CSE – 250 (Android Project)

Assigned Group No – 14

Selected Project No – 03

Sticky Note Application

Team members :

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Introduction

A sticky note application is a digital tool designed to replicate the experience of using traditional paper sticky notes, allowing users to create, organize, and manage virtual notes on their computer or mobile device. These applications provide a convenient way for users to jot down quick thoughts, reminders, to-do lists, and other pieces of information in a visual and easily accessible format.

Key features of sticky note applications often include:

1. Note Creation and Customization: Users can create new notes with the ability to customize them by changing colors, font styles, and sometimes even attaching images or links.

2. Organizational Tools: Sticky note applications typically offer features for organizing notes, such as grouping them together, categorizing them, or arranging them on a virtual board or desktop.

3. Reminders and Alarms: Some applications allow users to set reminders or alarms associated with specific notes, ensuring that important tasks or events are not overlooked.

4. Synchronization: Many sticky note applications offer synchronization across multiple devices, enabling users to access their notes from computers, smartphones, or tablets seamlessly.

The usefulness of a Sticky Note Application

Sticky note applications offers a digital alternative to traditional paper notes, providing users with a convenient and versatile way to organize their thoughts, tasks, and reminders. Their accessibility, flexibility, and customization options make them a valuable tool in both personal and professional settings.

These applications are useful for personal organization, note-taking, brainstorming, and task management. The digital format offers advantages over physical sticky notes, such as the ability to edit, delete, and organize notes more easily, as well as the convenience of accessing notes across different devices.

Requirements

Software Requirements Specification (SRS) from the user's point of view for the application :

A. Gather Note data

- Set Current date.
- Set Current time.
- Set Notes.
- Set Deadline.
- Set Reminder.

B. Manipulate information.

- Update information from created Note.
- Delete From set Note

C. Select for done.

D. Deletion of notes.

This Software Requirements Specification (SRS) outlines the essential features and functionalities of 'Sticky Notes' from a user's perspective, ensuring a comprehensive and user friendly platform for the common people.

System Requirements for the users

The following technologies are necessary for a user to use the app :

Users Point of View :

- ❖ Hardware : An android phone with good fluency and compatibility.
- ❖ Software : Android version 7.0(Nougat) or above.
- ❖ Note Information : Date, Time, Notes, Deadline, Reminder.

Developers Point of View :

- ❖ Workstation : Android Studio
- ❖ Database : MySQLite Database
- ❖ Frontend : Traditional Android XML Layouts
- ❖ Backend : java
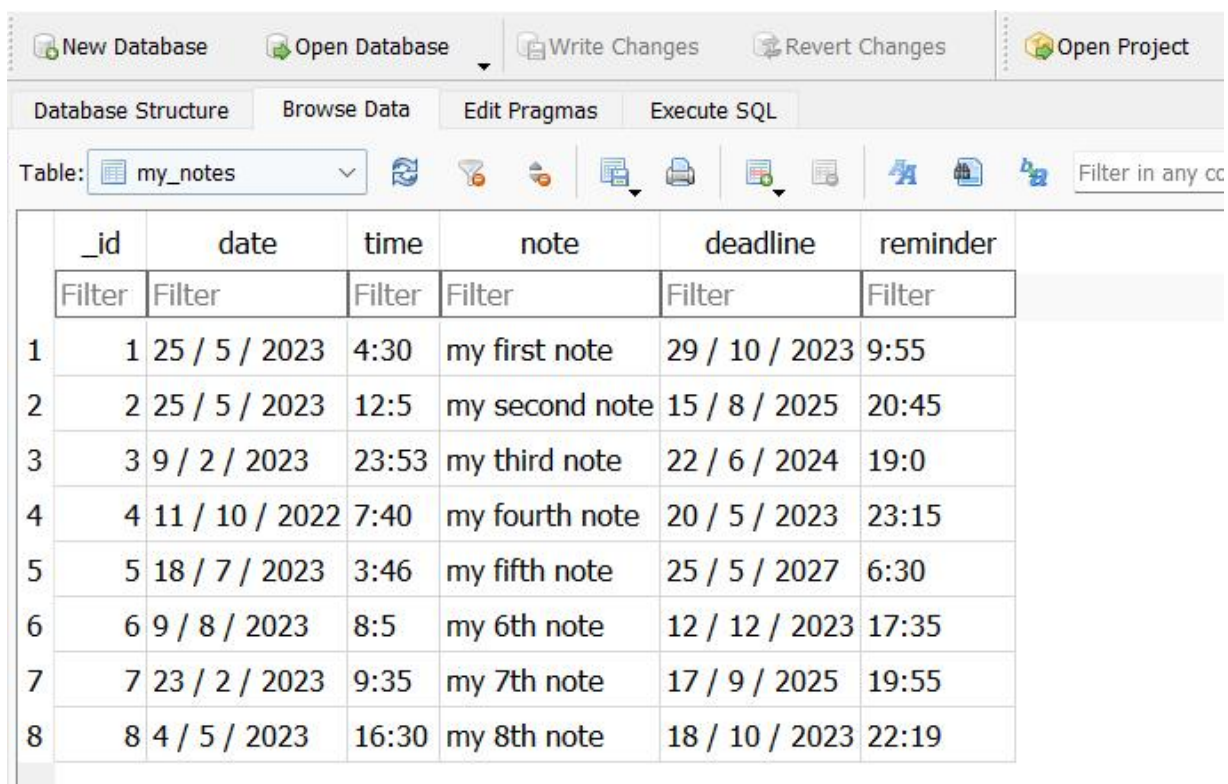
Database Functionalities for the app

Table Name： my_notes

Primary key： note_id

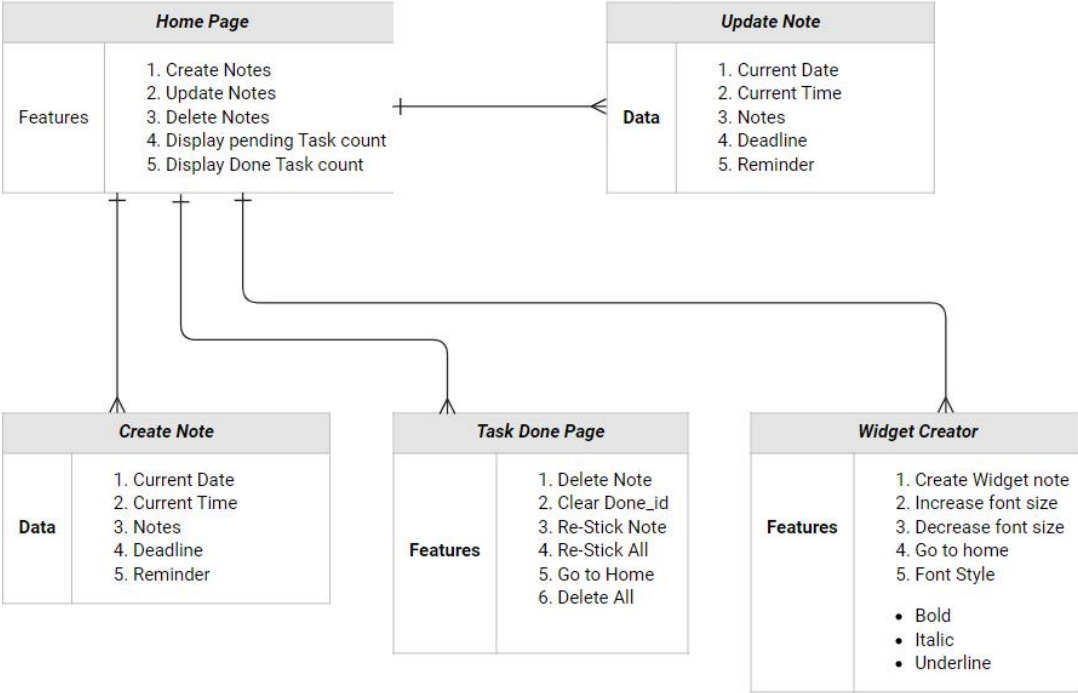**Foreign Key：** cur_date, cur_time, notes, deadline, reminder

We would like to use MySQLiteDatabase for my android Sticky Note Application. MySQLiteDatabase is a class provided by the Android SDK to interect with MySQLite databases. MySQLite is a lightweight, embedded relational databases that is commonly used in Android applications for local data stroage.

A snapshot of database table goes below :

_id	date	time	note	deadline	reminder
Filter	Filter	Filter	Filter	Filter	Filter
1	1 25 / 5 / 2023	4:30	my first note	29 / 10 / 2023	9:55
2	2 25 / 5 / 2023	12:5	my second note	15 / 8 / 2025	20:45
3	3 9 / 2 / 2023	23:53	my third note	22 / 6 / 2024	19:0
4	4 11 / 10 / 2022	7:40	my fourth note	20 / 5 / 2023	23:15
5	5 18 / 7 / 2023	3:46	my fifth note	25 / 5 / 2027	6:30
6	6 9 / 8 / 2023	8:5	my 6th note	12 / 12 / 2023	17:35
7	7 23 / 2 / 2023	9:35	my 7th note	17 / 9 / 2025	19:55
8	8 4 / 5 / 2023	16:30	my 8th note	18 / 10 / 2023	22:19

Entity-Relationship Diagram

Home Page

Features	1. Create Notes 2. Update Notes 3. Delete Notes 4. Display pending Task count 5. Display Done Task count

Update Note

Data	1. Current Date 2. Current Time 3. Notes 4. Deadline 5. Reminder

Create Note

Data	1. Current Date 2. Current Time 3. Notes 4. Deadline 5. Reminder

Task Done Page

Features	1. Delete Note 2. Clear Done_id 3. Re-Stick Note 4. Re-Stick All 5. Go to Home 6. Delete All

Widget Creator

Features	1. Create Widget note 2. Increase font size 3. Decrease font size 4. Go to home 5. Font Style • Bold • Italic • Underline

Here goes Entity-Relationship Information and brief description for my Android Application

In this project, There will be three separate activity. These are :

1. MainActivity
2. TaskDoneActivity
3. WidgetActivity

In MainActivity there we will have two buttons one to add notes and another to make an widget for that application. There will be a recycler view which will hold the created notes. To update or delete each of the created notes, we can just click on the task from recyclerview and then it will show you a popup Dialog menu for confirmation.

At the top of MainActivity page there will be a menu that will hold an icon to move between MainActivity and TaskDoneActivity where it will show a recyclerview with holding the tasks that've done by the user. And also there is a 3 dot menu you can delete all the notes at a time.

From Add task dialog, we can set there creation time, date, description, deadline and reminder. After completing that task, we can mark that note as done and after completing a task that marked note will be deleted from MainActivity and will be transferred to TaskDoneActivity. Also we have Date and Time Picker to set date and time from calender and clock using a button beside the EditText view.

We will also be able to add an widget for that application using the Create Widget button from MainActivity that will take user to another activity which will provide an access to create custom widget note. We can activate widget feature by picking the widget from our devices widget dropdown menu.
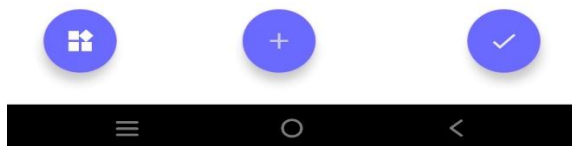
UI Design

1.Homepage: It contains 3-dot which defines delete all option. It also contains "+" icon which create new note, "✓" icon which denote go to 'Done task' page. It also contain a widget button which denote to go widget page.
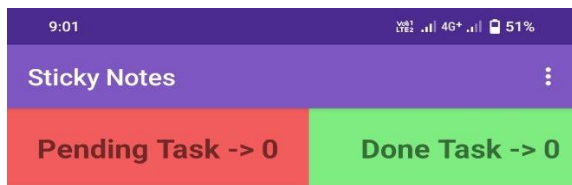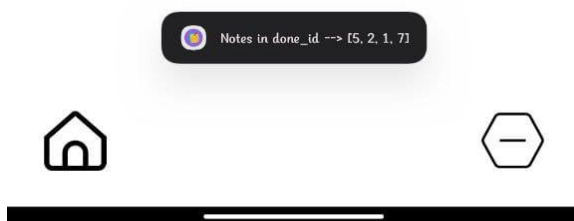

Homepage without notes

Homepage with notes

2. Task_Done_page: It contains HomeButton which denote to go hompage and '-' icon which Re-sticks all the notes that have done before.
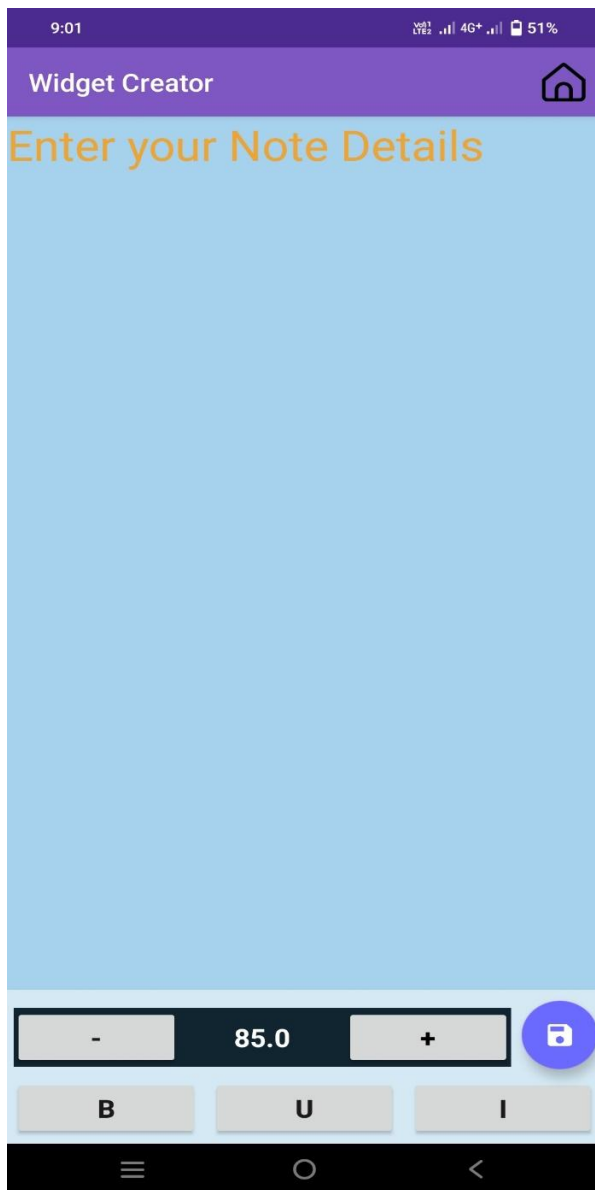

Done_Task_Page with notes

Done_Task_Page without notes

3.**Widget Creator Page**: This is widget creator page. It contains some font Style icon like bold denotes 'B', underline denotes 'U', italic denotes 'I', '+' denotes font size increasing, '-' denotes font size decreasing. It also contains 'save' and 'home' icon.

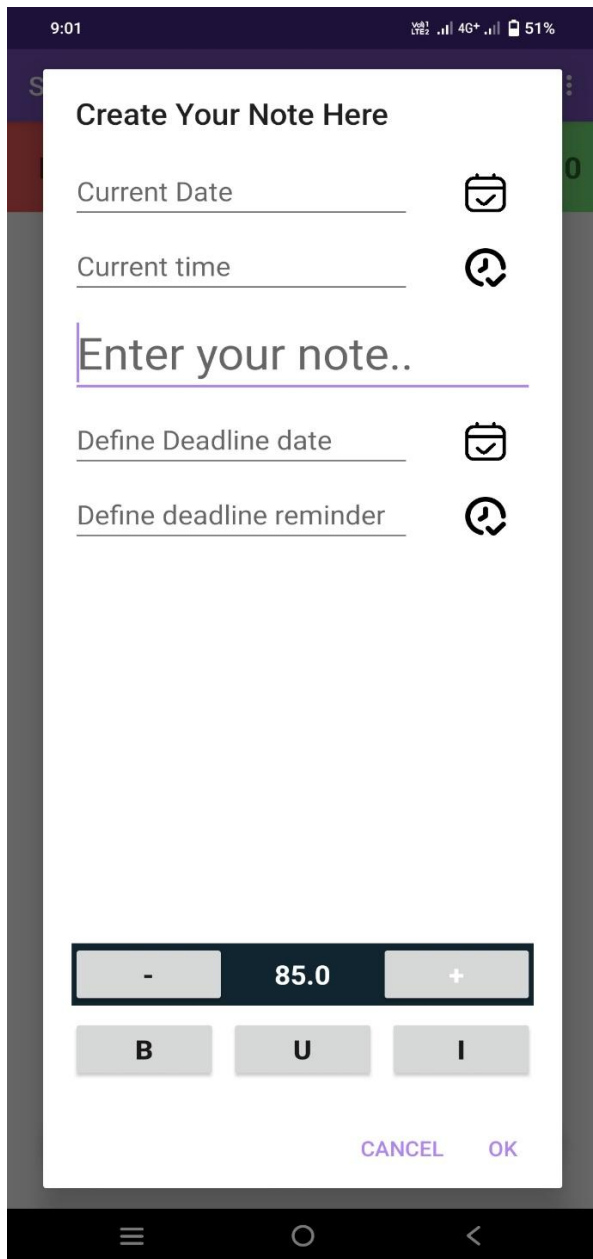4.**Widget on phone's screen**: This is widget which is in phone's screen.
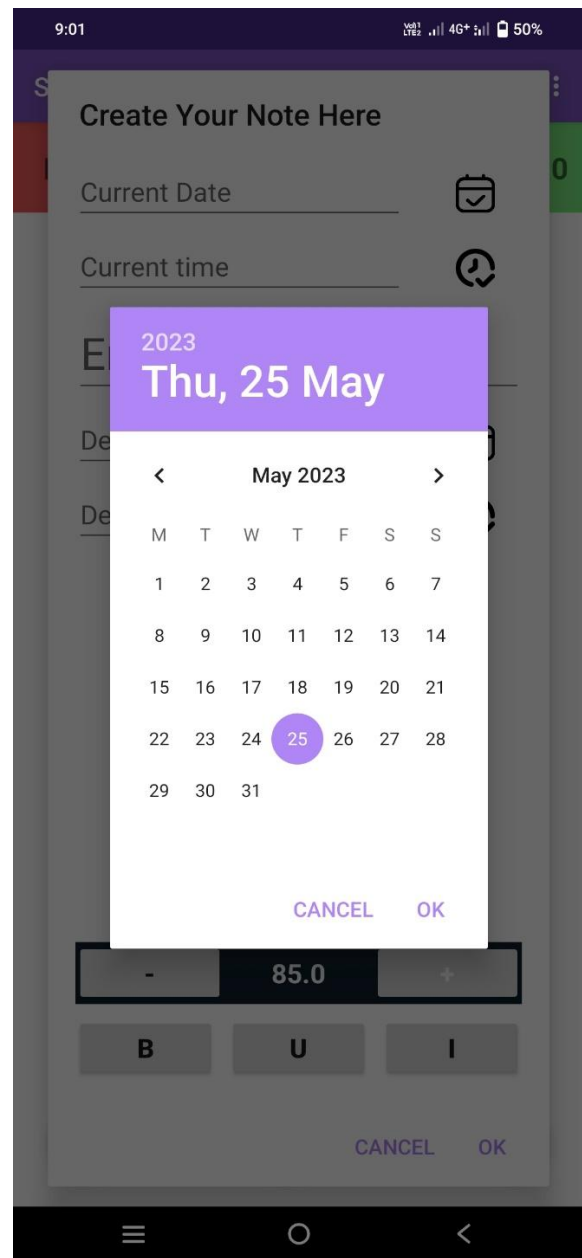

Widget Creator Page

Widget in phone's screen

5.Update Note pop up Menu: It contains Many features like 'Date picker dialog', 'Time_picker dialog', bold ,underline, italic and so on.
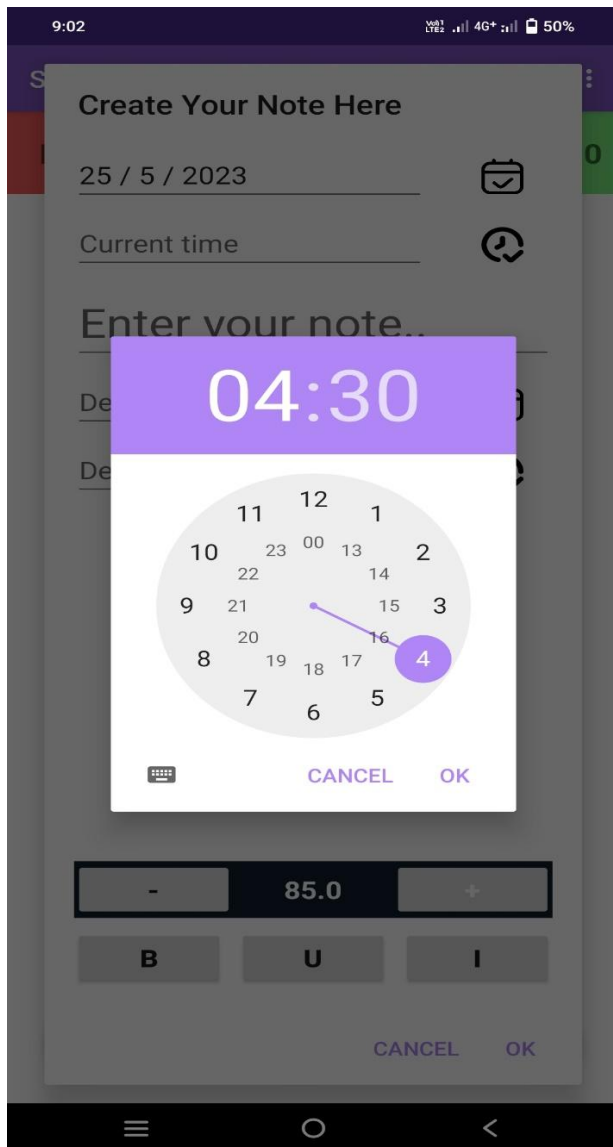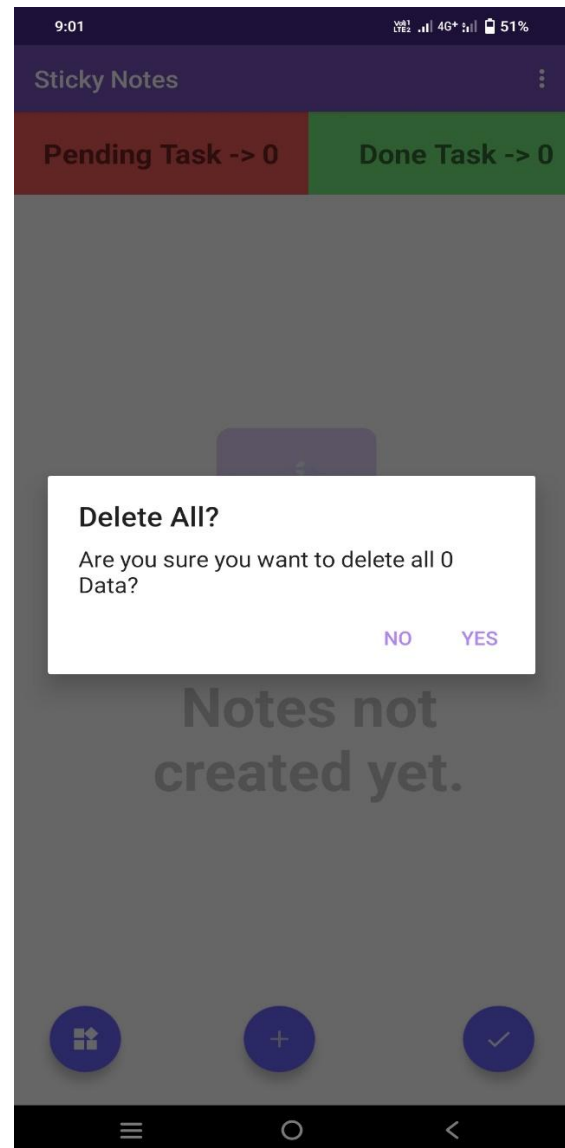

Update_Time_Pop_Up_Menu

Date_Picker Dialog

6.Date Picker dialog : It helps to select current date and deadline date.

7.Time Picker dialog : It helps to select current time and deadline time.

Time_Picker Dialog   All delete Dialog

8.All Delete Icon: It defines asking a question for deleting all data.

Conclusion

In conclusion, building a sticky note application for Android involves a combination of user interface design, data management, and integration of features that enhance productivity and organization. Using modern tools like XML layout compose allows us to create a more efficient and maintainable codebase for building interactive and visually appealing sticky note application.

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