

PROTOTYPE REPORT

Course : Software Engineering - CS301

**INSTITUTE NAME : INDIAN INSTITUTE OF INFORMATION
TECHNOLOGY, DHARWAD (IIITDWD)**

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ROLL NO. : 21BCS025

CLASS : 4TH SEM CSE SEC 'A'

GITHUB PROFILE - <https://github.com/Chaturth-R>

PROJECT NAME : A weather app that utilizes a weather API to display current and forecasted weather information.

APP NAME : ANEGUDDE WEATHER APP

TEAM NAME : ANEGUDDE WEATHER APP

Anegudde Weather App Logo



Introduction to Anegudde Weather App

Anegudde Weather App is an innovative weather app that utilizes a weather API to display current and forecasted weather information, weather news and weather YouTube Videos. It has been designed with scalability, security and SMART goals in mind.

The app has been developed using Flutter, a free and open-source UI software development kit created by Google

and used to develop applications for Android, iOS, Windows, Mac, Linux, Google Fuchsia and the web.

Design Criteria

The design of Anegudde Weather App was based on scalability, security and SMART goals. Scalability ensures that the app can grow and expand to meet the needs of the users. Security ensures that the app is safe and secure to use. SMART goals are specific, measurable, adoptable, responsive and time-bound.

The app has been designed with a user-friendly interface and intuitive navigation. It also has a feature that displays weather information for the location. The app also includes weather news and weather YouTube videos related to the weather.

Prototype Design

The prototype design of Anegudde Weather App was created with scalability, security and SMART goals in mind. The design includes a user-friendly interface and intuitive navigation. It displays weather information for location. The app also includes weather news and Weather YouTube videos related to the weather.

The design is also optimized for mobile devices, making it easy to use on the go.

Unique App Features

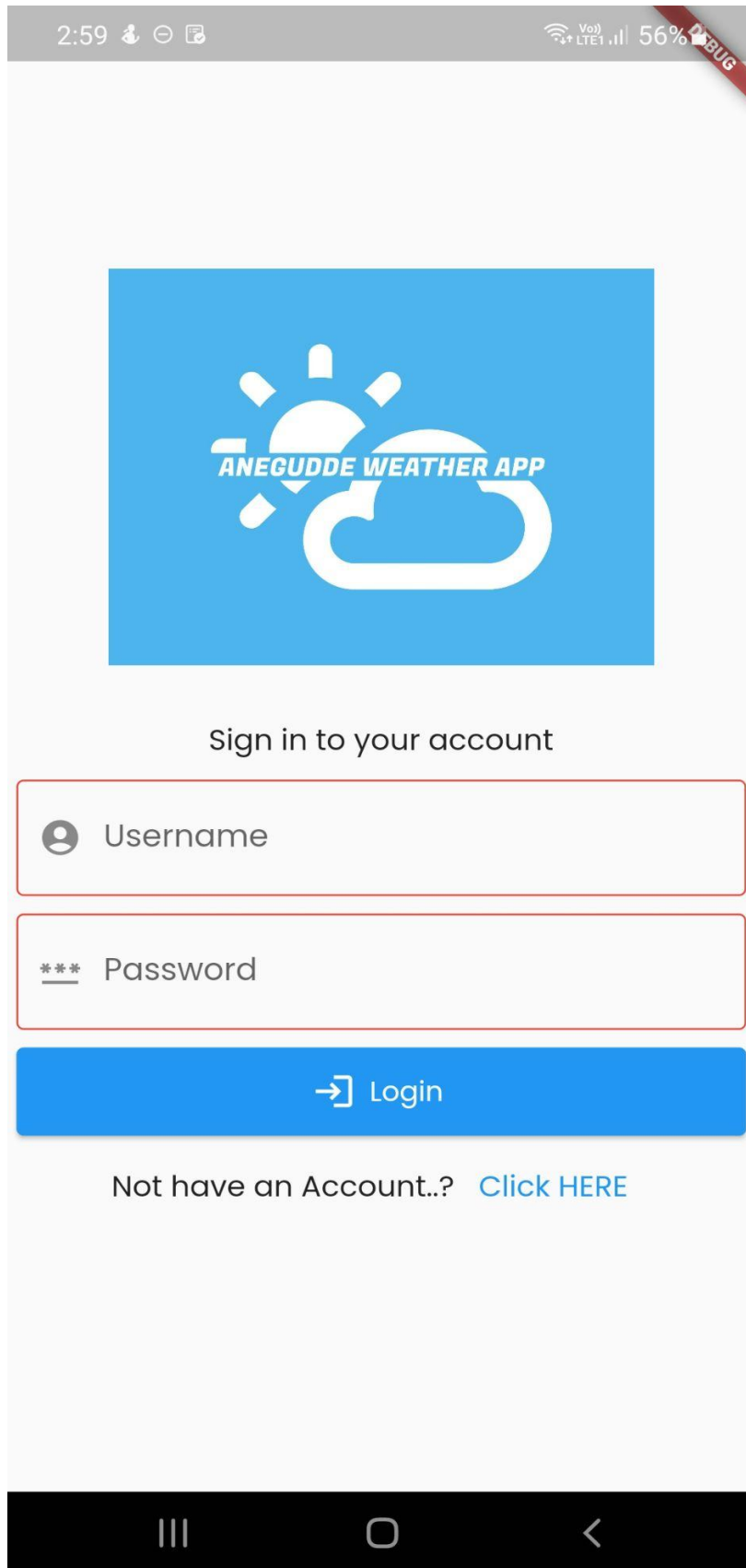
- **Current Weather Information:** The app displays the current weather conditions, including temperature, humidity, wind speed, and direction, for the user's place.
- **Hourly, Daily and weekly Forecasts:** The app provides hourly , daily and weekly weather forecasts, allowing users to plan their activities and outings accordingly.
- **Weather News:** The app features a section dedicated to weather-related news and updates for a region, keeping users up-to-date with the latest weather-related developments.
- **User-Friendly Interface:** The app features a user-friendly interface that is easy to navigate, with intuitive icons and design elements.
- **Weather YouTube Videos :** The app features weather-related YouTube videos and updates for a region.

Demonstration of Prototype

The prototype of Anegudde Weather App was demonstrated to show how the app works. The demonstration showed how the app can be used to view current and forecasted weather information, weather news and weather YouTube videos, and



weather information. The demonstration also showed how the app can be customized to the user's preferences. The prototype was also demonstrated to show how the app is optimized for mobile devices and can be used. The demonstration also showed how the app can be used to view weather information for the place.


LOGIN SCREEN



SIGNUP SCREEN


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 56%

 Sign Up


Create Your Account


Please provide following information to create account


 Name


 Contact Number

Password

 Email ID

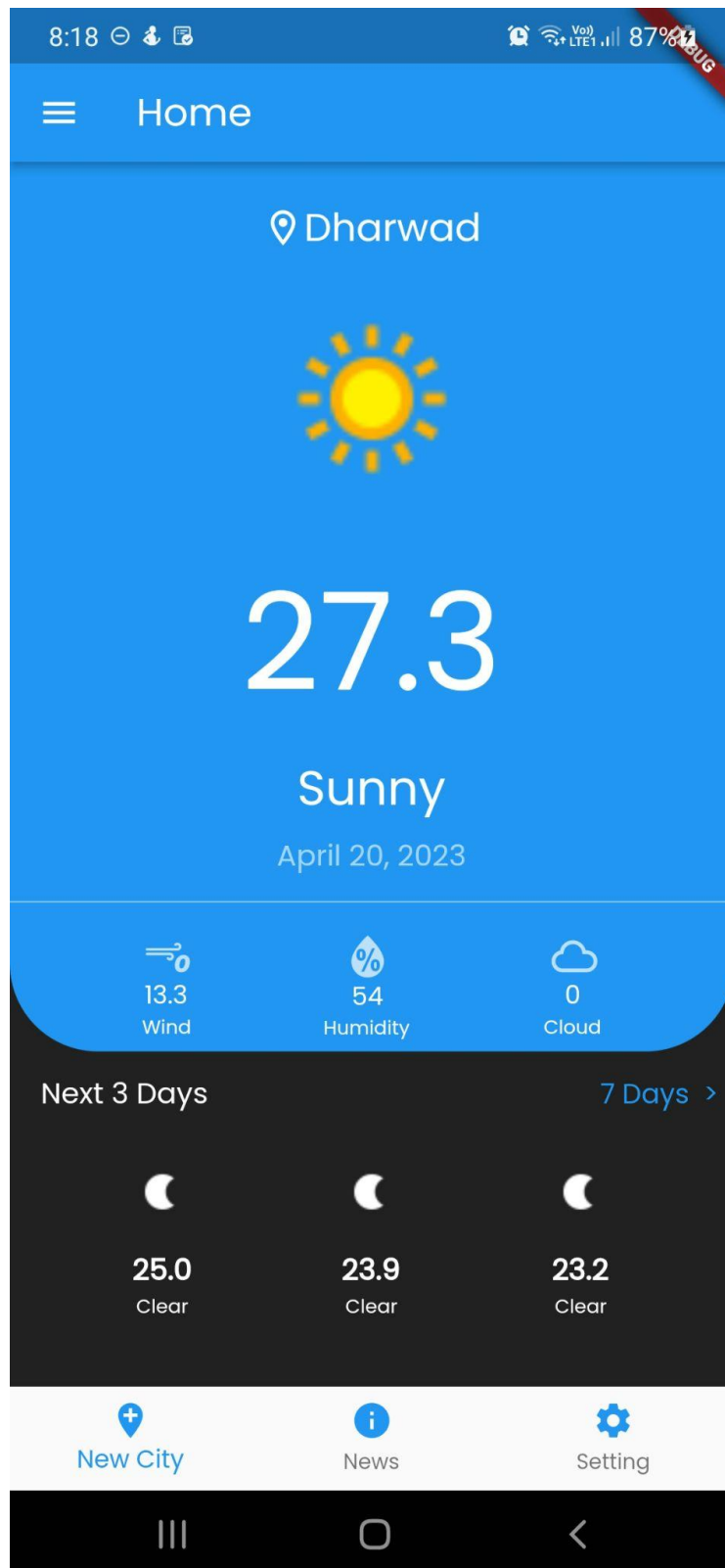
 Address

 Home City

 Save

Already have an Account..? [Log IN](#)

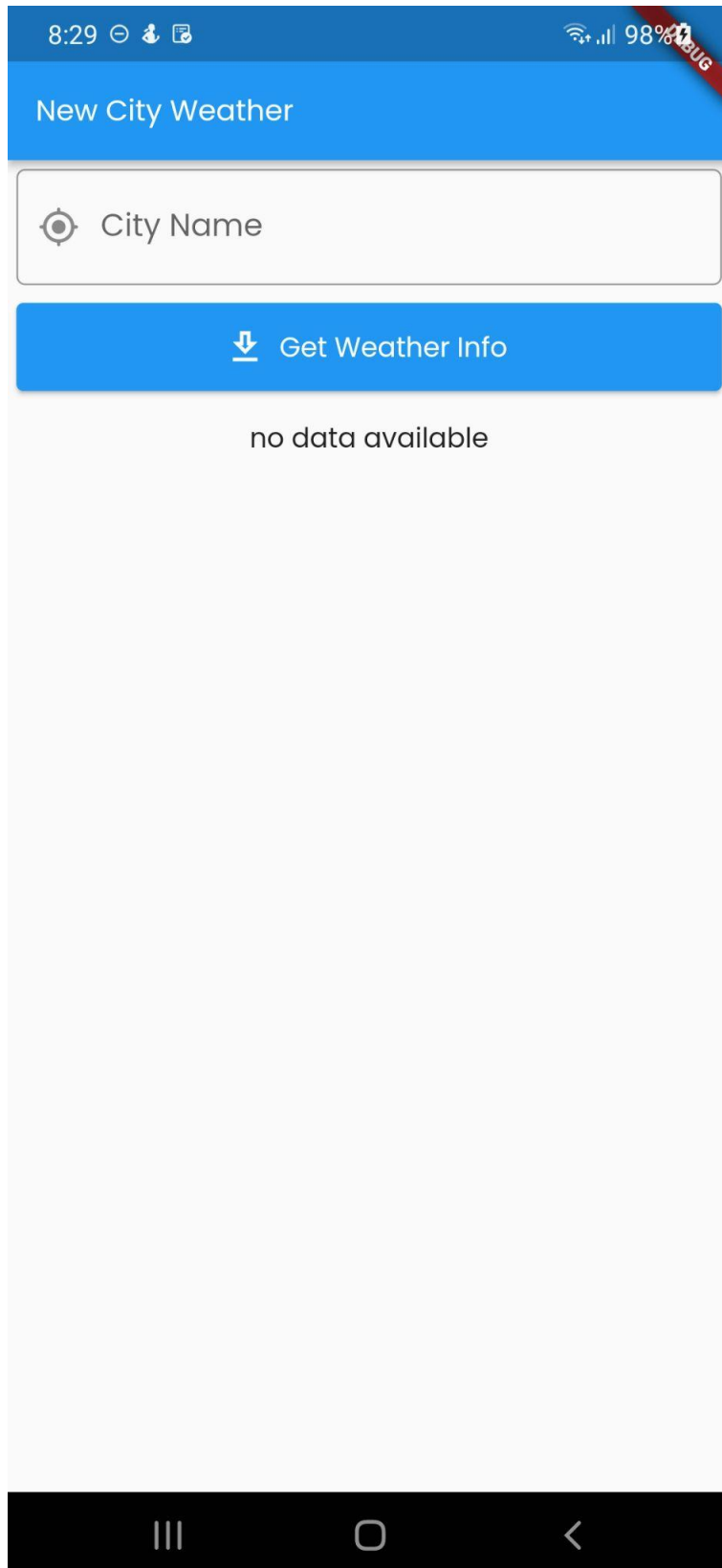
HOME SCREEN



The home screen of the app provides you with all the important weather details of your current place such as temperature, humidity, pressure, and a weather forecast. This information is displayed in an easy-to-read format and is constantly updated to provide you with the most accurate and up-to-date information.

Below the weather details section, you will find three useful widgets: "New City" and "Weather News With YouTube Integration" and "Settings".

New City Weather Screen



The "New City" widget allows you to easily switch between different places worldwide and view their weather information. This is particularly useful for travelers who want to stay informed about the weather conditions in their destination.

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99%

BUG

New City Weather



Bangalore



Get Weather Info



Bangalore, Karnataka



Sunny

24.0



Wind Direction

3.6km/h

SSE



50%

Humidity



24.5 C

Real Feel



7.0

UV

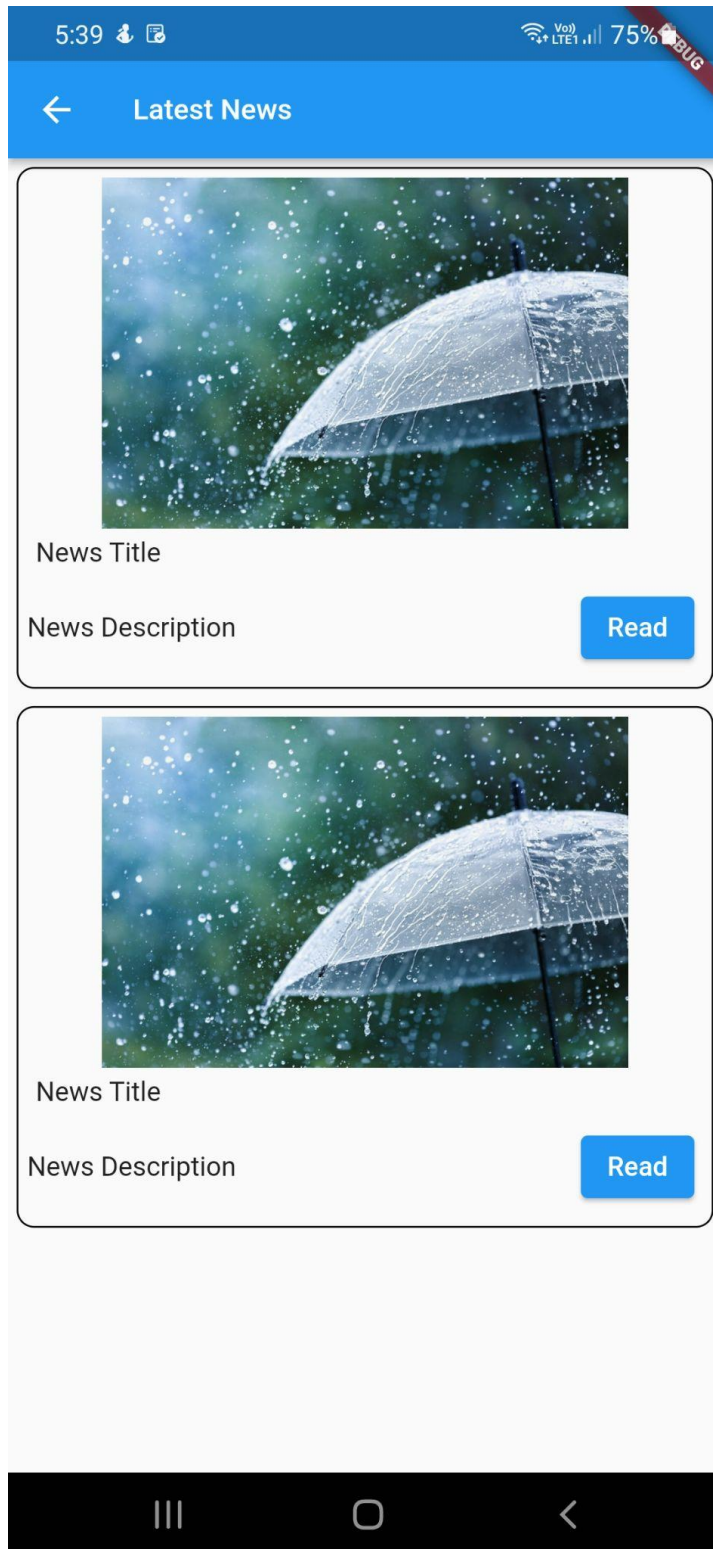


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Pressure

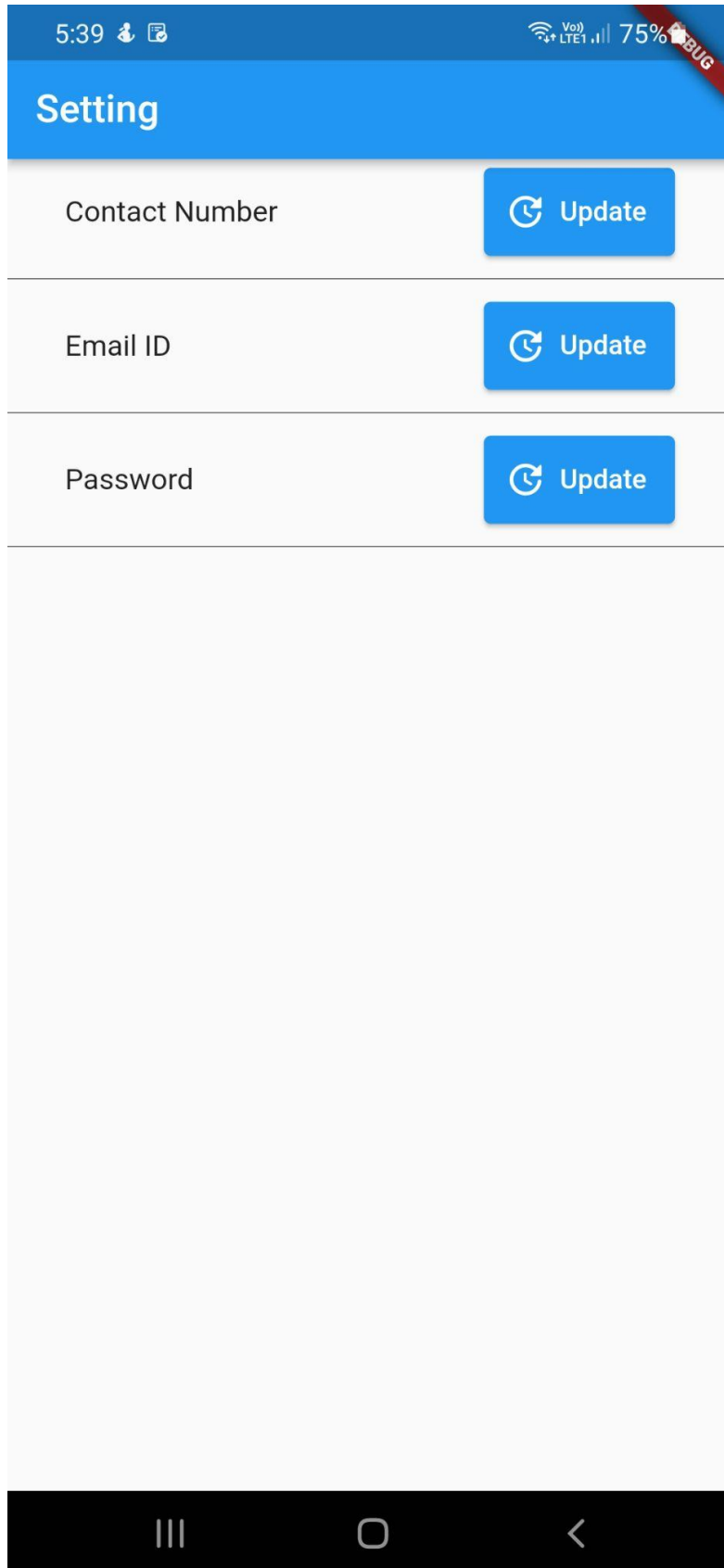


Weather News Screen with YouTube Integration



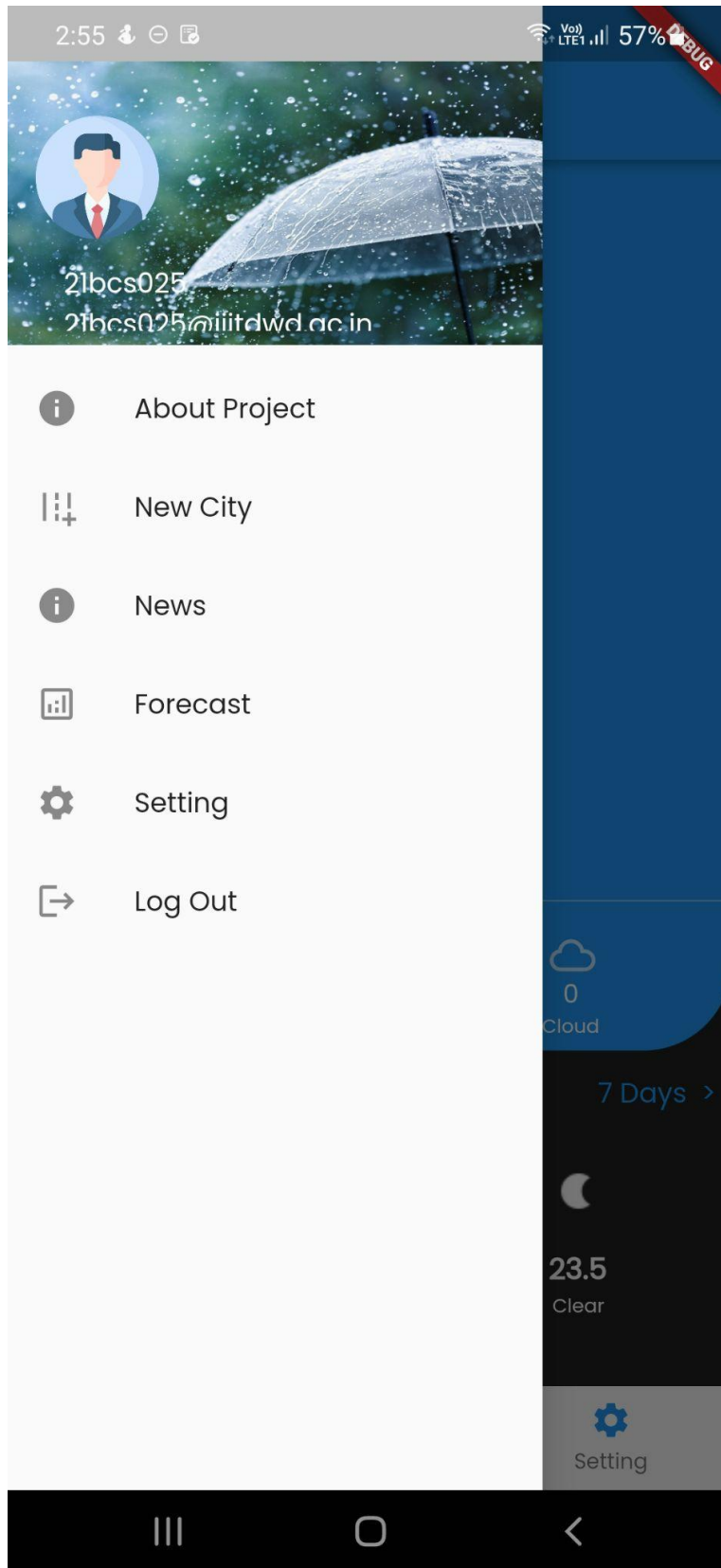
The "Weather News with YouTube Integration" widget provides you with the latest Weather news and Weather YouTube videos and updates related to weather, such as severe weather warnings, natural disasters, and more. This information can help you stay informed and prepared in the event of severe weather conditions.

Settings Screen



The app also includes a "Settings" section where you can customize your experience. Like you can edit your profile details.

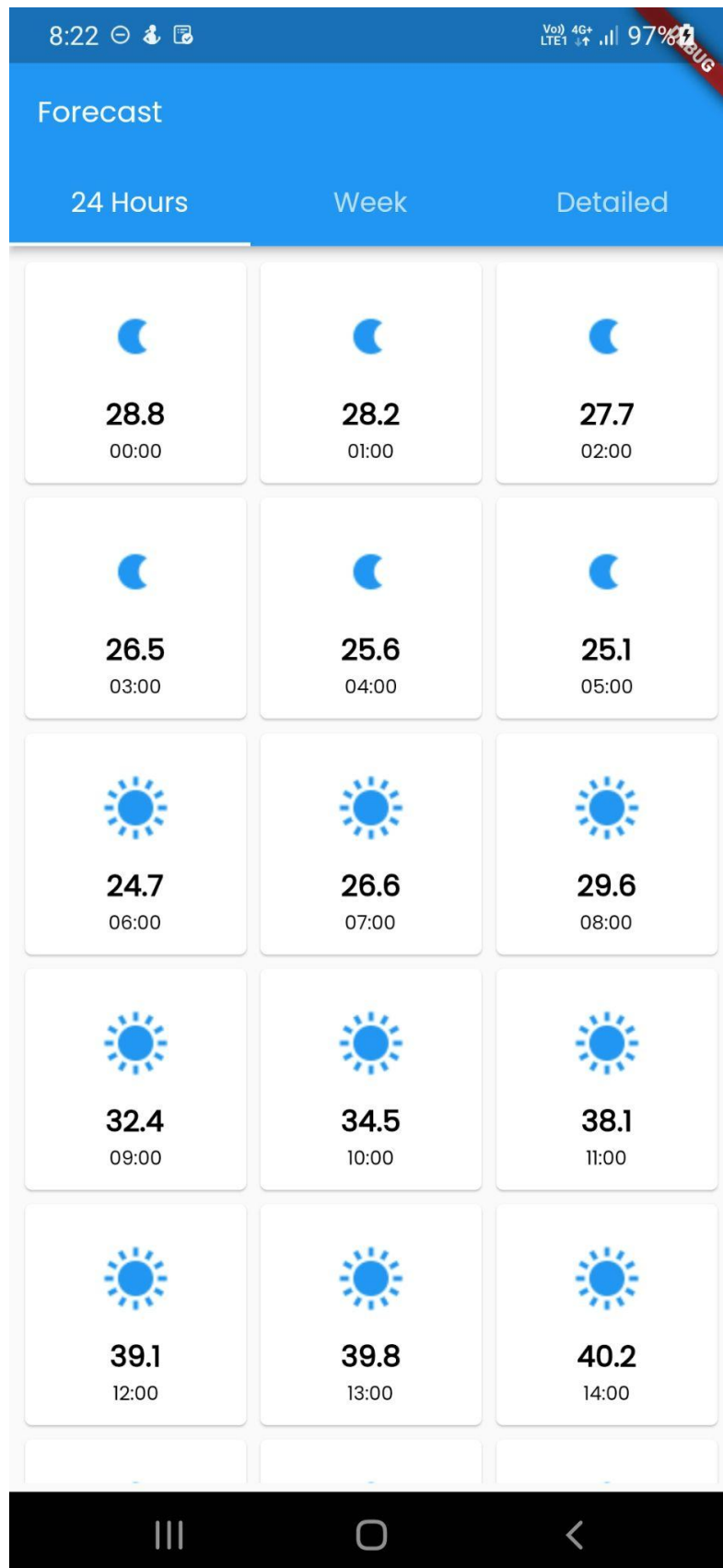
Menu Page



The app features a comprehensive menu that provides you with all the information and tools you need to stay informed about the weather.

Let's take a closer look at what's included in the menu which includes "New City", "Weather News with YouTube Integration", "Weather Forecast", "Settings", "Weather Information" and "Logout".

Weather Forecast Screen

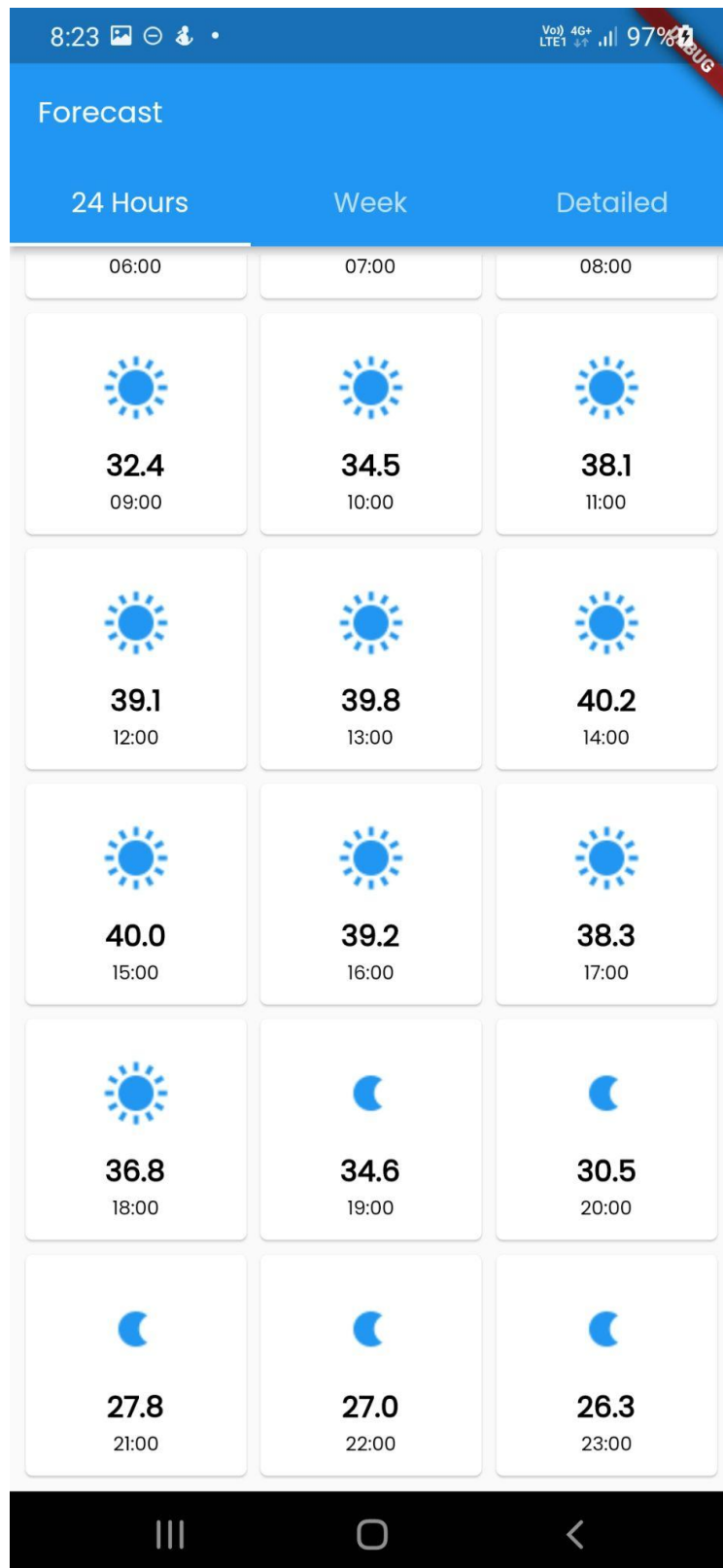


This feature provides users with up-to-date information about the weather, helping users make informed decisions about their daily activities. The weather forecast feature is divided into three sections: 24 hours, weekly and detailed.

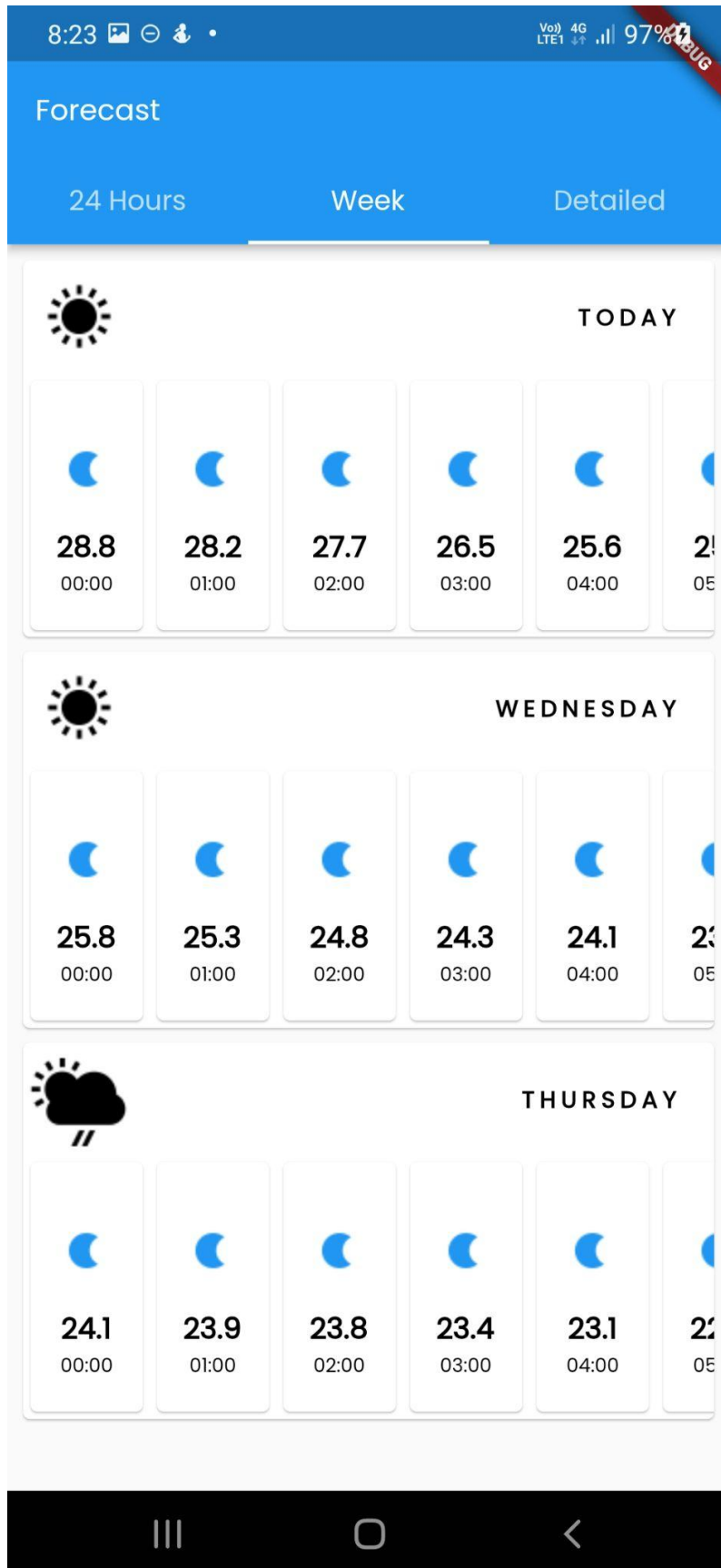
24 Hours

The 24 hours section provides a detailed hour-by-hour forecast, including temperature and other important weather information for each hour. This information is

updated frequently to provide you with the most accurate information possible. With this information, you can easily plan your day and be prepared for any changes in the weather.

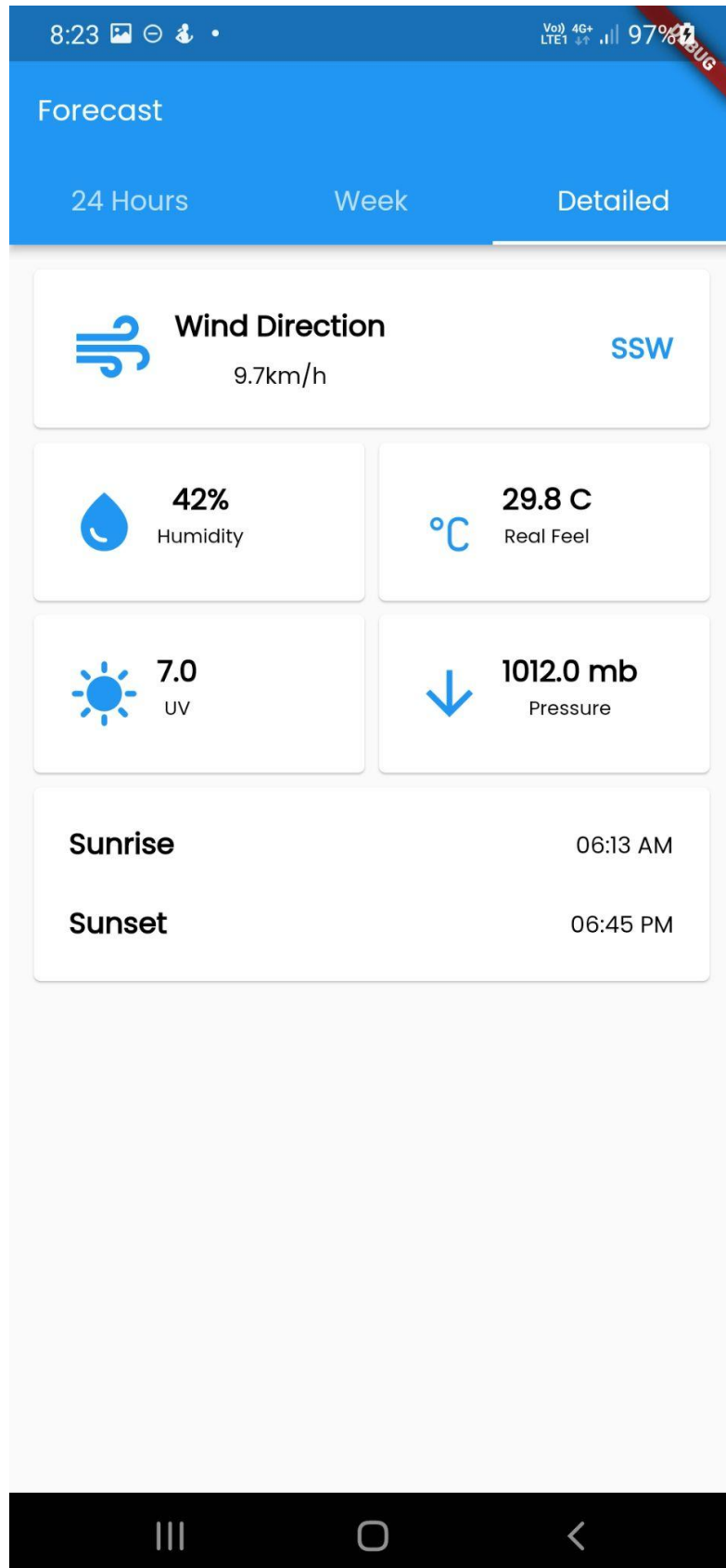


Weekly Weather Forecast



The weekly section provides a comprehensive day forecast, including temperature and other important weather information. This information can help you plan your week, from choosing the best days to go for a picnic to preparing for potential weather-related events.

Detailed Weather Information



This feature provides users with comprehensive information about the weather conditions in a specific location. The information is displayed in an easy-to-read format and includes details such as temperature, humidity, pressure, wind speed and much more information.

Technologies and tools used :

- **Flutter Framework:** Flutter is a cross-platform mobile app development framework that allows developers to create high-performance, natively compiled apps for iOS, Android, and the web.
- **Dart Programming Language:** Flutter uses the Dart programming language, which is an object-oriented, class-defined, garbage-collected language that is easy to learn and has a syntax similar to that of Java or C#.
- **Weather API:** To fetch weather data for the app, I have used the Weather API, which provides current and forecasted weather data for locations worldwide.
- **Android Studio:** Android Studio is an integrated development environment (IDE) used for developing Android apps. It provides developers with tools for debugging, testing, and building Android apps.
- **SQLite :** SQLite is a C-language library that implements a small, fast, self-contained, high-reliability, full-featured, SQL database engine. SQLite is the most used database engine in the world. SQLite is built into all mobile phones and most computers and comes bundled inside countless other applications that people use every day.

Conclusion

Anegudde Weather App is an innovative weather app that utilizes a weather API to display current and forecasted weather information, weather news, weather related videos and map with weather information. The app has been designed with scalability, security and SMART goals in mind. The design also includes a user-friendly interface and intuitive navigation. The prototype of the app was demonstrated to show how the app works, and the design benefits of the app were discussed.

The design of the app is optimized for mobile devices, secure and scalable. The app also includes a feature that displays weather information for the location.

GITHUB PROJECT -

<https://github.com/Chaturth-R/CS301-SOFTWARE-ENGINEERING-PROJECT-ANEGUDDE-WEATHER-APP>

THANK YOU MADAM!

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