**1. SAdminHome.dart**

* **Feature:** Super Admin Dashboard
* **Purpose:** Provides an interface for the Super Administrator role.
* **Components:**
  + **UI Elements:**
    - CustomHeader: Displays the title "Super Admin Dashboard".
    - Drawer: Side menu for navigation.
    - GridView: Displays dashboard options in a grid layout.
    - Card (\_buildDashboardCard): Represents clickable options on the dashboard.
    - ListTile (\_buildDrawerItem): Represents items in the drawer menu.
    - CustomFooter: Common footer element.
  + **Functionality:**
    - Displays a welcome message.
    - Option to "Remove Managers and Staffs" (accessible via drawer and dashboard card), linked to viewModel.deleteSasManager.
  + **State Management:** Uses SuperAdminDashboardViewModel.

**2. homeSAS.dart**

* **Feature:** SAS (Student Academic Services) Manager Dashboard
* **Purpose:** Provides an interface for the SAS Manager role, primarily focused on registration management.
* **Components:**
  + **UI Elements:**
    - CustomHeader: Common header element.
    - Text: Displays the current registration status ("Open" or "Closed").
    - GridView: Displays dashboard tiles in a grid.
    - Card (\_buildDashboardTile): Represents clickable dashboard actions with icons, titles, and descriptions.
    - CustomFooter: Common footer element.
  + **Functionality:**
    - Shows if student registration is currently open or closed based on viewModel.isRegistrationOpen.
    - Provides options to "Open Registration" and "Close Registration".
  + **State Management:** Uses SasManagerDashboardViewModel (handles handleTileTap actions).

**3. homeStaff.dart**

* **Feature:** SAS Staff Dashboard
* **Purpose:** Provides an interface for SAS Staff members to manage student-related tasks.
* **Components:**
  + **UI Elements:**
    - CustomHeader: Common header element.
    - Drawer: Side menu for navigation.
    - Text: Displays a personalized welcome message using viewModel.staffName.
    - GridView: Displays dashboard options in a grid.
    - Card (\_buildDashboardCard): Represents clickable dashboard actions.
    - ListTile (\_buildDrawerItem): Represents items in the drawer menu.
    - CustomFooter: Common footer element.
  + **Functionality:**
    - Displays a welcome message for the staff member.
    - Provides dashboard cards and drawer items for actions defined in staffItems:
      * Register Student (viewModel.navigateToRegister).
      * Edit Student (viewModel.navigateToEdit).
      * Put Student on Hold (viewModel.putStudentOnHold).
  + **State Management:** Uses HomeStaffViewModel.

**4. enrollment\_page.dart**

* **Feature:** Student Enrollment Dashboard
* **Purpose:** Allows students to view and manage their course enrollments.
* **Components:**
  + **UI Elements:**
    - CustomHeader: Common header element.
    - Card: Main container for the dashboard content.
    - Image: Displays a banner image (assets/images/student.png).
    - DataTable (\_buildSelectedCoursesTable): Displays currently enrolled courses with details (Code, Title, Campus) and a "Drop" action button.
    - ElevatedButton ("Drop"): Allows deregistering from a course (\_deregisterCourse).
    - Text: Displays messages when no courses are enrolled or dropped.
    - Column (\_buildDroppedCoursesList): Lists dropped or unapproved courses.
    - AddCourseButton: Button to navigate to the course selection page (/course\_selection) if not enrolled in any course (\_onAddCourse).
    - Section Titles (\_sectionTitle): Styled headers for "Current Enrollments" and "Dropped / Not Approved Courses".
    - CustomFooter: Common footer element.
  + **Functionality:**
    - Loads and displays currently enrolled courses.
    - Allows students to drop enrolled courses.
    - Loads and displays dropped/unapproved courses.
    - Provides navigation to add courses.
    - Loads selected courses passed as arguments via ModalRoute.
  + **State Management:** Uses CourseEnrollmentViewModel (manages loadEnrolledCourses, loadDroppedCourses) and local state (selectedCourses, droppedCourses).

**5. homepage.dart**

* **Feature:** Student Homepage
* **Purpose:** Serves as the main landing page for students, providing access to various services.
* **Components:**
  + **UI Elements:**
    - CustomHeader: Common header element.
    - Image: Displays a banner image (assets/images/homepage.png) with an overlay containing welcome text.
    - GridView: Displays main feature tiles.
    - Card (\_buildFeatureTile): Represents clickable feature tiles (My Profile, My Enrollment, Courses, Finance) with icons and labels.
    - CustomFooter: Common footer element.
  + **Functionality:**
    - Displays a welcome banner.
    - Provides navigation to different sections:
      * Profile (/profile, passes studentId).
      * Enrollment (/enrollment).
      * Course Selection (/course\_selection).
      * Finance (/finance).
    - Fetches the student's username using homepageViewModel.fetchUsername.
  + **State Management:** Uses HomepageViewModel.

XMLs:  
 **From courseAvailability.xml:**

* <courseAvailability> (Root Element)
* <course>
  + <course\_code>
  + <semester>
  + <offered>

 **From courses.xml:**

* <Units> (Root Element)
* <Unit> (Attributes: code, courseName)

 **From prerequisities.xml:**

* <units> (Root Element)
* <unit>
  + <code>
  + <prerequisites>

 **From programs.xml:**

* <programs> (Root Element)
* <program> (Attribute: programName)

 **From semType.xml:**

* <Units> (Root Element)
* <Unit> (Attributes: code, courseName, sem\_type)

 **From subprogrammes.xml:**

* <subprograms> (Root Element)
* <subprogram> (Attribute: subprogramName)