Mobile Application Development Laboratory
Model Exam

Employee Task Application

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Question:

Design an employee attendance application using Android Studio with following functionalities. (Use Sqlite as storage method)

    i)   Have 2 types of users – Employee and Admin. An employee can register with the app using a set of details. Each employee should have a unique id and username. The employee can login app with a username and password. Have a page that shows his name, welcome message, and the set of tasks he needs to do today (tasks can be in points). Have a checkbox and text (something like "I log in for work"). Upon clicking enable the submit button. Upon submission, redirect to a page that displays the task, check box, text ("I have completed the task"), and submit button.

    ii)   Admin can log in (have predefined username: admin Password: admin) and view the employees who logged in for work, and the amount of time to complete the task. Admin can also add the tasks.

    iii)   Use toasts wherever necessary(use at least twice)

Aim:

To make an android application for Employee management using SQLite.

Technical Concepts Learnt:
- Menus.
  - Menus are needed to add hidden functionality such as "Create Task" and "Logout".

- Toasts.
  - Toasts are used to alert the user and indicate the status of every operation the user performs.
  - Eg: "Login Successful", "Invalid Information" etc.

- ListView and ListViewAdapters.
  - Used to display information from the database in List Form.
  - Eg: EmployeeListCursorAdapter, TaskListCursorAdapter.

- SharedPreferences.
  - Used to store small key value pairs, and persist a login session.

- Intents.
  - Used to switch between activities and pass information between them using Extras.

- SQLite.
  - Used as our main storage, contains the tables "Employee" and "Task". Stores all information.
  - Information is accessed through a SQLiteDatabase wrapper class.
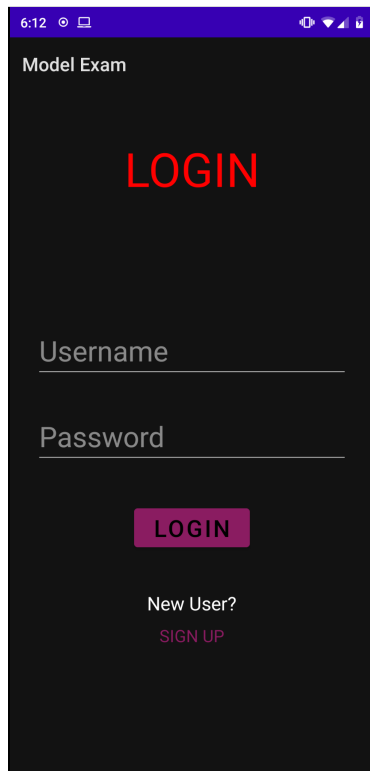
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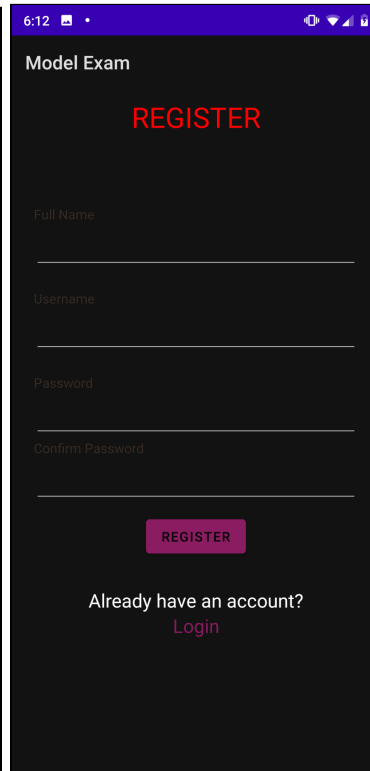https://drive.google.com/file/d/1CQqlXSSj6RZeh_NPi2YmmGwHE0Ys79fR/view?usp=sharing

Apk:
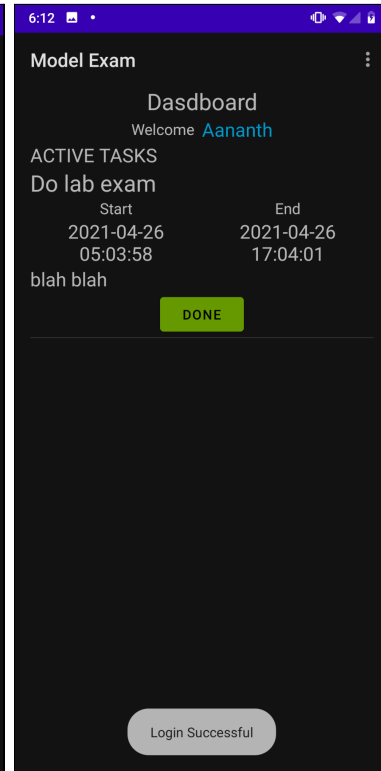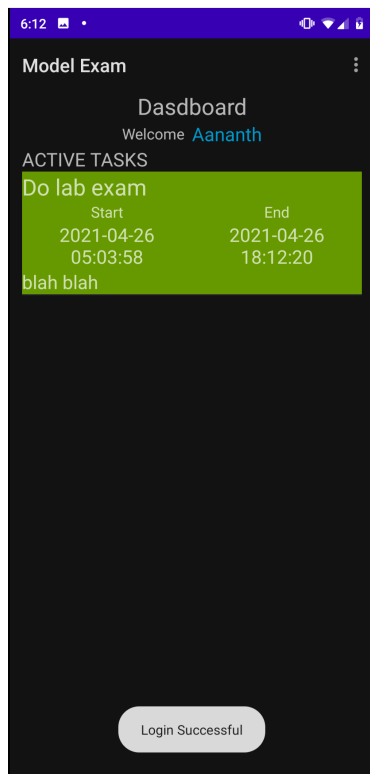https://drive.google.com/file/d/1c_DgTmR0XTkc6kCDYuURFgNfHlElQeOf/view?usp=sharing
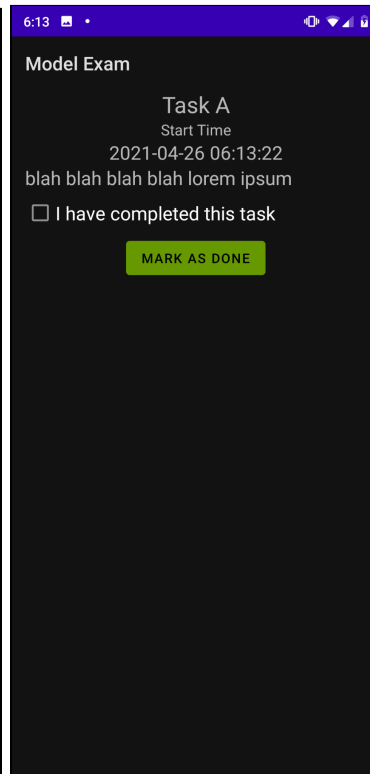
Screenshots:
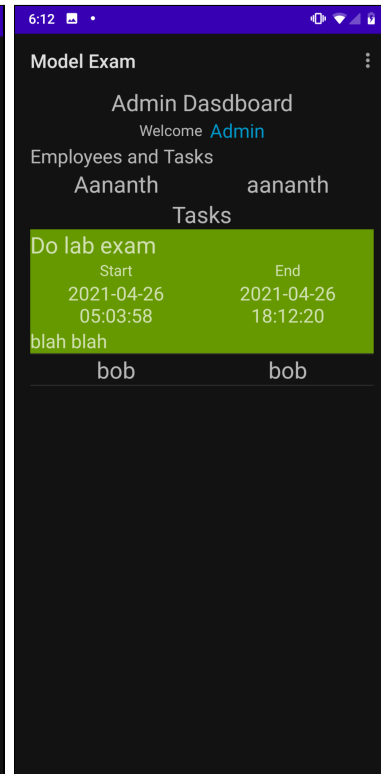

(i) Login

(ii) Register
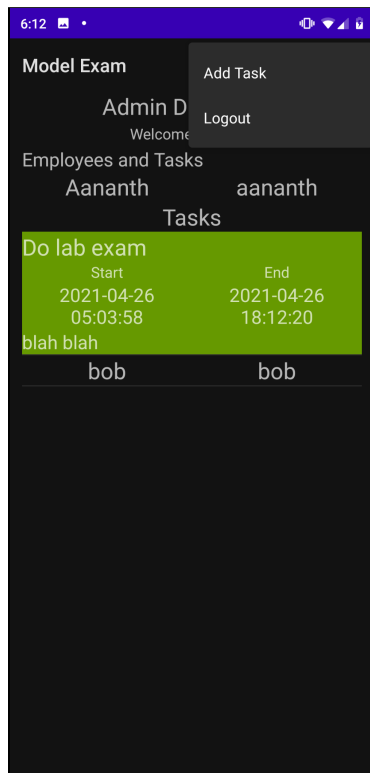

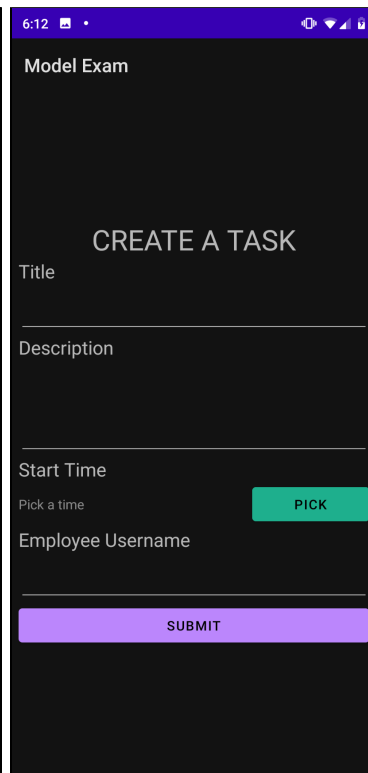(iii) Dashboard

(iv) Dashboard - Done

(v) Mark as Done

(iii) Admin Dashboard

(vii) Menu   (viii) Create Task

Conclusion:

An android application for Employee management was made using SQLite. Various concepts in Android App Development were explored including:

- Menus.
- Toasts.
- ListView and ListViewAdapters.
- SharedPreferences.
- Intents.
- SQLite.