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ASSIGNMENT 3



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Course : Mobile App Development
Section: SE 5-2

Presented to :

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Smart Home Dashboard

The app allows users to monitor and control smart home devices such as lights, fans, air conditioners, and cameras. The main focus is on layout, interactivity, navigation, and responsive UI design.

➤ Features Implemented

1. Dashboard with Device Grid

- Main screen shows devices using **GridView**.
- Each device is displayed inside a **Card widget** containing:
 - Device icon
 - Device name
 - Toggle switch (ON/OFF)
 - Status text (e.g., “Light is ON”)

2. Custom AppBar

- Title: **Smart Home Dashboard**
- Menu icon on the left
- Profile picture icon on the right



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10:50 Smart Home Dashboard

My Devices

1 of 4 devices are ON

Living Room Light

Living Room

OFF

Bedroom Fan

Bedroom

ON

Kitchen AC

Kitchen

OFF

Front Door Camera

Entrance

OFF

+ Add Device

10:56 Smart Home

Control your devices

- Dashboard
- All Devices 4
- Rooms
- Settings
- Help & Support



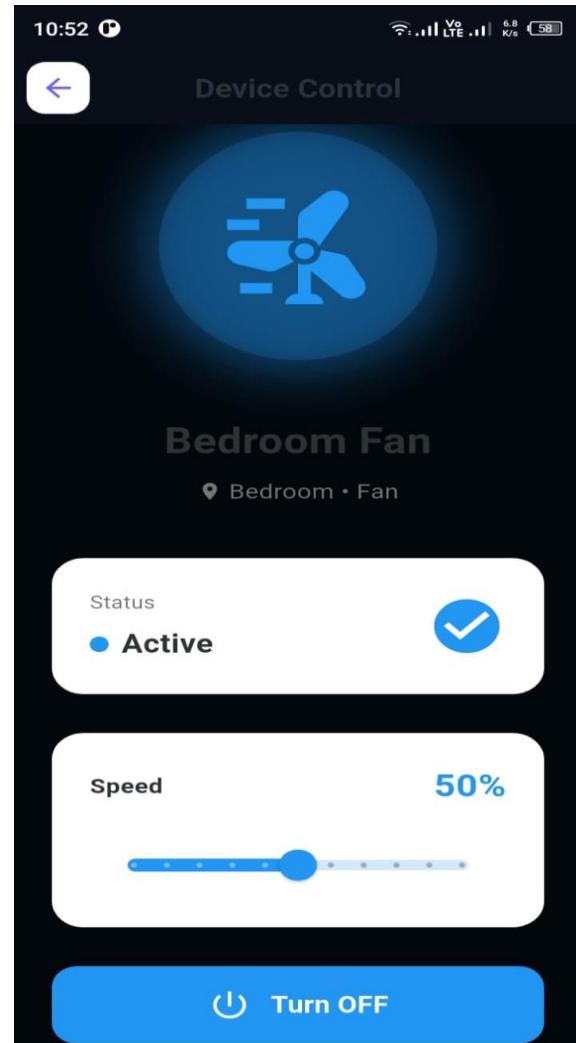
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3. Device Details Screen

When any device card is tapped (via **GestureDetector/InkWell**), app navigates to a new screen showing:

- Large device icon
- Current device status
- Slider control for brightness/speed/temperature
- Back button to return to dashboard





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4. Add Device Functionality

FloatingActionButton opens a form to add a new device:

- Device name
 - Device type (dropdown)
 - Room name
 - Status (ON/OFF – default OFF)
- After submission, the device appears dynamically on the dashboard.

10:53 10:53

Add New Device

Device Name
SONY HDR

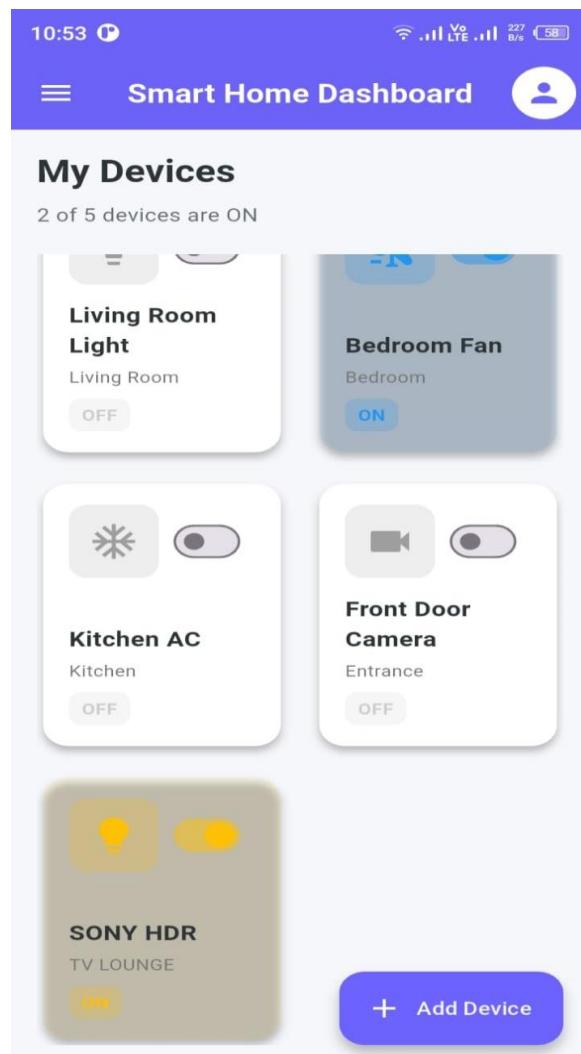
Device Type
Light

Room Location
TV LOUNGE

Initial Status
Turn ON by default

Add Device

Cancel

The dashboard shows four cards: 1. Living Room Light (Living Room) - OFF. 2. Bedroom Fan (Bedroom) - ON. 3. Kitchen AC (Kitchen) - OFF. 4. Front Door Camera (Entrance) - OFF. Below the cards is a summary: "2 of 5 devices are ON". At the bottom is a card for the newly added SONY HDR in the TV LOUNGE, which is currently ON.



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5. Stateful Interactivity

Stateful widgets are used for:

- Toggling device switches
- Updating real-time status
- Changing slider values
- Adding devices to the dashboard list

7. Responsive Layout

- UI adapts to various screen sizes using:
 - **Flexible, Expanded**
 - **MediaQuery**
 - Scroll support for smaller screens

8. Theming and Styling

- Custom **ThemeData** for app-wide colors, typography, and icons.
 - Modern, clean visual design for all screens.
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