PACE UNIVERSITY

Computer Science Project I
CS 691
Team Name: Technocrats
Team 1

AGENDA

01 Measuring our progress towards our deadlines, coordinating our activities, addressing any difficulties, and resolving on the next steps as they apply to improvement are the highest priorities of this session.

02 Trying to keep track on significant dates. Add activities to a group calendar. Mention regarding timely submission.

03 Analyse and research all the components that our project would require from the client's point of view.

04 For something like the project to be effective, it needs to have interaction, attendance, cooperation, teamwork, as well as attention from each team member.

TEAM MEMBER ROLES

Sai Sindhu
Developer

Anil Babu
Developer

AniviReddy
Developer

TEAM MEMBER ROLES

Sahith

Quality

Analyst/Tester

NIKHIL

Scrum master &

QUALITY ANALYST

Bharadwaja

Developer

IMPROVEMENTS MADE FROM PROFESSOR'S FEEDBACK

Professor provided inputs after the delivery of Deliverable 2, recommending us to improve its conceptual architecture diagram. The following slides highlight the changes we made to our sprint plan by taking professor feedback into consideration and also suggested to use the task in our product backlogs its issue type and also create tables in slides instead of using screenshots.

PROBLEM STATEMENT

Over the last two years, Social Distancing has become increasingly prevalent as a part of the Covid-19 pandemic outbreak. According to international health authorities, interpersonal communication is the principal primary contributor to the pandemic's spread. To avoid the spreading, it is therefore necessary to maintain the necessary spacing with some effort. In addition, developing an
automated Contact Detection step that secures privacy would be beneficial to prevent further infection. Today's smartphones are not just for communication; they can also detect numerous characteristics of their environment (movement, proximity, orientation, etc.). In addition, now a days practically everyone utilizes a smartphone. Reflect on these facts The issue is resolved by a mobile app that can notify users when it detects that a person is approaching from a closer distance than is advised.

PROJECT DESCRIPTION

Our product is focused on COVID-19 safety Protocols. It is designed to ensure that people are adhering to social distancing guidelines. Ultimately, it can help make people and the community safer from the virus . This is a tracking app that uses a smartphone's GPS and Bluetooth features to track COVID-19 case. Bluetooth technology enables users to assess their risk of being exposed to the COVID-19 virus if they have been within six feet of a confirmed case. It is also able to detect specific locations that are deemed 'infected area's through location data analysis, and crowd sourcing. this data so it is easily accessible for decision making purpose. The idea behind the app was to make people aware of their risk, and give them the tools to protect themselves from contracting the virus. We developed a product that would be a cost-effective measure for protecting profits and human life. The idea for our product is based on the idea of a "control" to prevent COVID-19 from spreading. It would be an app that uses Bluetooth and GPS capabilities to track COVID-19 cases and would also provide alerts in case it detects COVID-19 in an area. This product was designed to be inexpensive, effective, providing information necessary for the public's awareness of where the virus is being spread. We designed this app as incentive to prevent someone from spreading the virus as they are able to see how close they are getting near people who have contacted it.

PERSONAS

PERSONA 1

Profile

Name: Christiana
Age: 24
Location: New York, NY
Job: Student
Family: Lives with her boyfriend

About

Christiana is a student who is pursuing her masters in a public university.

Goals

In the process of going to the college she will travel a lot and meet lot of random people who might got affected by covid virus.so ,she want to be careful for which she need to protect herself form covid and covid patients she use our app which was built for covid detection of covid effected persons nearby distances of 6ft with the help of location and Bluetooth tools .she gets notification that she was in danger zone that someone near to her is effected by covid in 6ft distance.so that she can take precautions. Like maintain proper social distances.

PERSONA 2

Profile

Name: Maddy
Age: 35
Location: New Jersey, NJ
Job: Senior nurse
Salary: $74000/year
Family: Husband

About

Maddy is a senior nurse she will makes regular bp and temperature of the patients.

Goals

Maddy, a nurse in a public hospital, is often overwhelmed with multiple patients. It would be immensely useful if she had a mobile application that could detect who is within 6ft of her location. This would make her job much easier and safer. Both scenarios will require Maddy to do a set of certain tasks for the app to perform its intended action. For the scenario, she must create an account, install and activate her mobile application, use the app at work for it to detect where she is within 6ft of her current location. Maddy must store her account information, so the app can detect where she is within 6ft of her current location.

PERSONA 3

Profile

Name: Sourabh
Age: 44
Location: Alabama, Ga
Job: Chief Security Officer
Salary: $112000/year
Family: Two children and wife

About

Sourabh was a chief security officer at a shopping complex who checks every customer at the entrances of the mall.

Goals

Sourabh goal is to check each and everything of every single customer whether they are healthy or got effected by the covid. Through our app he gets the notification when any persons effected by the covid is near to him in 6 ft distances. so then he stops them and take the measures to get them the prescribed quarantine so that the other people in the mall doesn't get effected.

MINIMAL VIABLE PRODUCT (MVP)

MVP

MINIMAL VIABLE PRODUCT (MVP)

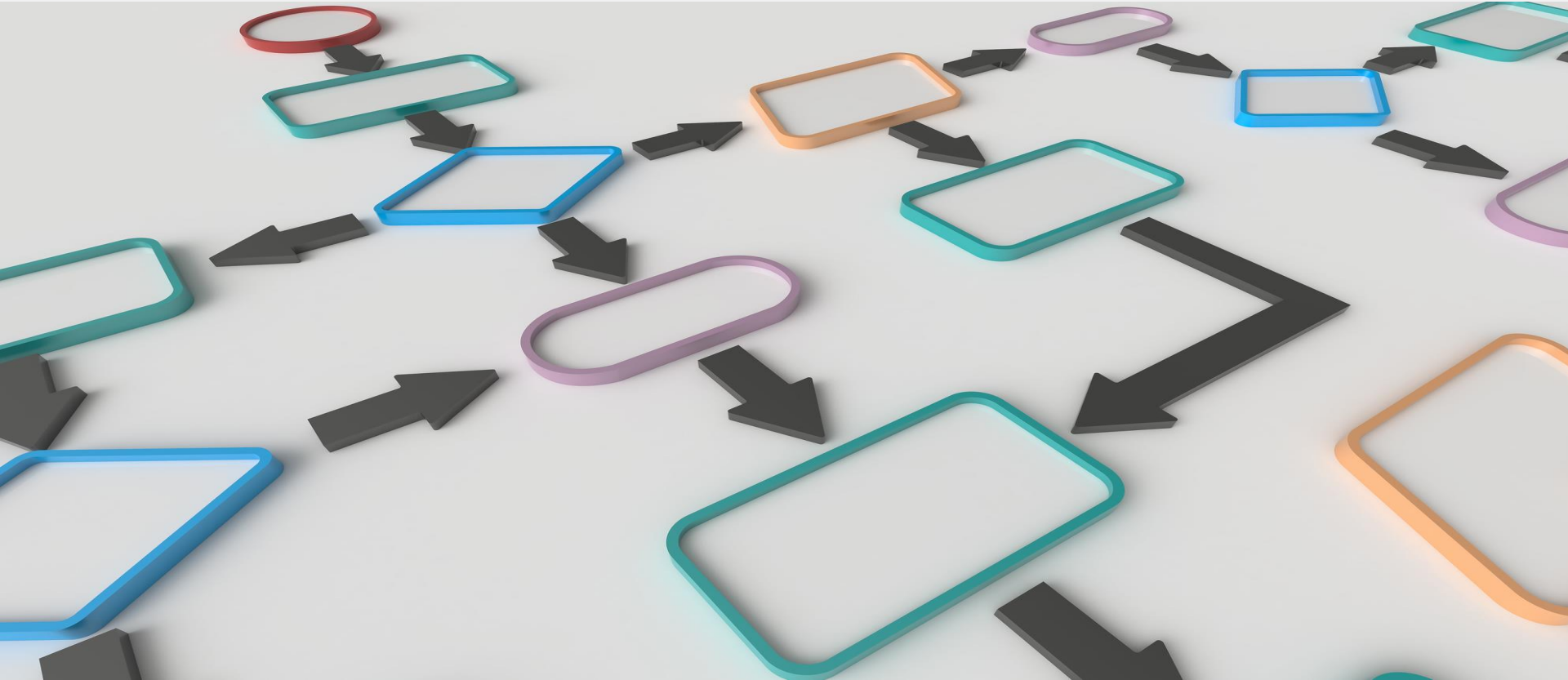
The Following are the Features we are covering in our MVP

- **Login Page**
- **Registration Page**
- **Home Page**
- **Play and Pause buttons to start the Scanning of surrounding areas**
- **Alerts to the users**
- **Users previous Covid19 history**

TECHNOLOGIES

PACE UNIVERSITY

ARCHITECTURE DIAGRAM



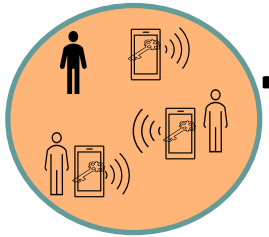
CONCEPTUAL ARCHITECTURE DIAGRAM

PACE UNIVERSITY

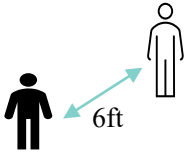
How does it works?

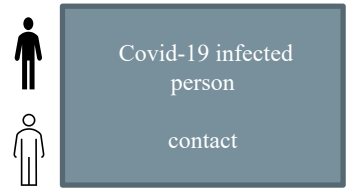
1 User installs and start the armor app

2 Exchange anonymous Bluetooth beacons that contains a unique key



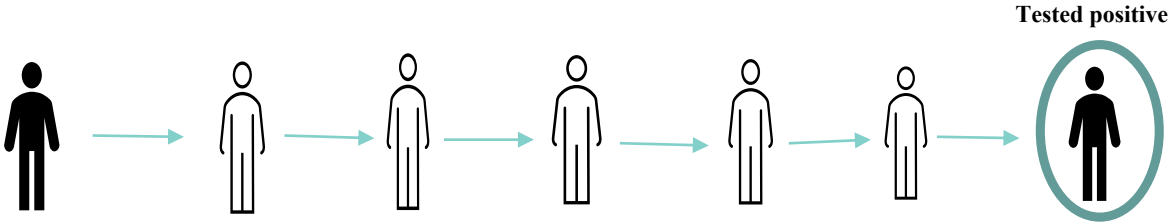
3 Proximity is classified Using Bluetooth RSSI values





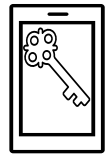
Users are alerted! If recommended distance is not maintained

4 Each user save local anonymous Data about people whom they encountered.



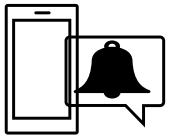
5 infected users will update their status as positive for covid-19 in the app

Anonymous keys of infected users are uploaded to a centralized cloud database

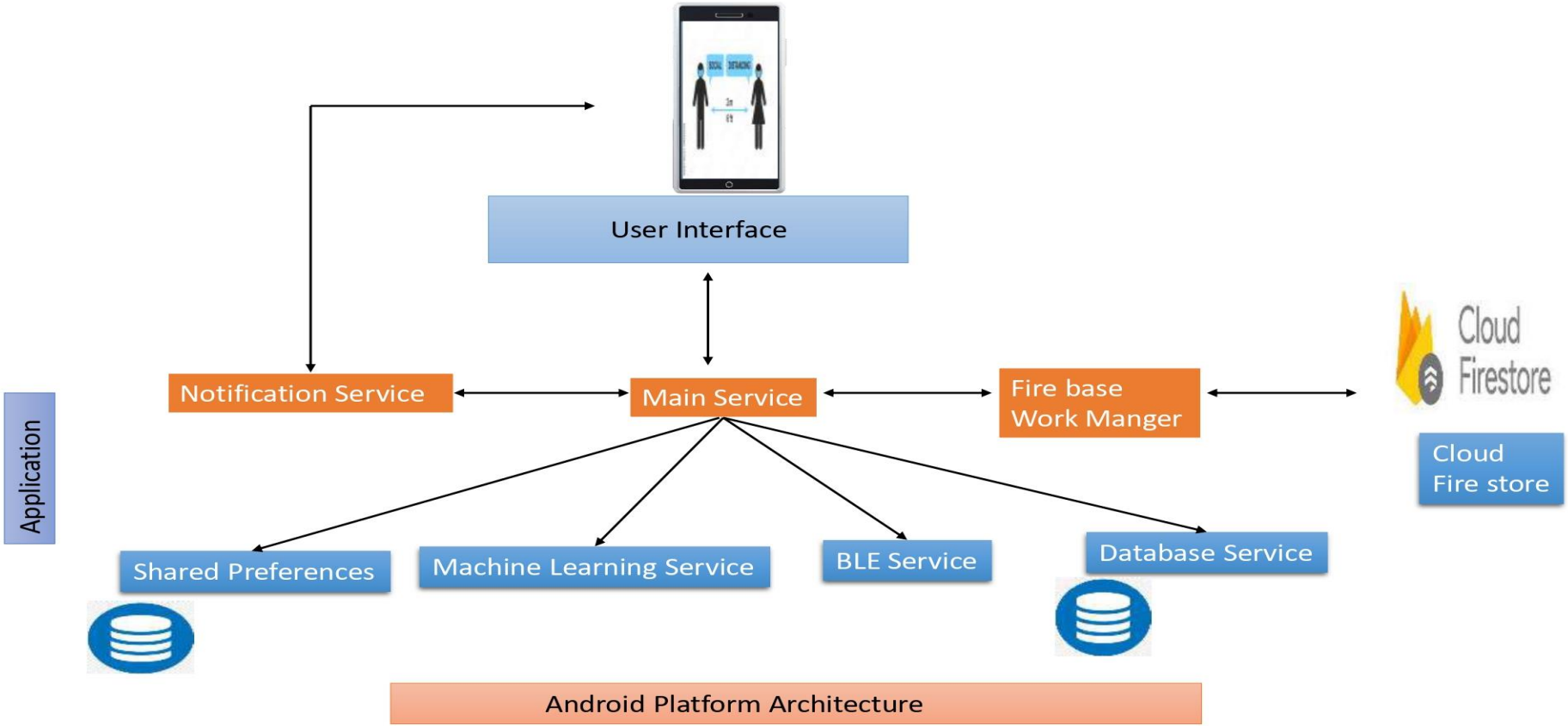


6 The app regularly downloads the database of infected users and crosscheck for matching keys in the local database

7 If there is a matching result in the local database, user will receive a notification



SEQUENCE ARCHITECTURE DIAGRAM



PRODUCT BACKLOG

PRODUCT BACKLOG

PACE UNIVERSITY

ID	Summary	Status
Cov-1	To gather all the requirements for the project.	Done
Cov-2	As a team we should have team work agreement with all rules and regulations.	Done
Cov-3	As a team we should divide roles and responsibilities among ourselves to develop the project.	Done
Cov-4	As a team we should develop required technical and functional knowledge required to complete the project.	Done
Cov-5	As a team we should plan the product requirements and development plan for the project.	Done
Cov-6	As a user I should have a Apk file which can be installed in mobile with basic functionalities.	Done
Cov-7	As a user I should be able to see the welcome page for Application.	Done
Cov-8	As a user I should be able to see the Knowledge page after welcome page , which has information of how application works.	Done
Cov-9	As a user I should be able to give all the required permissions to application to access the required data in mobile.	Done
Cov-10	As a user I should be able to reset the permissions for application anytime.	Done

PRODUCT BACKLOG

PACE UNIVERSITY

ID	Summary	Status
Cov-11	As a user I should be able to see the Registration page for the application.	Done
Cov-12	As a user I should be able to the user name and get registered in the application.	Done
Cov-13	As a user I should be able to get pop up notification to turn on Bluetooth if application is being used.	Done
Cov-14	As a user I should be able to get pop up notification, asking required permissions for the application	Done
Cov-15	As a registered user I should be able to see the home page, once I login in to the application.	Done
Cov-16	As a registered user I want to logout from the application so that I can log in again whenever I want.	Done
Cov-17	As a user, I want to create my account to the application so that I can Keep my account private and Signup Using Name, Email and Password.	Done
Cov-18	As a user, I want to login using my email id as my user id so that I can access my account	Done
Cov-19	As a user, I want to navigate between pages so that I can quickly access the features I need	Done
Cov-20	As a user, I want to access the feature in home page	Done

PRODUCT BACKLOG

ID	Summary	Status
Cov-21	As a registered user I want to see the play the button in the Bluetooth screen page so that I can start searching for infected users near my location.	To be Done
Cov-22	As a registered user I want to see the pause button in the Bluetooth screen page so that I can stop scanning for infected users in the application.	To be Done
Cov-23	As a registered user I want to see the option for changing the user's name in settings page so that I can change the user's name.	To be Done
Cov-24	As a registered user I want to see the option for marking as covid 19 infected person in settings page so that I can update my status whenever I diagnosed with covid.	To be Done
Cov-25	As a registered user I want to see the option for deleting my account in settings page so that I can delete my account.	To be Done

ACCEPTANCE CRITERIA TABLE

ID	Scenario	Summary	Place
Cov-16	User opens application after installation	Given I'm a user of the application When I click on the settings icon in the application Then I should be able to see the logout option And When I click on the logout, I should be able to logout from the application.	Logout
Cov-17	User want to create account	Given I’m in a role of the user, trying to create my account to the application When I open the app Then the app asks me to sign up or login And I click on the signup, I should able to create my account to the application using Name, Email and Password.	Sign Up

ACCEPTANCE CRITERIA TABLE(continued)

PACE UNIVERSITY

ID	Scenario	Summary	Place
Cov-18	As a registered user I should be able to login using Email id as user id	Given I'm the user of the application When I open the app, I should be able to see the apps login page. Then I should be able to enter my registered email id in the user id or email field and password in password field. And after entering the details I should be able to login or sign in. If my credentials are valid, I should be able to access my account If my credentials are invalid, I should see an error indicating that the credentials are incorrect. And then I should be able to reset my password if I forget it or need to update it.	Login
Cov-19	As a user I want to be able to easily navigate between different pages so that I can quickly access the features I need	Given I'm the user of the application When I open the app, I want the navigation menu to be clearly labelled and organised so that I can easily find the pages I need to use Then I want the navigation menu to be optimized for smaller screens so that I can easily access the pages I need on my phone or tablet And as a user I want the navigation menu to include a search bar so that I can quickly find the pages I need by keyword search.	Home page

ACCEPTANCE CRITERIA TABLE(continued)

ID	Scenario	Summary	Place
Cov-20	As a user I want to be able to access the features in home page	Given I'm the user of the application When I open the app, I should be able to access the features in the home page Then I open the app home page should be intuitive and easy to navigate And as a mobile user I want the home page to be responsive and optimized for my device	Home Page

TEST CASES

ID	Unit of Test	Scenario	Test Data	Steps to be Expected	Expected Result
Cov-16	Logout	Successful Logout	Email –example@example.com, Password: test123	Homepage ->Logout	When the user click on the settings icon in the application user should be able to see the logout option in the menu
Cov-16	Logout	Successful Logout	Email – email@email.com Password – Email@99	Homepage ->Logout	When the user click on the logout option user should be able to logout from the application without any error.
Cov-17	Sign Up	Sign Up should be Successful	Name – Sai Email - example@example.com, Password: test123	Homepage ->Sign Up	Check result on Entering valid Name, Email and Password
Cov-17	Sign Up	It should show an error as “Email is already in use”	Name – Anil Email – email@email.com Password – Email@99	Homepage ->Sign Up	Check result email entering already used
Cov-17	Sign Up	It should show an error “Enter the password with given parameters”	Name – Anivi Email – password@mail.com Password – Password@14	Homepage ->Sign Up	Check the response did the password is containing all the parameters

TEST CASES(continued)

ID	Unit of Test	Scenario	Test Data	Steps to be Expected	Expected Result
Cov-18	Login	Successful Login	Email – example@example.com, Password – test123	Homepage -> Login	User should be successfully logged in and redirected to the relevant page or dashboard.
Cov-18	Login	Invalid Email ID	invalid email, Password: test123	Homepage -> Login	User should see an error message indicating that the email ID is invalid and should be prompted to enter a valid email ID.
Cov-18	Login	Invalid Password	example@example.com, Password – invalid password	Homepage -> Login	User should see an error message indicating that the password is incorrect and should be prompted to enter the correct password.
Cov-18	Login	Forgot Password	Click on "Forgot Password" link	Homepage -> Login	User should be redirected to the password reset page where they can enter their registered email ID to reset their password.
Cov-18	Login	Account Lockout	Enter incorrect password multiple times	Homepage -> Login	User's account should be temporarily locked after a certain number of failed logins attempts to protect against brute force attacks.
Cov-18	Login	Logout	Click on "Logout" or "Sign Out" option	Homepage -> Login	User should be successfully logged out of their account and redirected to the login page.

TEST CASES(continued)

ID	Unit of Test	Scenario	Test Data	Steps to be Expected	Expected Result
Cov-19	Home page	Open the home page	Verify that all features listed in the home page are visible and displayed correctly.	Login-> Home page	All features listed in the home page should be visible and displayed correctly.
Cov-19	Home page	Click on each feature listed in the home page.	Verify that each feature is accessible and functional.	Login->Home page	All features listed in the home page should be accessible and functional.
Cov-19	Home page	Open the home page on a mobile device.	Verify that the home page is responsive and optimized for the mobile device	Login->Home page	The home page should be responsive and optimized for the mobile device.
Cov-19	Home Page	Verify that the navigation menu is visible and clearly labelled on every page of the application.	Open the application and navigate to a page. Verify that the navigation menu is visible. Verify that the labels of the menu items are clear and descriptive.	Login-> Home Page	The navigation menu is visible and clearly labelled.

TEST CASES(continued)

ID	Unit of Test	Scenario	Test Data	Steps to be Expected	Expected Result
Cov-20	Home Page	Verify that the navigation menu is organized and structured logically	Open the application and navigate to the home page. Verify that the navigation menu items are organized in a logical manner. Verify that related pages are grouped together.	Login-> Home Page	The navigation menu is organized and structured logically.
Cov-20	Home Page	Verify that the navigation menu is optimized for smaller screens.	Open the application on a mobile device. Verify that the navigation menu is collapsed and can be expanded with a tap. Verify that the menu items are clearly visible and easy to tap on.	Login-> Home Page	The navigation menu is optimized for smaller screens.
Cov-20	Home Page	Verify that the navigation menu includes a search bar.	Open the application and navigate to the home page. Verify that the navigation menu includes a search bar. Type a search term into the search bar.	Login-> Home Page	The navigation menu includes a search bar and search results are relevant.

PACE UNIVERSITY

SPRINT BACKLOG

SPRINT 3 BACKLOG

SPRINT 3

ID	Summary	Status	Place
Cov-16	As a registered user I want to logout from the application so that I can log in again whenever I want.	To be done	Logout
Cov-17	As a user, I want to create my account to the application so that I can Keep my account private and Signup Using Name, Email and Password.	To be done	Sign Up
Cov-18	As a user, I want to login using my email id as my user id so that I can access my account	To be done	Login
Cov-19	As a user, I want to navigate between pages so that I can quickly access the features I need	To be done	Home Page
Cov-20	As a user, I want to access the feature in home page	To be done	Home Page

SPRINT 4 BACKLOG

PACE UNIVERSITY

SPRINT 4

ID	Summary	Status	Place
Cov-21	As a registered user I want to see the play the button in the Bluetooth screen page so that I can start searching for infected users near my location.	To be Done	Home page
Cov-22	As a registered user I want to see the pause button in the Bluetooth screen page so that I can stop scanning for infected users in the application.	To be Done	Home page
Cov-23	As a registered user I want to see the option for changing the user's name in settings page so that I can change the user's name.	To be Done	Home page
Cov-24	As a registered user I want to see the option for marking as covid 19 infected person in settings page so that I can update my status whenever I diagnosed with covid.	To be Done	Home page
Cov-25	As a registered user I want to see the option for deleting my account in settings page so that I can delete my account.	To be Done	Home Page

Stories Completed in Sprint 3

ID	Summary	Status	Place
Cov-16	As a registered user I want to logout from the application so that I can log in again whenever I want.	Done	Logout
Cov-17	As a user, I want to create my account to the application so that I can Keep my account private and Signup Using Name, Email and Password.	Done	Sign Up
Cov-18	As a user, I want to login using my email id as my user id so that I can access my account	Done	Login
Cov-19	As a user, I want to navigate between pages so that I can quickly access the features I need	Done	Home page
Cov-20	As a user, I want to access the feature in home page	Done	Home Page

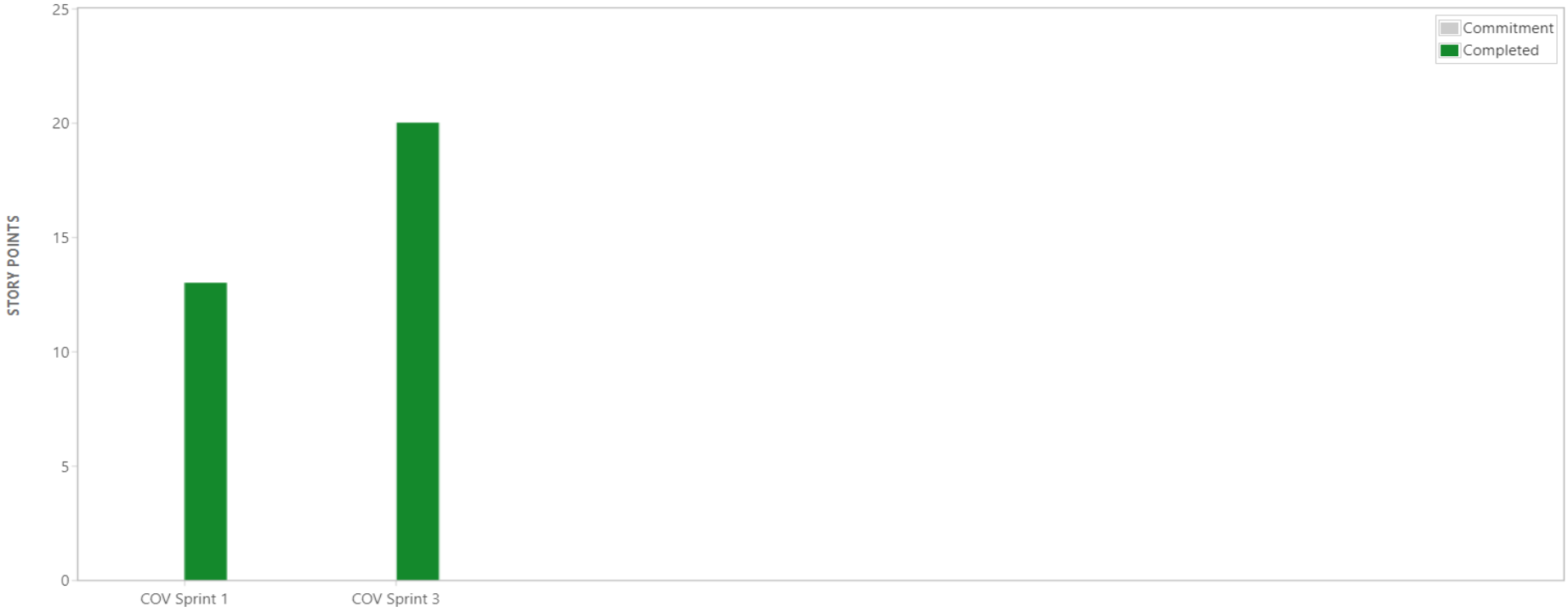
METRICS

METRICS VELOCITY REPORT

Projects / Covid19 Safety Protocol Tracker1 / COV board / Reports

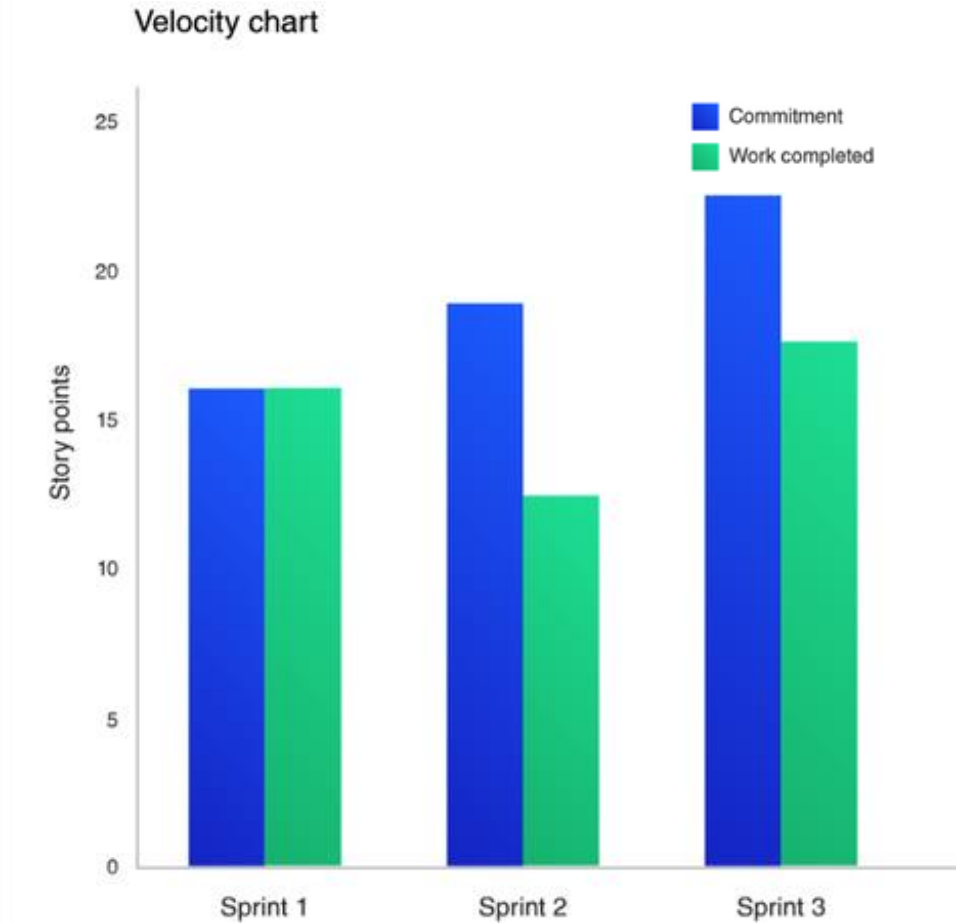
Velocity Chart

How to read this chart



METRICS

TEAM MEMBERS VELOCITY REPORT

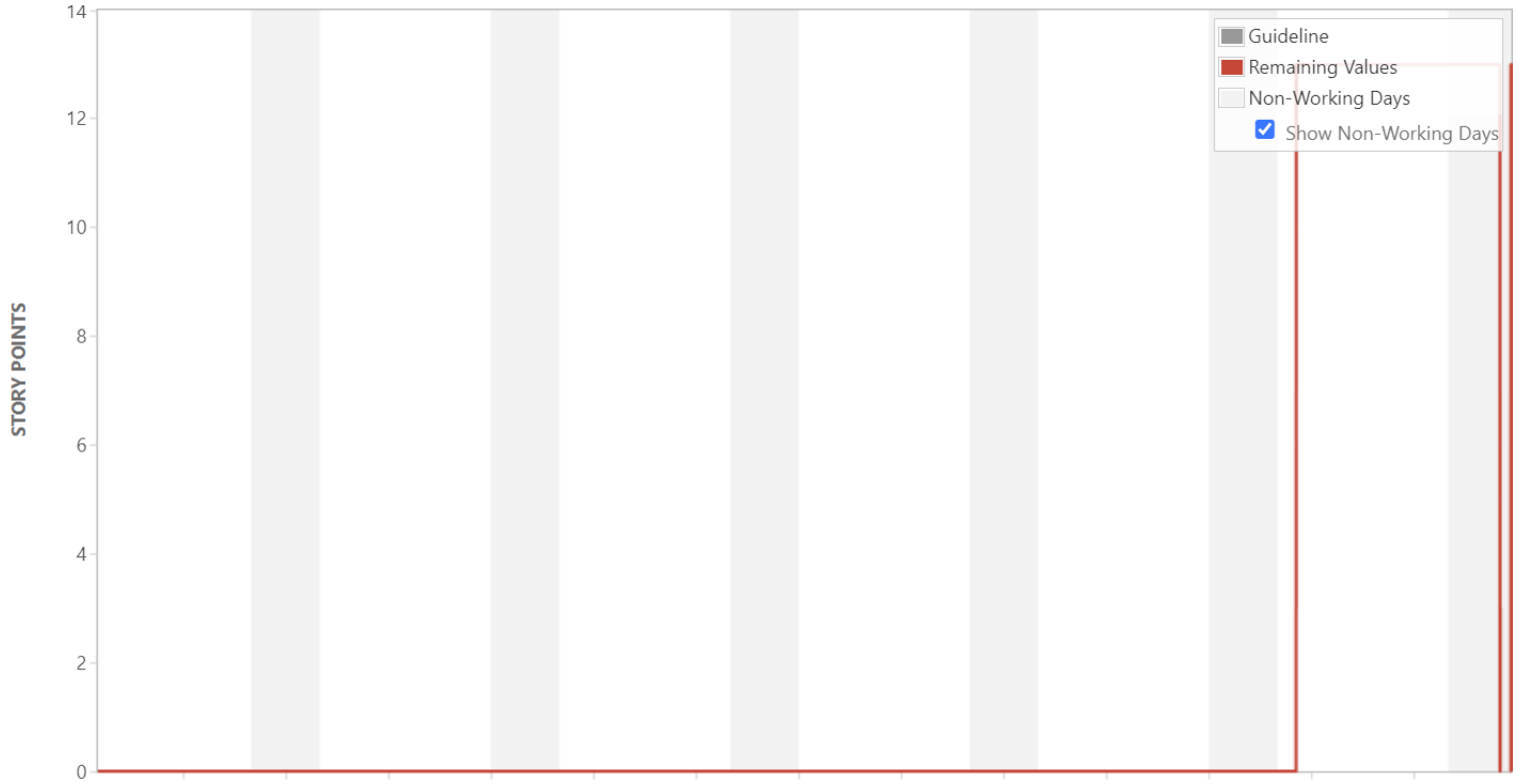


METRICS

SPRINT BURNDOWN CHART

Projects / Covid19 Safety Protocol Tracker1 / COV board / Reports

Burndown Chart



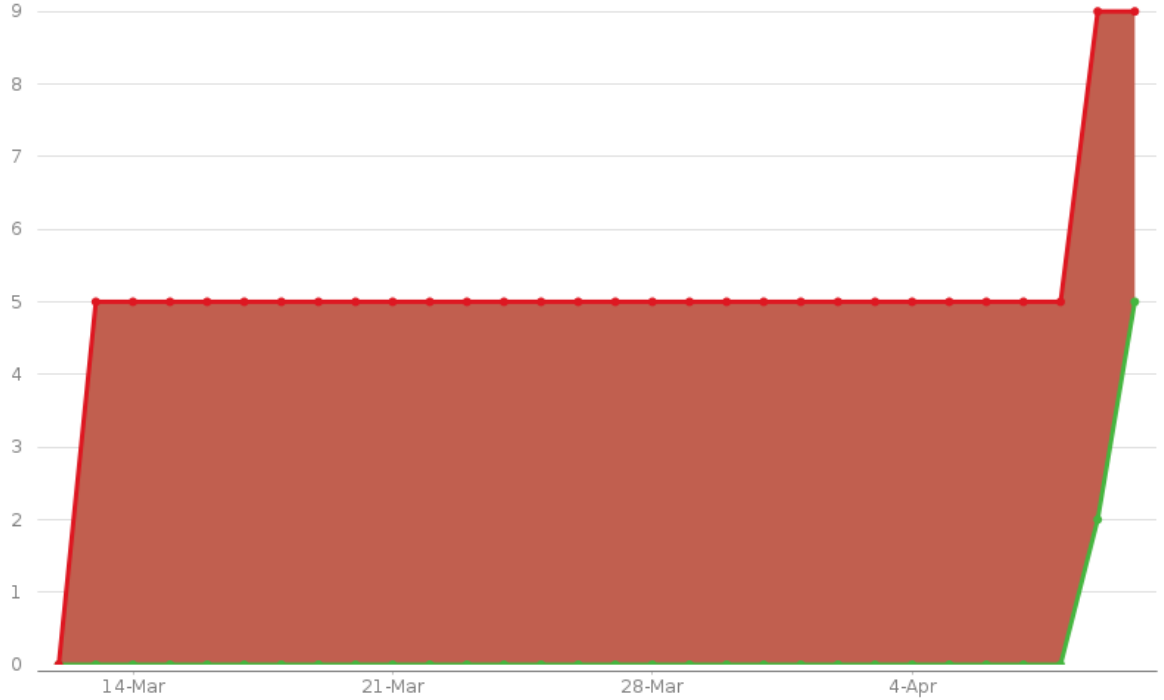
METRICS

COMPLELETED vs COMMITTED RATIO

Project: Covid19 Safety Protocol Tracker1

Chart

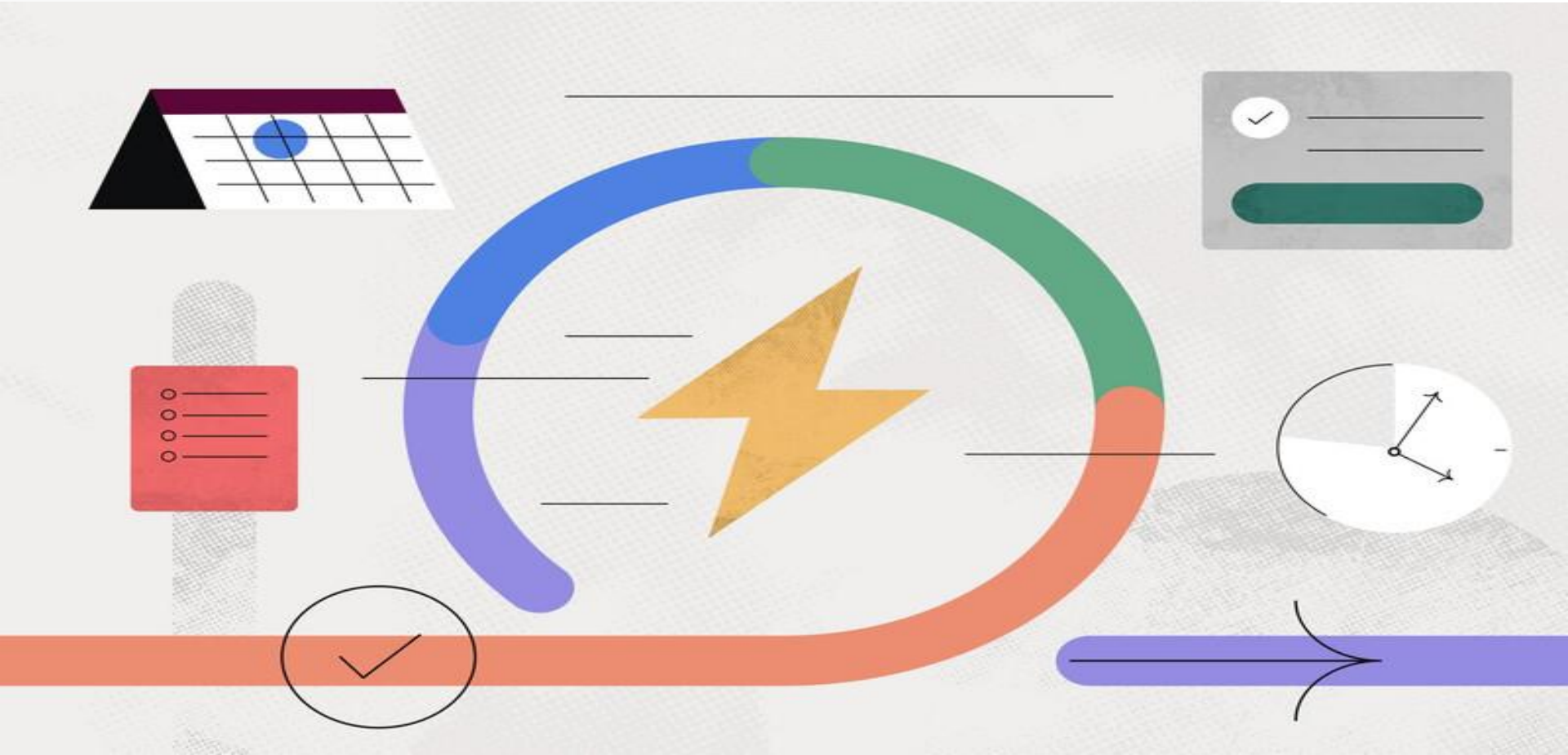
This chart shows the number of issues **created** vs the number of issues **resolved** in the last **30** days.



RETROSPECTIVE

What went well	As we are using Microsoft Teams for daily communication and for team meetings, Communication went in a well organized way.
What needs improvement	Team members should not miss the weekly meetings also they should make sure to give updates to their teammates about the work they do.
Next Steps	In the next sprint we should make sure that everyone of the team should be responsible to complete the work assigned to them.

SPRINT 4

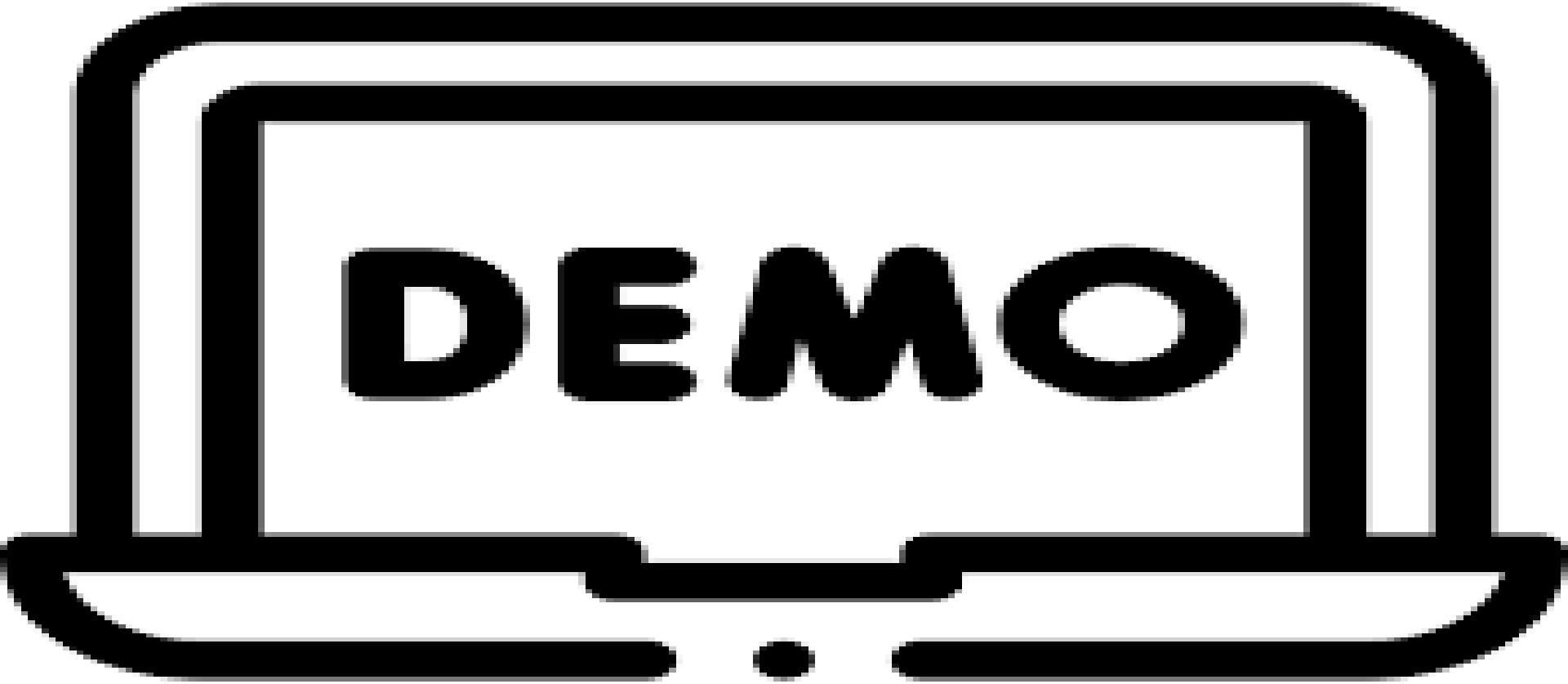


Stories planned for SPRINT 4

PACE UNIVERSITY

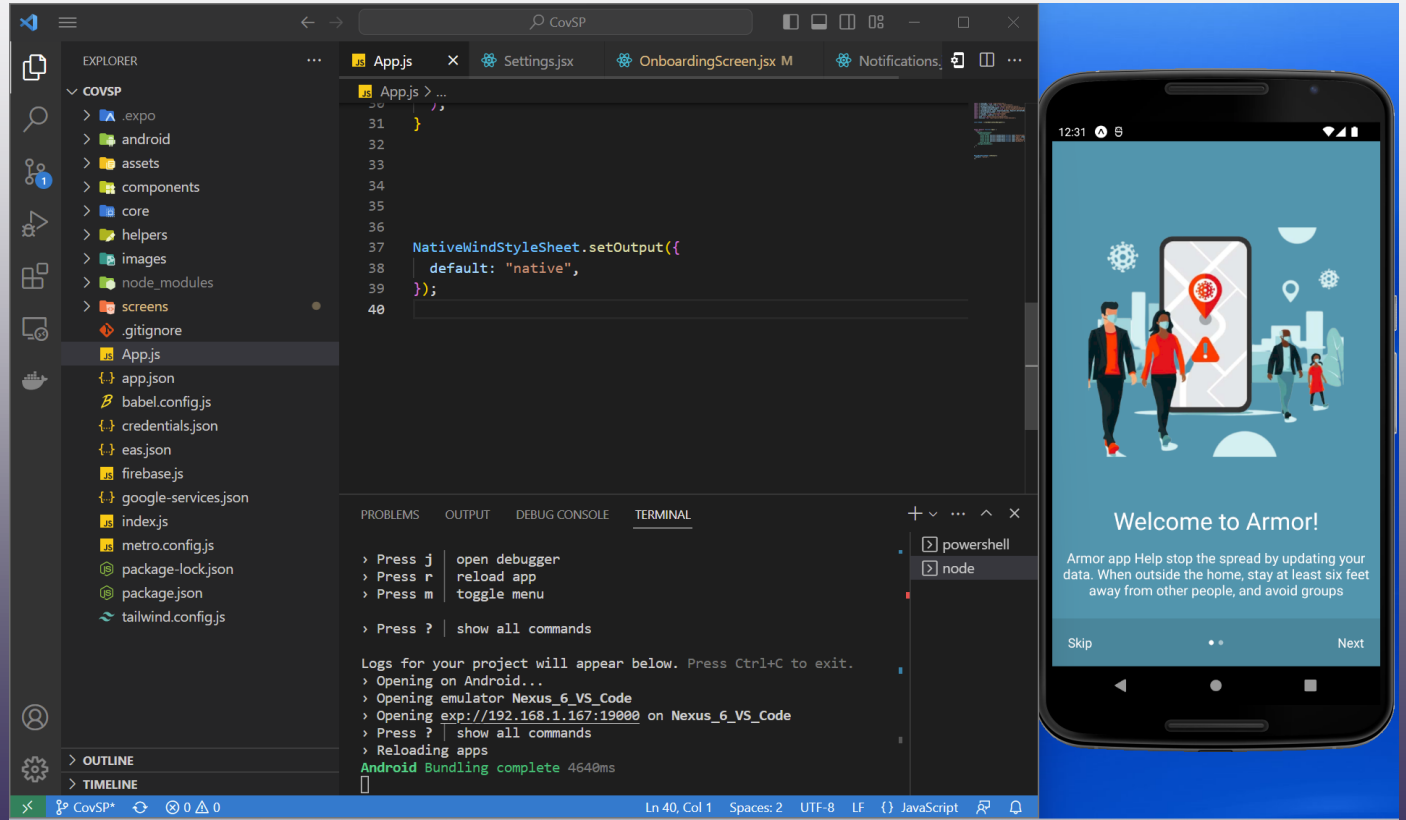
ID	Summary	Status	Place
Cov-21	As a registered user I want to see the play the button in the Bluetooth screen page so that I can start searching for infected users near my location.	To be Done	Home page
Cov-22	As a registered user I want to see the pause button in the Bluetooth screen page so that I can stop scanning for infected users in the application.	To be Done	Home page
Cov-23	As a registered user I want to see the option for changing the user's name in settings page so that I can change the user's name.	To be Done	Home page
Cov-24	As a registered user I want to see the option for marking as covid 19 infected person in settings page so that I can update my status whenever I diagnosed with covid.	To be Done	Home page
Cov-25	As a registered user I want to see the option for deleting my account in settings page so that I can delete my account.	To be Done	Home Page

PROJECT DEMO SPRINT 3



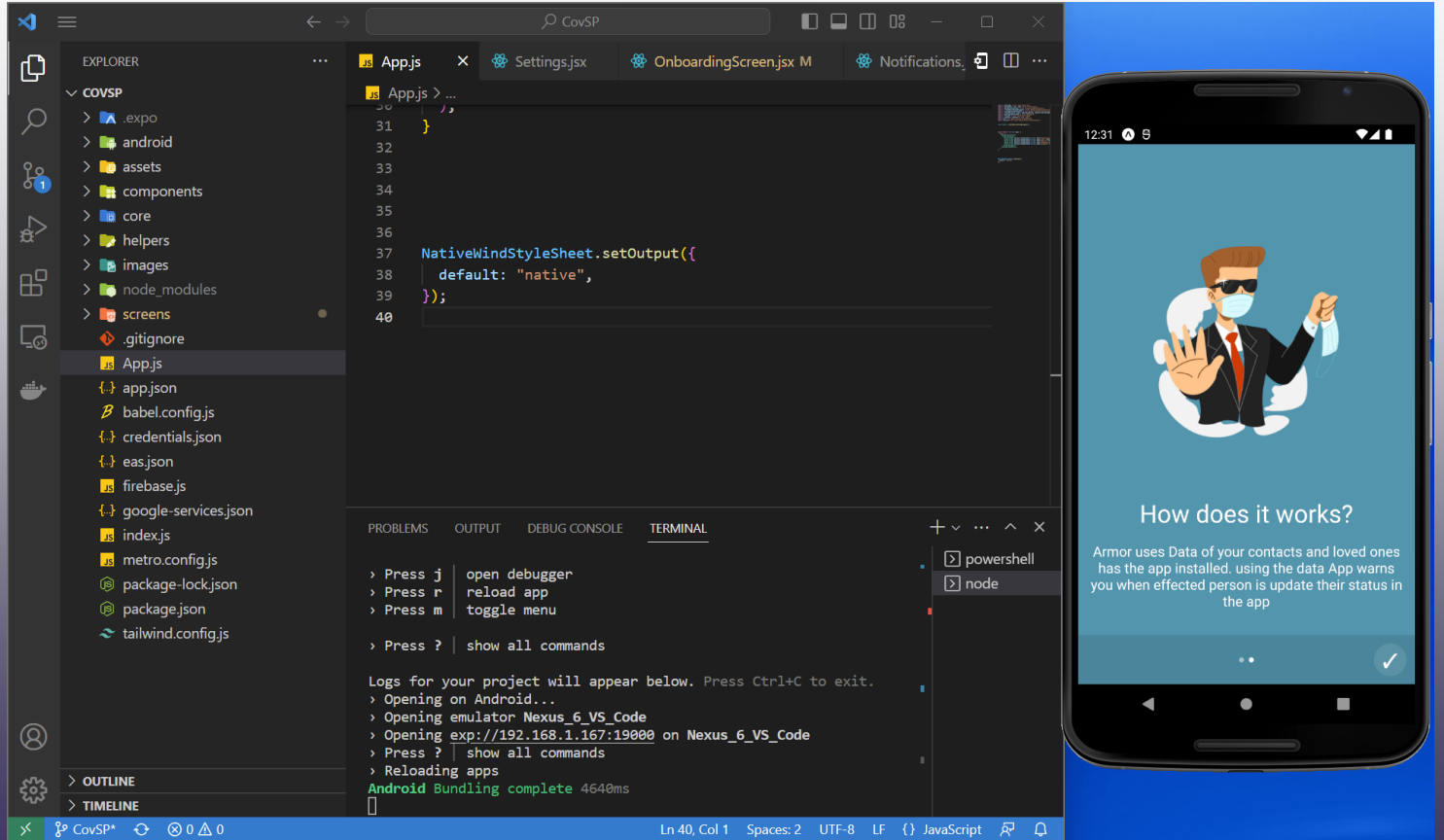
PROJECT DEMO SPRINT 3

Live application demo:



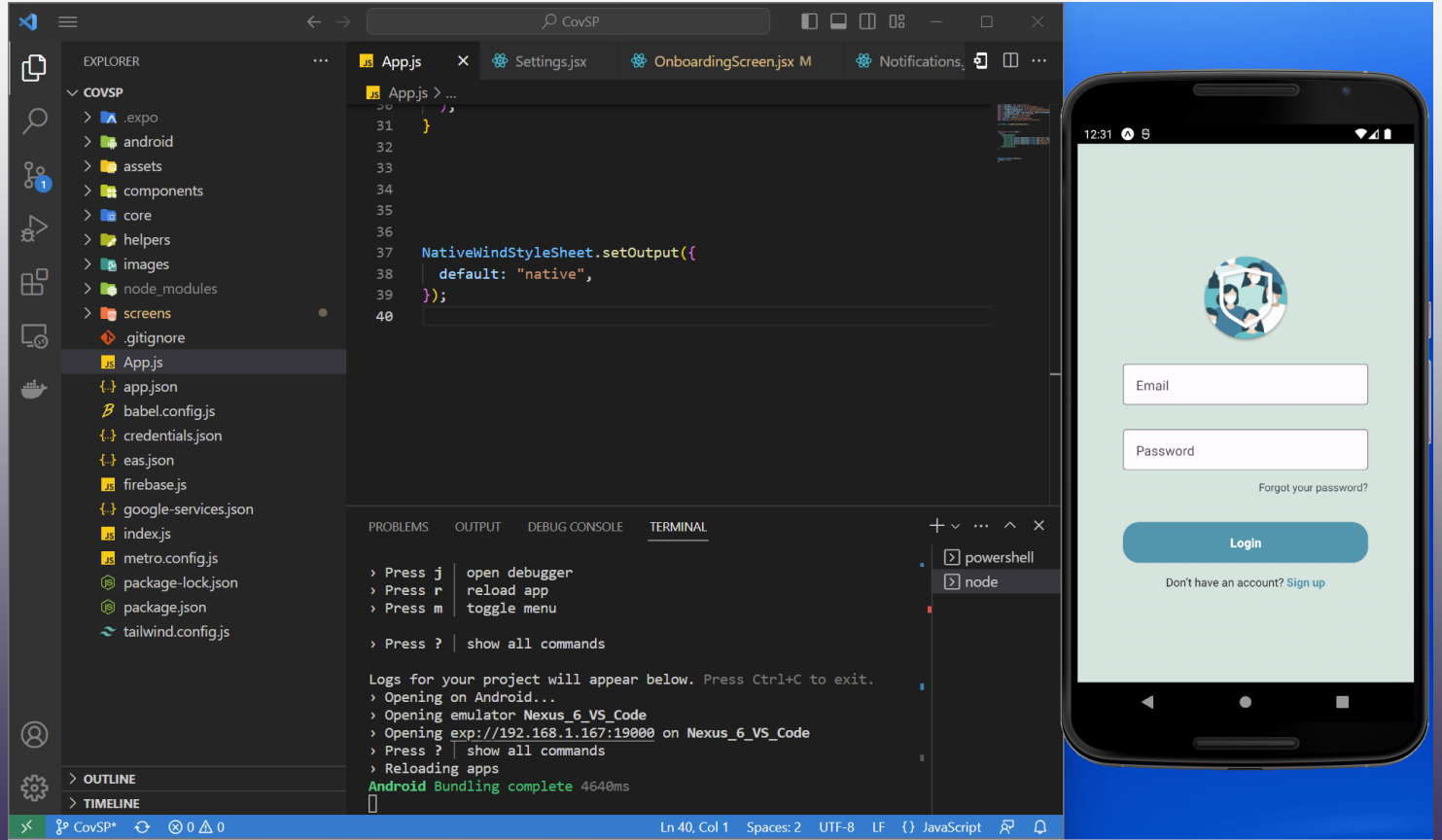
PROJECT DEMO SPRINT 3

Onboarding Screen



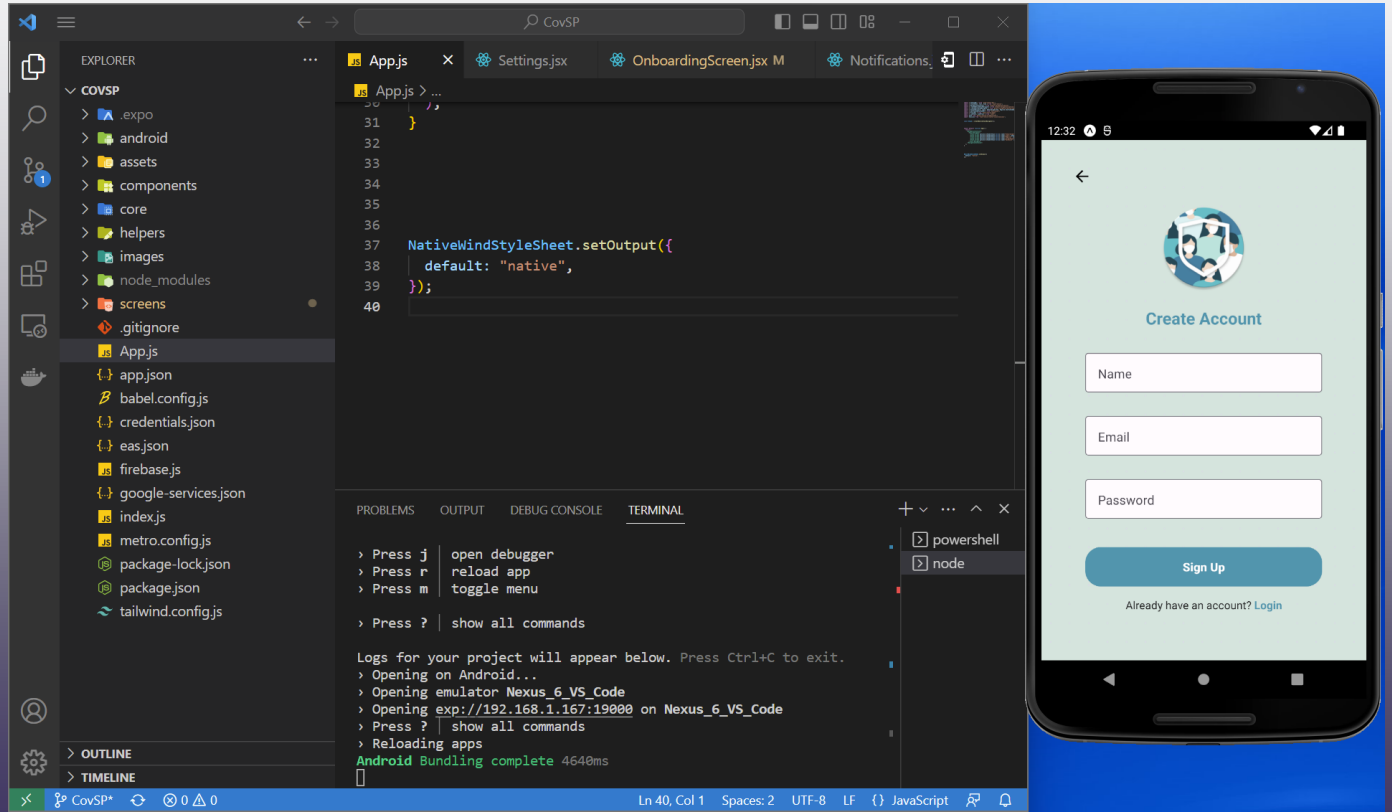
PROJECT DEMO SPRINT 3

Login Page



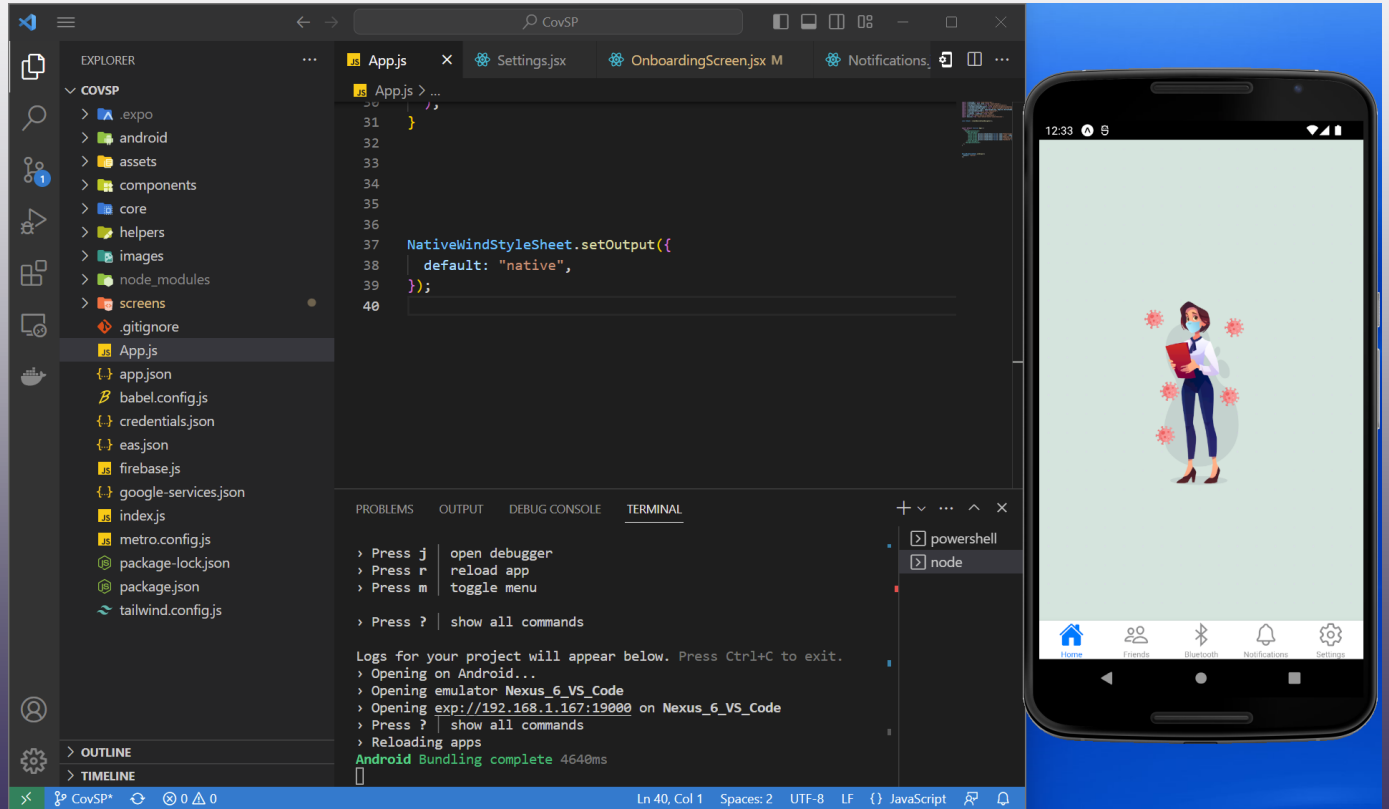
PROJECT DEMO SPRINT 3

Registration Page



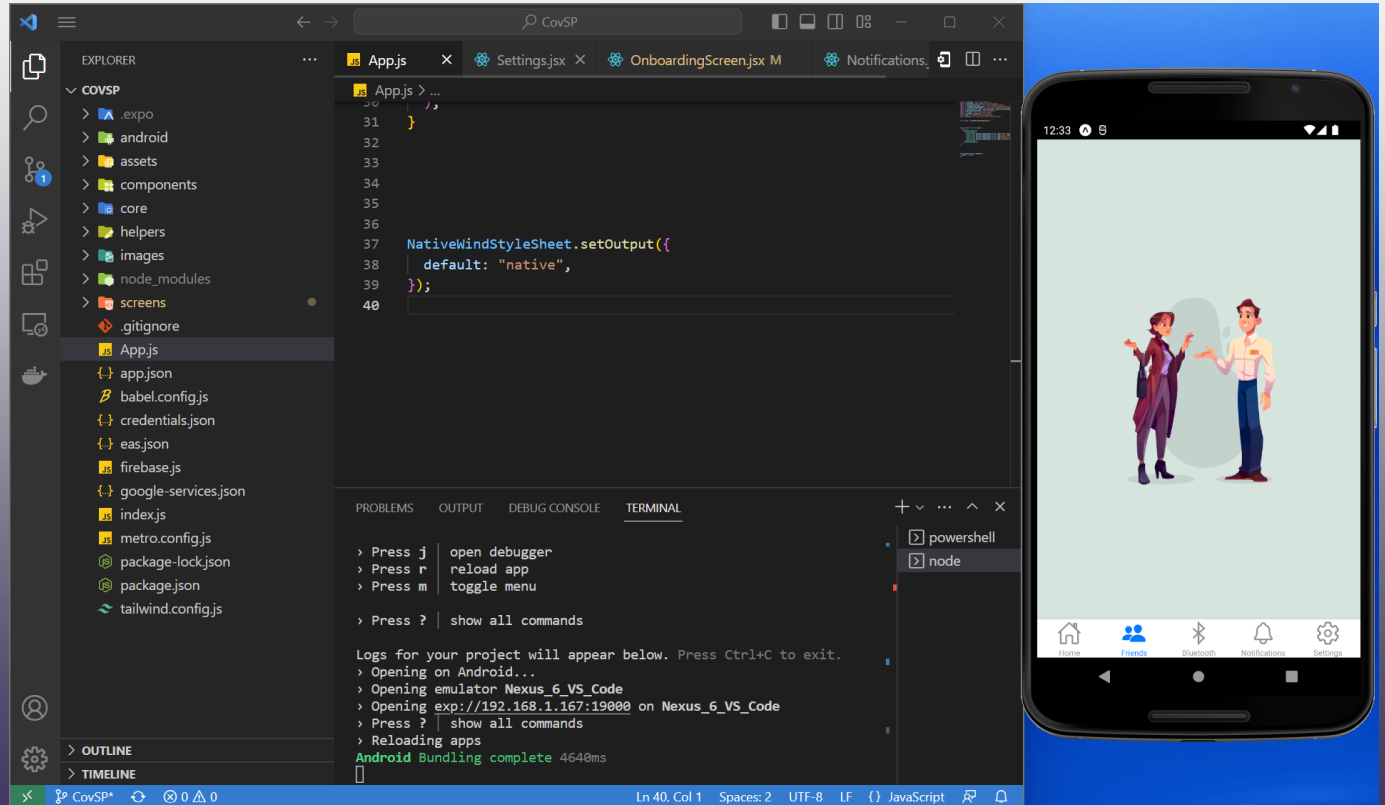
PROJECT DEMO SPRINT 3

Home Page After Login



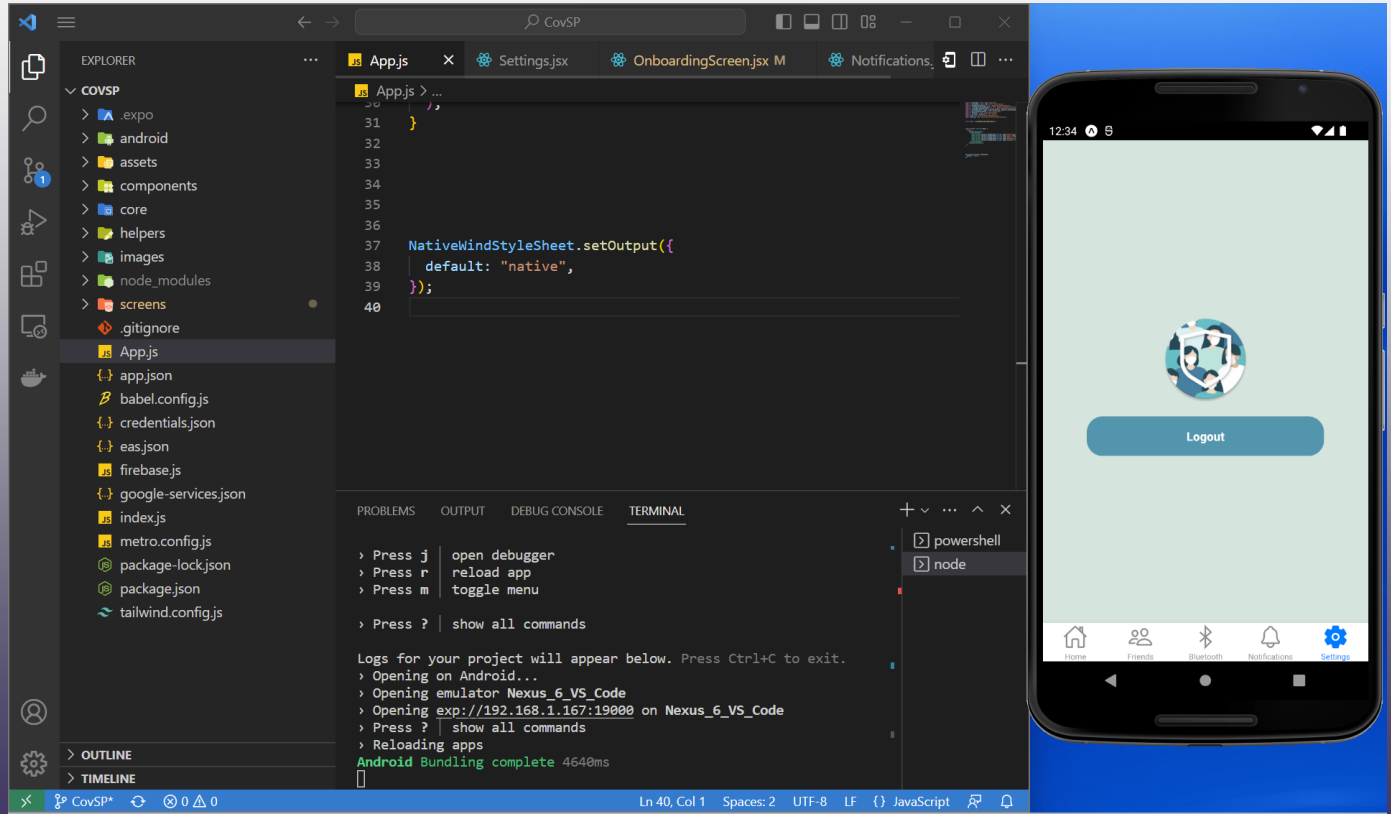
PROJECT DEMO SPRINT 3

Friends Tab



PROJECT DEMO SPRINT 3

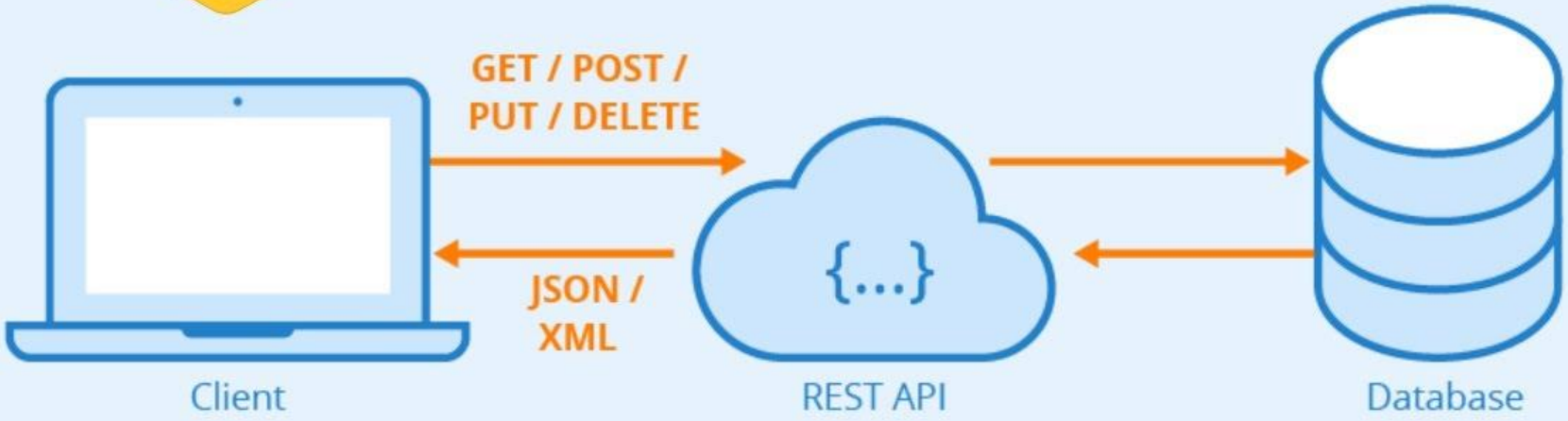
Settings tab



API

PACE UNIVERSITY

Firebase



GITHUB LINK

https://github.com/htmw/2023S-Team1

THANK YOU