source for other teammates until the group is formed.

2. LITERATURE REVIEW

There are many existing apps which also have similar functions and features. Two of the apps that we have found are We3 and Meetup.

a. Case Study 1: We3 App

i. Similarities

We3 is a friend-finding app for like-minded people. It asks the users to complete surveys about their personalities, lifestyles and beliefs etc. and matches them with 2 other people who share the same interests to create a tribe.

ii. Differences

After the computer successfully matches the user with 2 other people, the user has to wait for the other people to accept his or her invitation to join their tribe, which may take up to a few days, depending on how responsive the person is. Hence, we added the features below to improve on this:

A notification bell and notifications for the users to know when other people have invited them or when other people have accepted their requests so as to speed up the process.

b. Case Study 2: Meetup App

i. Similarities

Meetup aims to help bring together groups of people that have common interests. A user can form a group once they have signed up and wait for people to join their groups. Meetup strongly encourages groups to meet up face-to-face to foster closer relationships with each other. Similar Features that we use are:

- Both apps help form groups of people and foster closer relationships.

- Both apps require face-to-face meetings.

- sers on both apps do not have "followers" or other direct connections with each other like on other social media sites.

ii. Differences

Although this app is quite similar to ours, these are some of the differences:

- Meetup is generally targeted at the public while our app is targeted at school students.

- For Meetup, users have to pay a monthly fee to create, maintain and expand the group; however, our app is free to use.

- Meetup is for large groups, but our app keeps the group size to a maximum of 4 persons.\

3. METHODOLOGY

a. Survey

We conducted surveys by preparing questionnaires in Google forms and sent out the surveys to students in Hwa Chong Institution. The results gathered for each questions are shown below::

Do you consider yourself unsociable? (You are afraid to take the initiative to talk to others.)
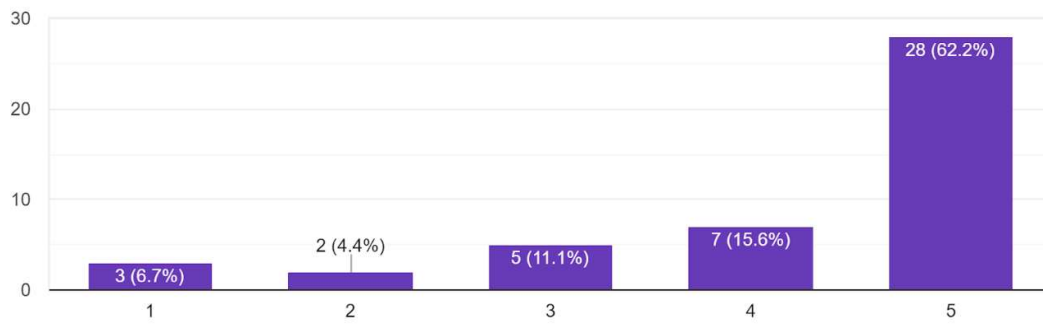45 responses

- I am unsociable.
- I am sociable.

31.1%

68.9%
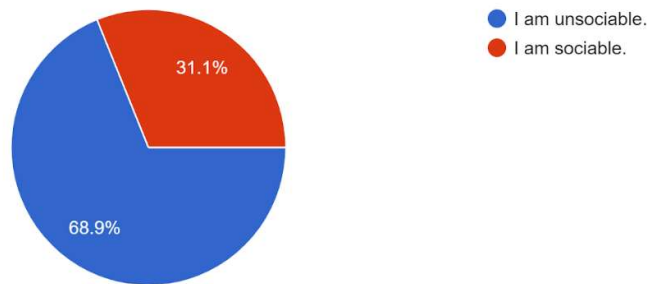
Did you have any difficulties finding partners for project work?
45 responses

- Yes
- A little
- No

15.6% 28.9%

55.6%
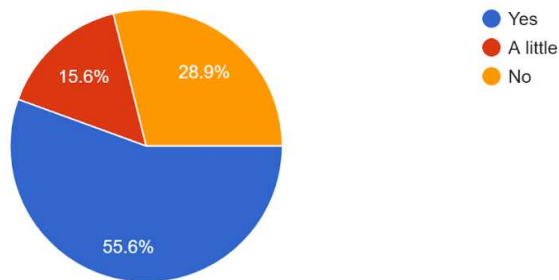
Do you think that it will it be beneficial to you?

45 responses

3 (6.7%)	2 (4.4%)	5 (11.1%)	7 (15.6%)	28 (62.2%)
1	2	3	4	5

What attributes do you want to see in Project Work Partners?

45 responses

Attribute	Value
Maturity	33 (73.3%)
Passion	24 (53.3%)
Respect	31 (68.9%)
Driven	32 (71.1%)
Reliability	36 (80%)
Responsibility	37 (82.2%)
Can be able to look at things fr…	1 (2.2%)
Koolness	1 (2.2%)
farnee	1 (2.2%)
good vibes	1 (2.2%)
Sociable	1 (2.2%)
Everything :)	1 (2.2%)
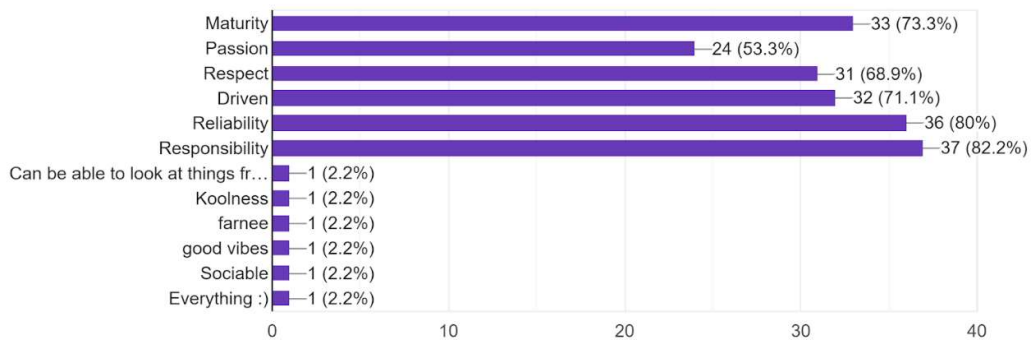
What is a suitable and fun name for our app? (Please do not be inappropriate in any way.)

45 responses
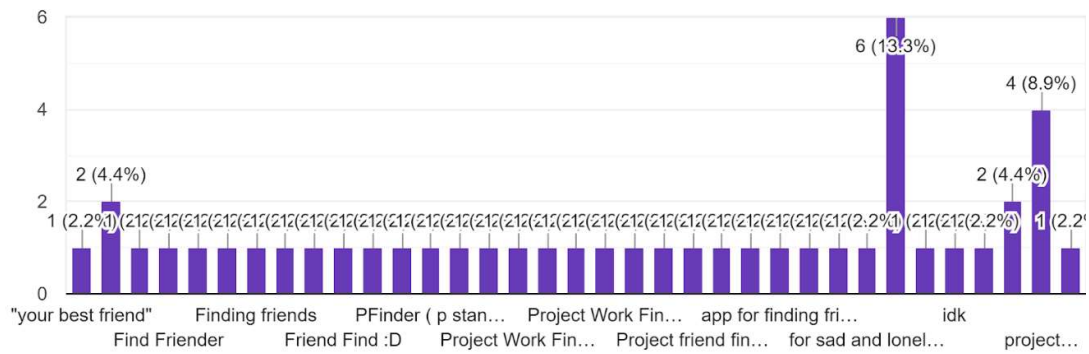
The survey results show that around 55% to 70% of the students have problems finding project work partners.

b. **Interviews**

Interviews were conducted with 10 interviewees using the questions in Appendix 1.

Most of the responses believe that the PWFF would be effective and useful. A minority does not, but, the majority outweighs the minority, and we mostly agree that the PWFF is effective.

c. **Software:**

We used Flutter, which uses Dart as its main language, to make our app and Android Studio as an IDE to support Flutter. We developed a software to list the students' profiles and once a like-minded student is found for the forming of a project group, a request can be sent by the student looking to form a group.

d. **Members Role and Job Distributions**

Ethan: Login and Registration page for the app, to determine who the user is.

Ziyue: Creating the individual user profiles and a list of the different users profiles.

Calvin: Gather survey results and interview people to see their views on our app and if they have any suggestions for improvement.

**Bolin**: Do the notifications and navigation bar.

e. **Project Timeline**

Date	Description
May 2021	Conduct surveys, Write out the flow for features of app, Design app pages
June 2021	Build, run and test app

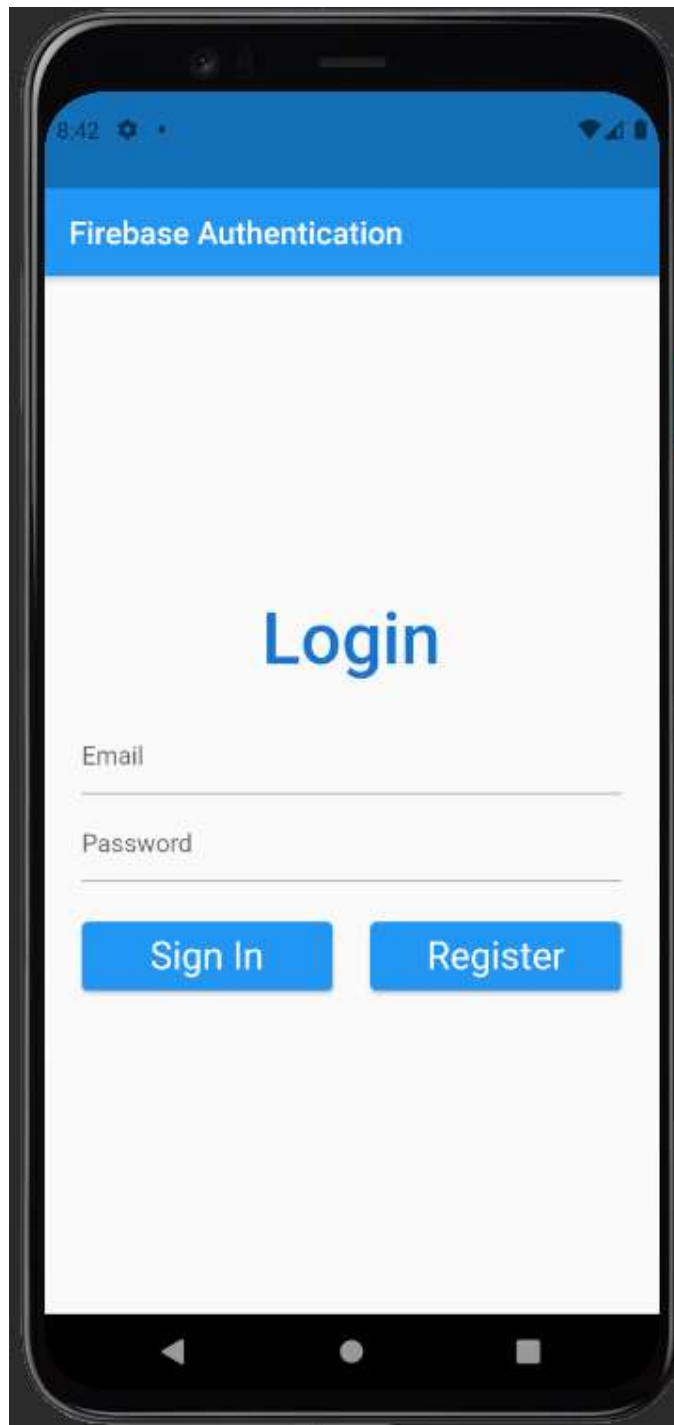| July to August 2021	Prepare written report and presentation slides
16 August 2021	Submit written report
18 August 2021	Final Evaluation

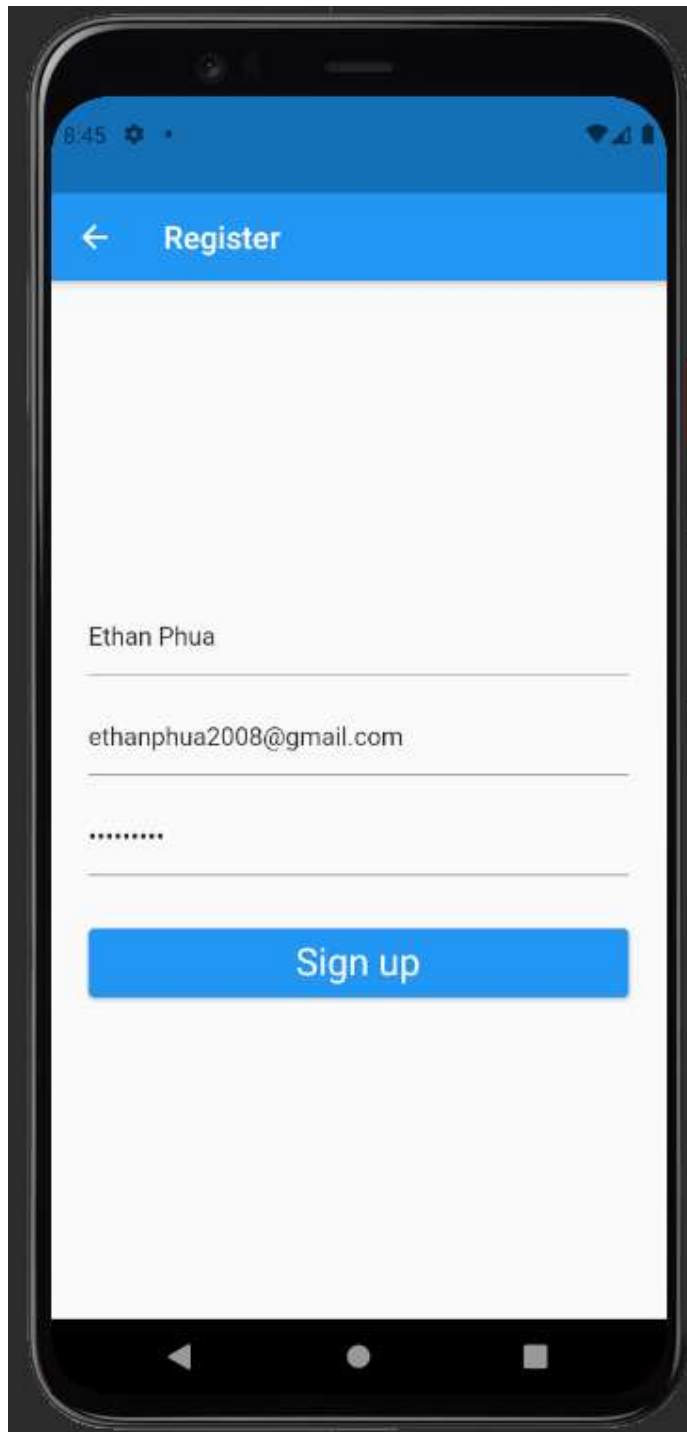## 4. OUTCOME, ANALYSIS & DISCUSSIONS
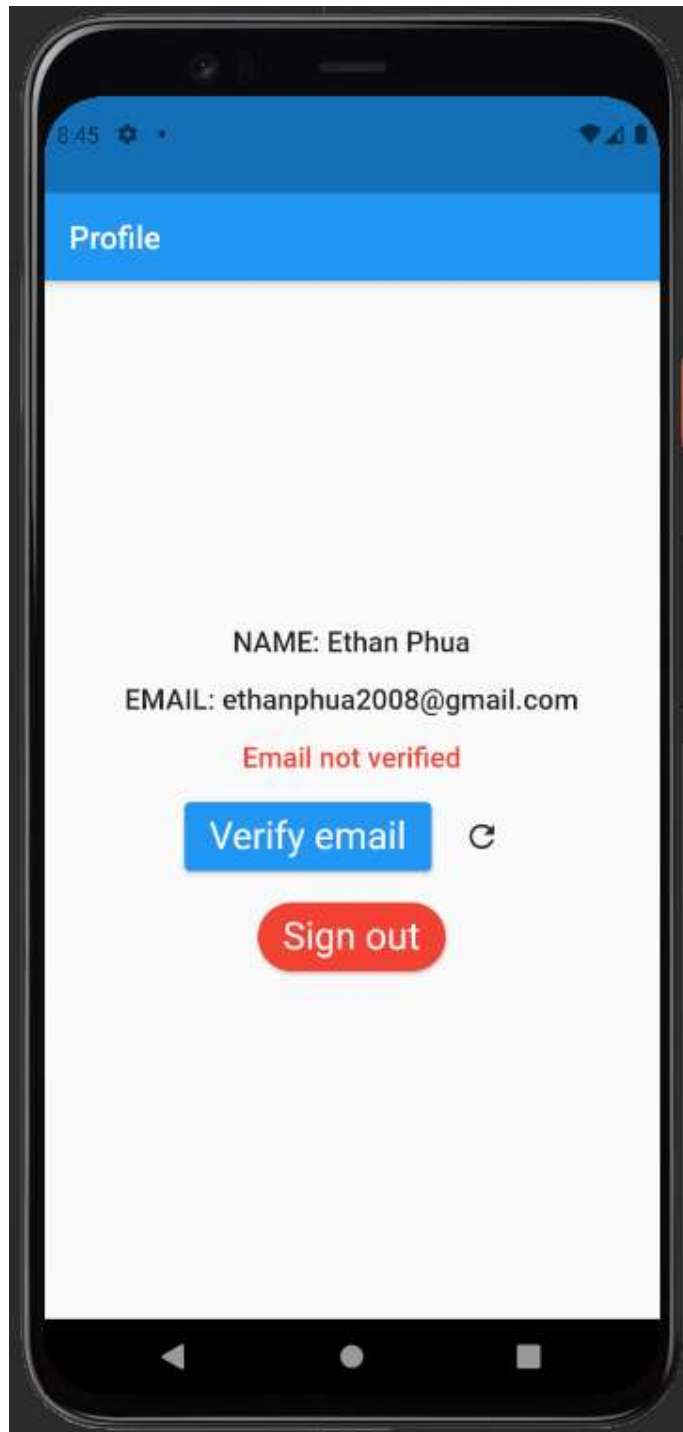
a. Flowchart of the different features of the App
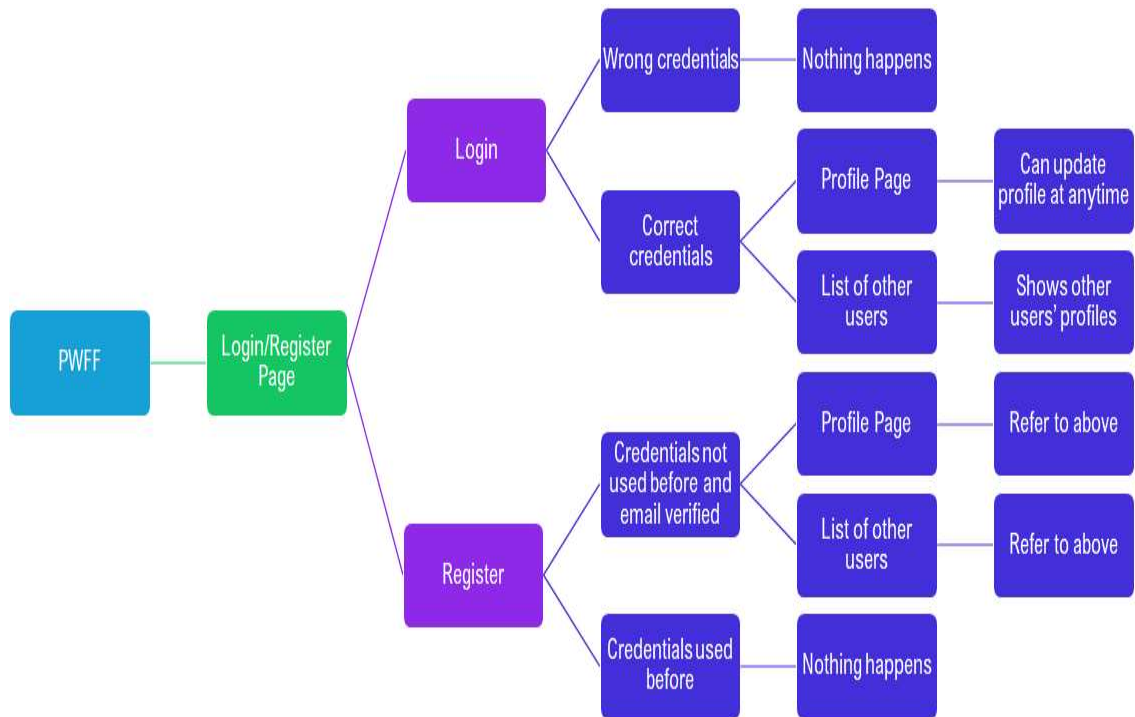
b. Features of the system (with screenshots and descriptions of its purpose)

- Login page:

Verify your email for project-300140697126 ➤ Inbox ×

noreply@pwff-c56e2.firebaseapp.com   20:46 (0 minutes ago)
to me ▾

Hello Ethan Phua,

Follow this link to verify your email address.

https://pwff-c56e2.firebaseapp.com/__/auth/action?mode=verifyEmail&oobCode=yMcSJZ7v2siGhdM8nTvjcbhtqgjCTVwCRVvQlbeL9yYAAAF7Tv_UDw&apiKey=AlzaSyBISNEPj1szkCDeRbS1tM4AzNaG8yPibrw&lang=en
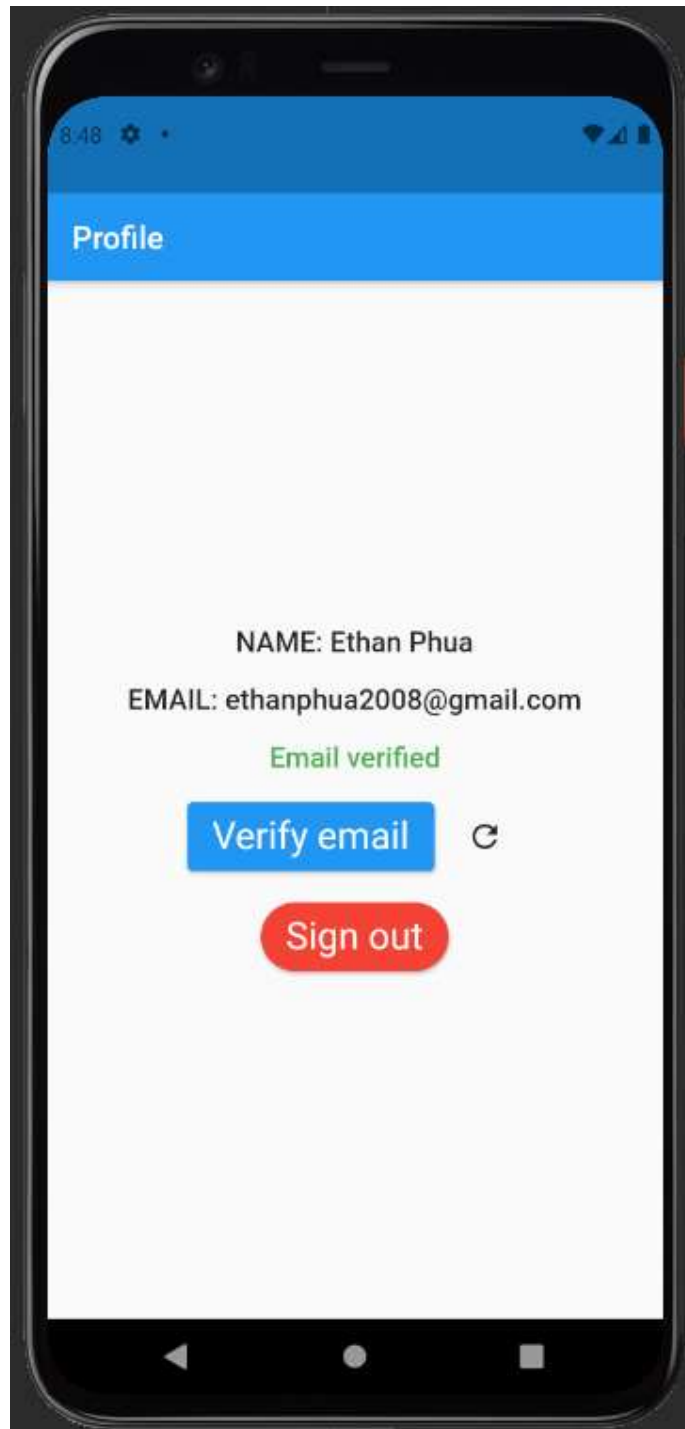
If you didn't ask to verify this address, you can ignore this email.

Thanks,

Your project-300140697126 team

↩ Reply   ➡ Forward

Login page features include:

- Register, Verify and Login functions.
- Allows user to login or register an account using email address
- Authenticating users using Firebase Authentication. Email will be sent to the email address provided for verification.

- Allow users to login using email address and password after successfully registration and verification.

    - User Profiles

    User Profile features include:

    - Lists the profiles of users using the app.
    - Once a like-minded student is found for the forming of a project group, a request will be sent by the student looking to form a group (or the Requester) to the identified student.

    - Notification bell

        - Notify users when there is invitation to form group

5. IMPLICATIONS AND RECOMMENDATIONS

a. Outcome of the App

- Help more Secondary One students find other Secondary 1s who are interested in the same hobbies to become friends.

- Decrease the number of people who are unable to find project members.

- Bring out the synergy within the group of like-minded students and allow the group to get things moving faster and efficiently, thereby raising the standard of the work done.

b. Areas for Improvement and Possible Further Extensions

1. Incorporate "Forgot password"
2. Instead of letting nothing happen, when the user types in the wrong credentials, incorporate an error message.
3. Expand categories for strength related to other skill sets in areas such as research, organisation, writing etc.
4. Add a filtering function to sort out all of the users.
5. Add a chat function.
6. Extend to other schools in Singapore

6. CONCLUSION

We felt that this project has been a fruitful learning experience. We had a fun time designing this app, and we also strengthened our bonds as not only groupmates, but as friends as well. Whenever one of us faced obstacles, we tried suggesting solutions for them to see if it would work. We also learnt how to work effectively as a team. We also understood that everyone has their own strengths and weaknesses. Everyone did their best and we are truly proud of ourselves for persisting and getting this project done.

This Project was relatively new to us, so the members who had to do the coding had to spend time downloading the various apps, and search up tutorials online on coding. Even so, we still could not figure it out after countless tries, making them extremely frustrated. This taught us determination and perseverance. We kept trying, encouraging each other along the way. Finally, after many failed attempts, we managed to overcome most of the problems and our hard work had paid off. We also had to learn to effectively manage our time. Our schedules were packed, and we rarely had time to discuss our progress and finish our assigned tasks. Thus, we strived to be proactive and cut down on our break times to finish our assigned tasks. We also woke up earlier in the morning, so that we could meet and asked one another if we had any difficulties.

7. Bibliography

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APPENDICES

Appendix 1 - Interview questions

Question: Imagine you are an antisocial person and have few friends. You do not dare to ask others to be your Project Work Groupmates. Would you think that a PWFF (Project Work Friend Finder) would be useful?

Response 1:
"It definitely would be useful; being antisocial doesn't necessarily mean being incapable of social interaction, it can stem from being insecure. PWFF ensures that we antisocial people are not going out of our comfort zones."
-Vanccio (An online participant)

Response 2:
"It would not be useful. Ultimately, being anti-social is an issue that has to be resolved by you and when you enter the workforce, you have to work with colleagues. There will not be any PWFF to help you, so you would be on your own. So, you would need to solve that yourself early on."
-Neo (An online participant)

Response 3:
"Yes. With little human interaction, I can find group mates who have common interests. Also, I don't have to worry about me being anti-social, as they are anti-social as well"
-Nicholas

Response 4:
"I feel that this Friend Finder can be quite helpful and effective as it can help reserved people like me to find good PW partners. Sign me up!"
-Youwei

Response 5:
"I feel that this Friend Finder can allow me to communicate with people who are anti-social as well. I believe that I can find people that have the same goal as me for PW. This will be very efficient as I would face difficulties asking others to be my PW partners. Most importantly, this will help me to get a reliable Project Work Group."
-Anonymous

Response 6:
"I have mixed feelings about this app. Since only anti-social kids would use the app, it would lead me to a group of anti-social kids. A group of anti-social kids may be unbalanced and our project may fail since nobody in the group would talk to each other. On the other hand, I feel that they would open up to each other more since they are all the same - antisocial! I will give this a try!"
-Ken

Response 7:
"Yeah. It will help users to find other individuals who have similar interests or hobbies and it may facilitate the forging of new friendships."
-Anonymous

Response 8:
"PWFF would be beneficial. It would aid people who have an antisocial personality and a timid ideology to shy away from approaching others and hope that others will take the initiative to help them instead. This would be a great solution to helping people to find reliable PW partners."
-Jori

Response 9:
"It won't be useful. I could team up with my friends or ask them to ask others to team up with me. Some people also might not want to work with each other. The solution is to get social."
-Yu Heng

Response 10:
"Not really. Even if you are anti-social, if you have the talent and skill, other people will still try to include you in their group."
-Yeu Kit

       I conclude that most of the responses believe that the PWFF would be effective and useful. However, a minority does not, and they have reasonable reasons as well. In the end, though, the majority outweigh the minority, and we mostly agree that the PWFF is effective.