



Project: SUST Interact

ANDROID/IOS APPLICATION

Course : CSE 250 | Project : SUST Interact
Type : Android application
Application name: SUSTbot

Why this project:

We wanna make a user friendly & advanced chatbot via an android application so that one can access various info about SUST campus, departments, bus schedule, cafe, library, organizations, admission, class routine, exam, syllabus, medical center etc in the quickest & easiest way. Also a user can access the infos manually by visiting the application. That's the motivation we got so far.

Used Technologies:

Flutter – Flutter is an open source framework by Google for building beautiful, natively compiled, multi-platform applications from a single codebase. Here we used its functionalities required for developing the android application. Flutter sdk is installed first and configured for suitable environment.

Dart – Here we learned this programming language for basic implementation of flutter. A programming language used to code Flutter apps. Dart is another product by Google.

Used Technologies:

Firestore - Firestore supports frameworks like Flutter on a best-effort basis. Here we use this backend service for user authentication (sign up & log in system). Before adding Firestore to this Flutter app, it needs to create a Firestore project to connect to the app.

IDE/Editor – We mainly used Visual Studio as IDE and installed required extensions such as flutter, dart etc. This is configured with the latest version for flutter plugins. VS code is a source-code editor made by Microsoft for Windows, Linux and macOS.


Used Technologies:

Dialogflow – We implemented this google service for the chatbot. Dialogflow is a natural language understanding platform that makes it easy to design and integrate a conversational user interface into your mobile app, web application, device, bot, interactive voice response system, and so on. First an agent was created in dialogflow and learnt for various queries and replies.

User authentication :

Login :

Entering the application, a login page is available for a new user. One should drop the valid email address & the password to login.



The login page features a dark teal background. At the top center is a circular logo with a colorful, abstract design. Below the logo, the text "SUSTbot" is displayed in a bold, green, pixelated font. Underneath the logo and text are two white, rounded rectangular input fields. The first field is labeled "Email" with a small envelope icon to its left. The second field is labeled "Password" with a small key icon to its left. Below these fields is a blue rectangular button with the text "Log In" in white. At the bottom of the page, the text "Don't have an account?" is followed by a blue link labeled "Sign Up".

SUSTbot

Email

Password

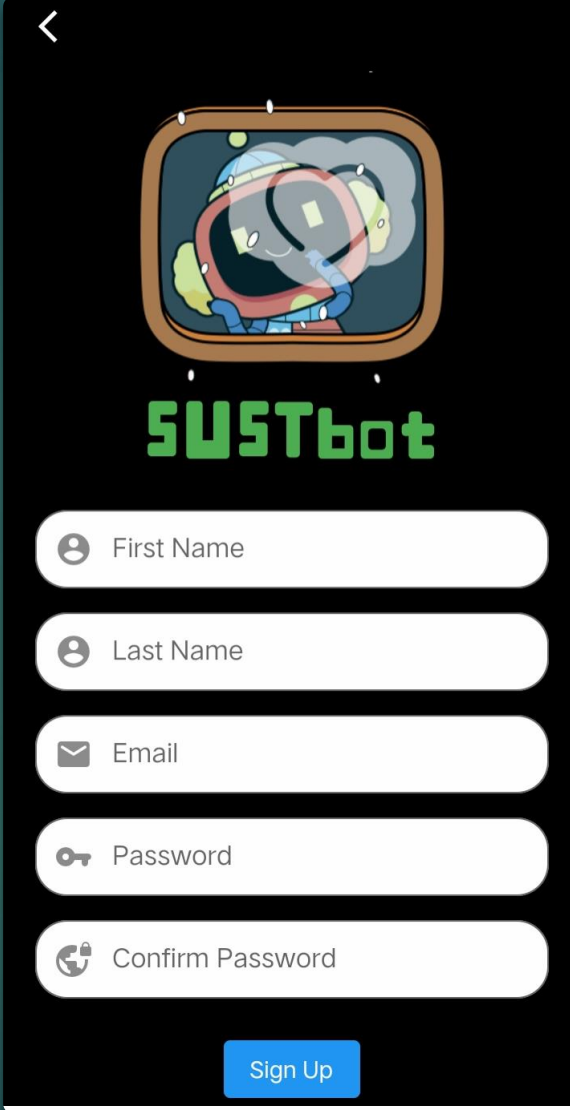
Log In

Don't have an account? [Sign Up](#)

User authentication :

Sign up system:

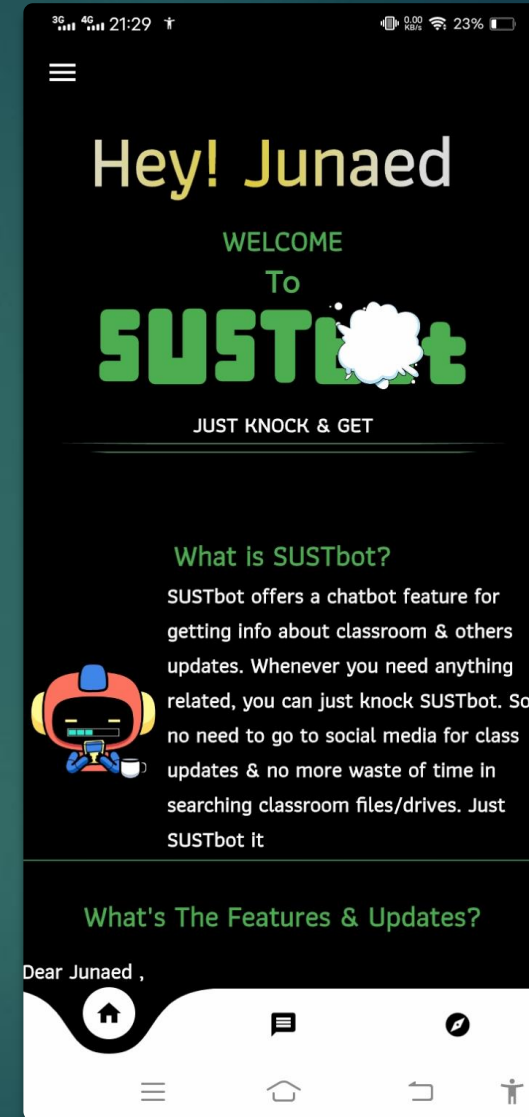
For the first time of using the app, one should sign up with a valid email address, First name, Last name, min 6digits password.



The image shows a mobile app sign-up screen for 'SU5Tbot'. At the top, there is a back arrow icon. Below it is a logo featuring a stylized robot head inside a rounded square frame, with the text 'SU5Tbot' in green below it. The sign-up form consists of five white input fields with rounded corners, each preceded by a small icon: a person icon for 'First Name', a person icon for 'Last Name', an envelope icon for 'Email', a key icon for 'Password', and a key icon for 'Confirm Password'. At the bottom right of the form is a blue button with the text 'Sign Up'.

Homepage :

The home tab welcomes you and introduces itself with an overview.



Chatbot:

Beside the home button, a chat tab offers the chatscreen. One should enter a dept code for the first time.

Its a user friendly advanced Chatbot such that it can learn new things and reply with new info to users.

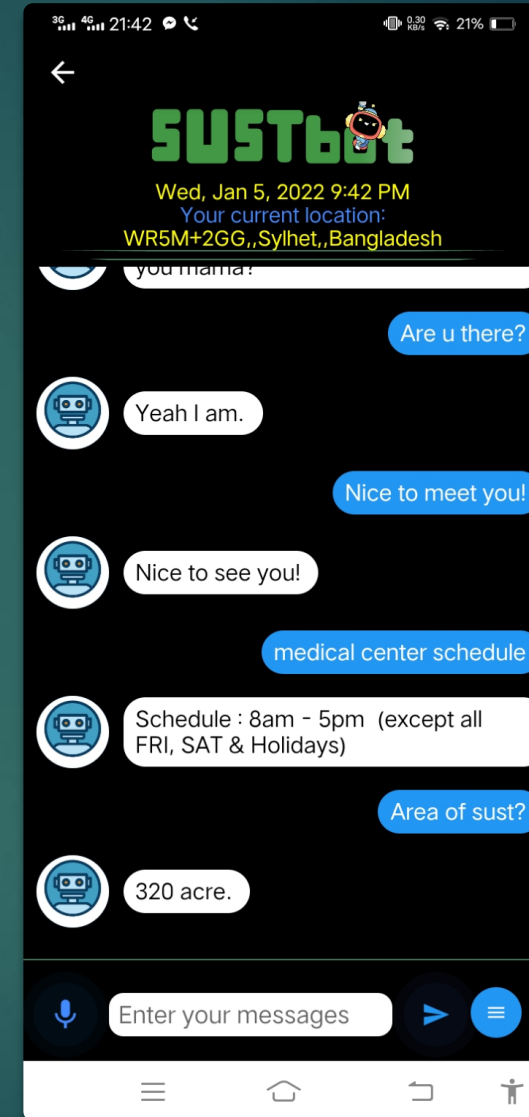


Chatbot:

For each query this will response with suitable replies.

Response can be short message or link for now. You can ask through text or voice. Ask it whatever you want to get related to.

Chat with SUSTbot and have fun.



Chatbot:

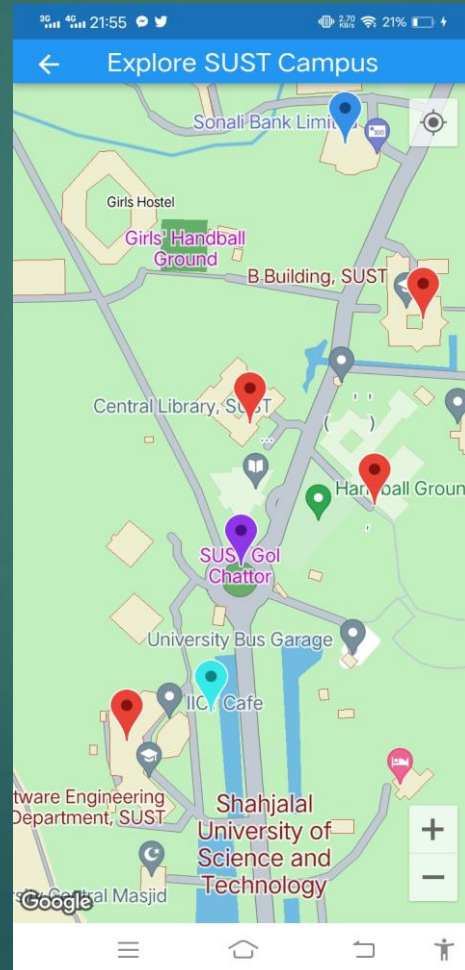
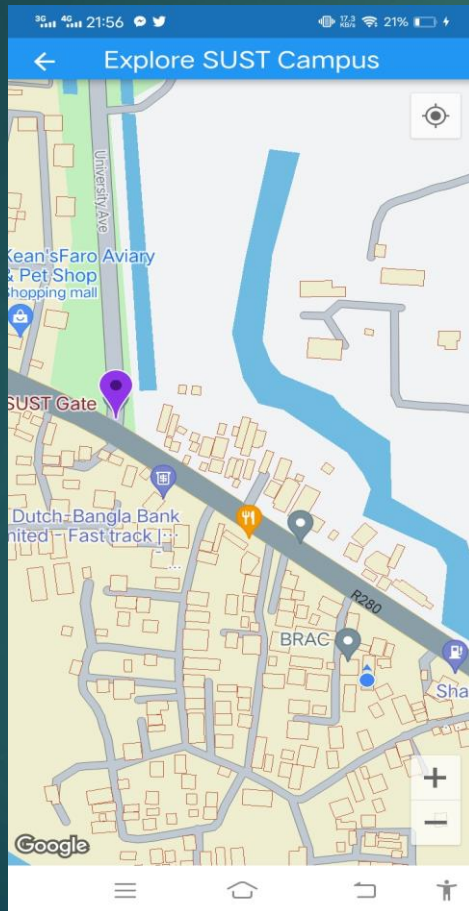
Speech to Text feature: Tap the voice button beside and ask through speech.

Get current location: You can find a button beside that is to provide ur current location address!

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Explore campus map:

Explore a Customized SUST map View Campus Map & Direction. You will be asked for allow access to on location then the mapscreen will show your location.



Menu bar

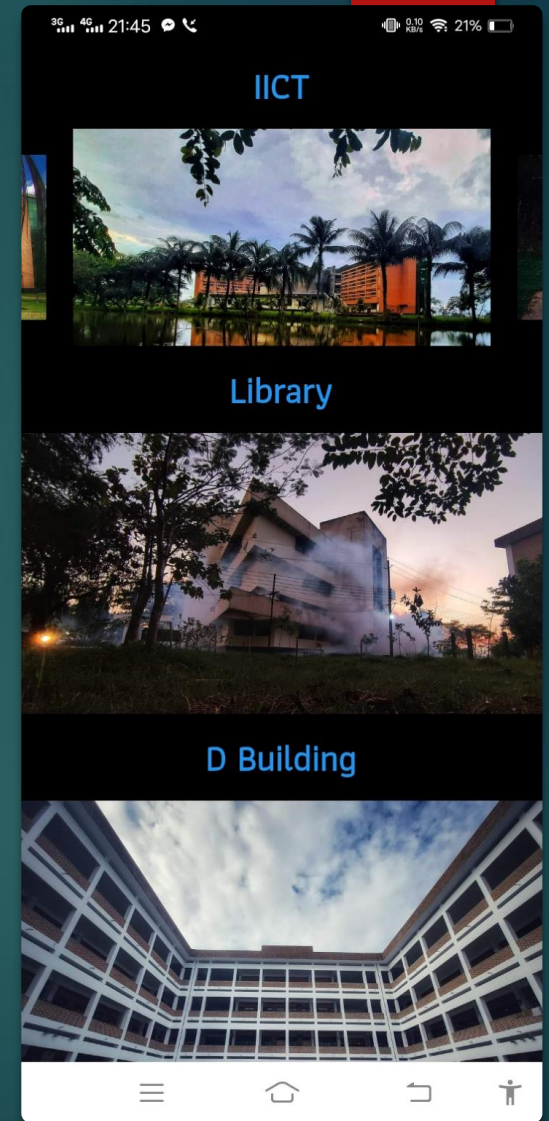
Menu bar:

On the top left of the home tab, you can see a menu bar. Enter here get details.

About SUST:

Click this button and know some basic info about SUST.

Visit SUST Gallery: Tap here to see the beautiful photograph of the Campus.



Menu bar

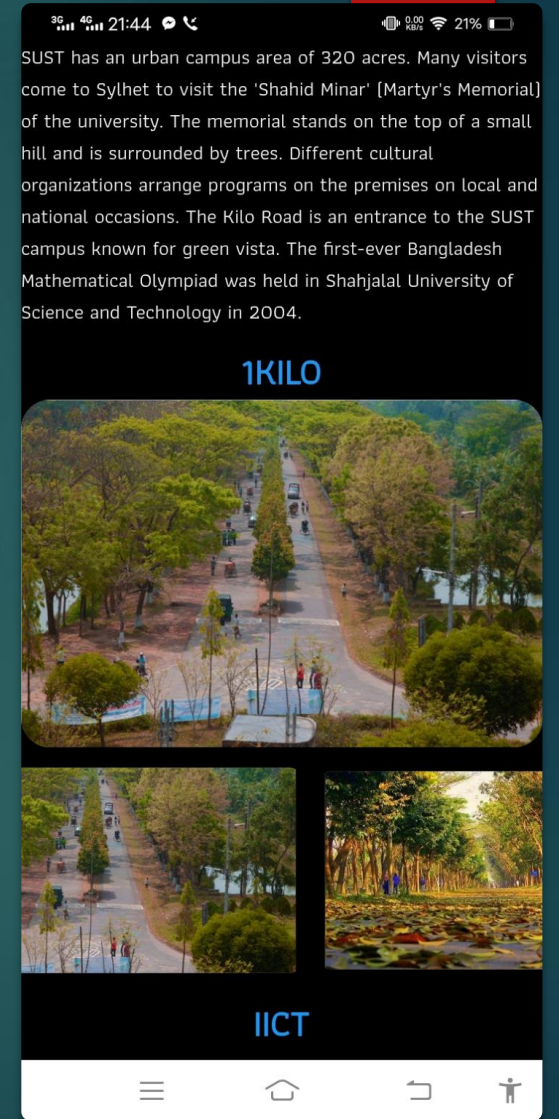
Schools and Departments :

All the depts. Name. Library: Central library, IICT library

Club & Organizations:

View some organization info.
(Remainings will be updated later).

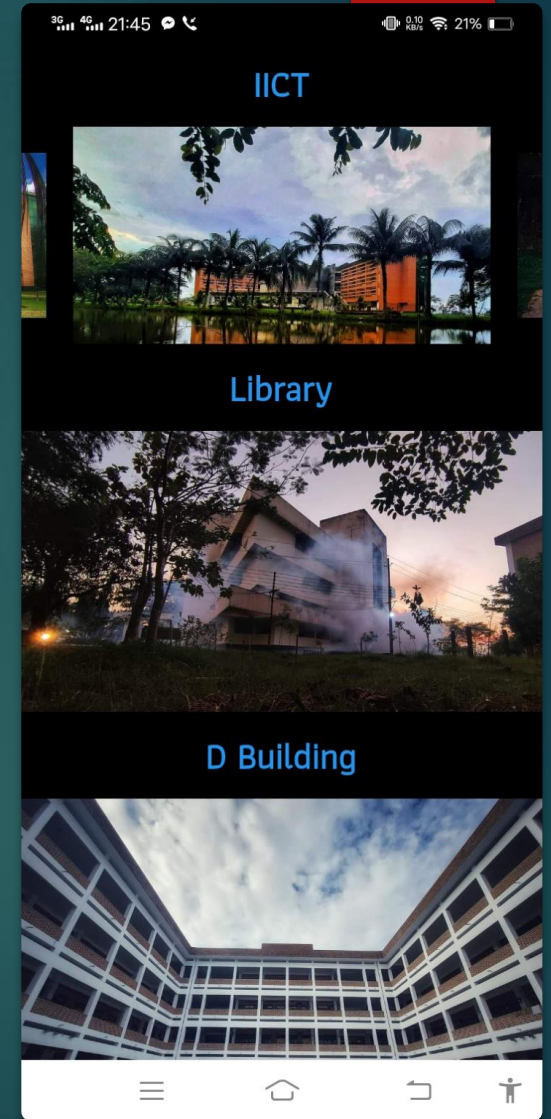
Canteen & Tong: View canteen and tong infos



Menu bar

Transport: University Bus schedule
Medical Service - SUST Medical Center
[Photo] Schedule
Sports Ground: View Central Field & other
sports ground
Residence Halls
Achievements
Contact SUST
Logout

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Conclusion:

some feature specially will be more helpful for new SUSTians.
This chatbot can be added messenger as well.

So one can find a facebook page named “SUSTbot” and chat.

We desire to work in a large scale for more details & updating info.