



Android Study Jams

App Submission

Name: Praseon Kumar – ASJ Facilitator

Institute Name: IIT Ranchi

App Name: Study Journal

Project Link: <https://git.io/JS7EW>

App Release Link: <https://git.io/JS7EI>



Problem Statement:

As a student it is important to manage time to cover each subjects properly with a proper break between two sittings. During preparation of competitive exams, students do sitting of 2-3 hours twice or thrice a day. They usually use timer or alarm application to get notified about their timings, but these applications does not have functionality to save their progress in study. If they studied something one month or two months back, they don't remember what they have done. This problem increases proportional to the time.

Solution:

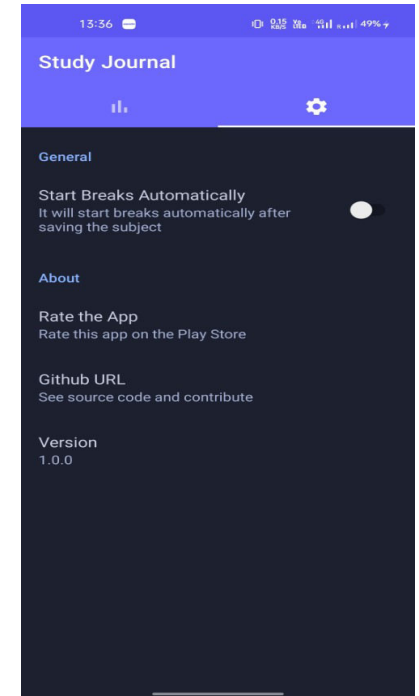
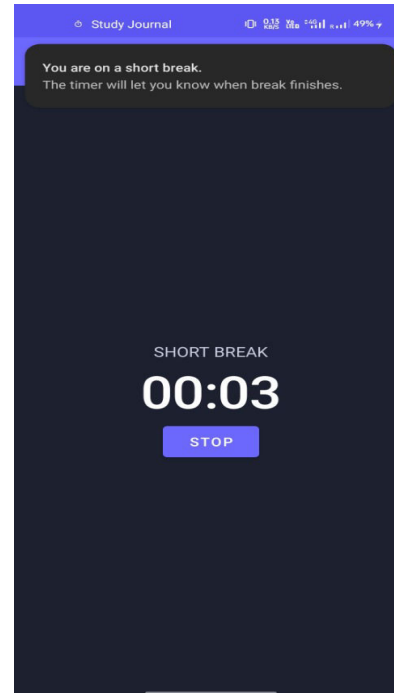
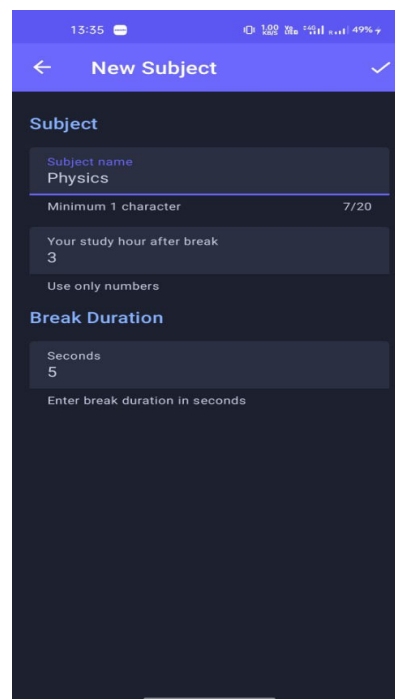
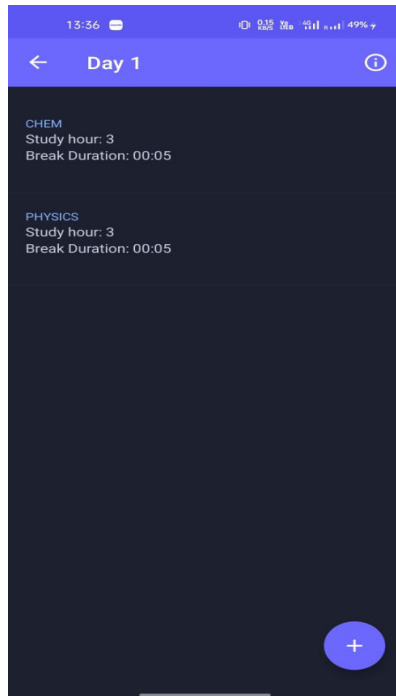
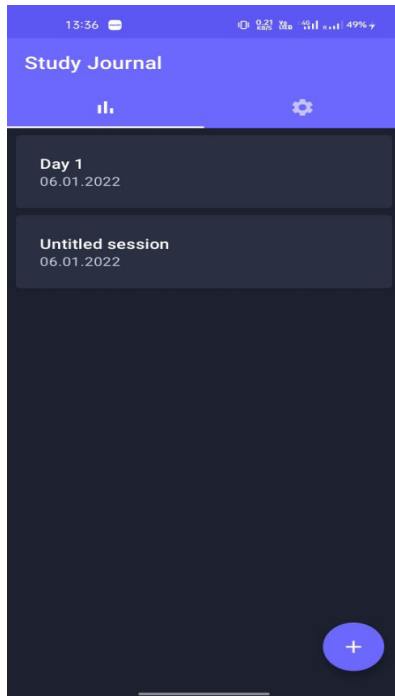
There may be one solution to do both tasks at a time if we are somehow able to track their progress and save it to local of android. And also give them in hand timer support to manage their breaks between two consecutive studies.

By taking these things into consideration, I have developed an application named Study Journal which has above mentioned features.

Features:

1. Creating study notes: Tap the + button on the main screen to create a new note.
2. Renaming study notes: Tap the Info options button on a study note to rename it.
3. Deleting study notes: Swipe left on a study note you wish to remove.
4. Restoring the last deleted study note: Tap the Undo button in a pop-up message to restore the last deleted study note.
5. Adding subjects: Tap the + button on a study note to create a new subject.
6. Deleting subjects: Swipe left on a subject you wish to remove.
7. Restoring the last deleted subject: Tap the Undo button in a pop-up message to restore the last deleted subject.
8. Starting timer: Add a new subject, and a timer starts to count down as rest time manually or automatically, depending on the settings.
9. Timer notifications: Study Journal automatically alerts you with a vibration after your rest time is over.
10. Choosing timer launch mode: Navigate to the Settings screen on the main screen and tap the toggle button.

Screenshots of screens:



Concepts Used:

I have used multi-modular and clean architecture with MVVM for the development of application. Also used coroutines & flow for creating timer module.

Tech stacks and open source libraries used:

1. Kotlin
2. Coroutines & Flow – for multithreading
3. Recyclerview – for creating dynamic lists
4. Preferences – interactive settings screen
5. Room Persistence – for local cache and database
6. Navigation – for navigating between fragments
7. Lifecycle – lifecycle aware components
6. Dagger-Hilt – for dependency injection
7. ViewBinding delegate – a property delegate for viewbinding
8. Junit – simple framework for testing

9. Espresso – for UI tests