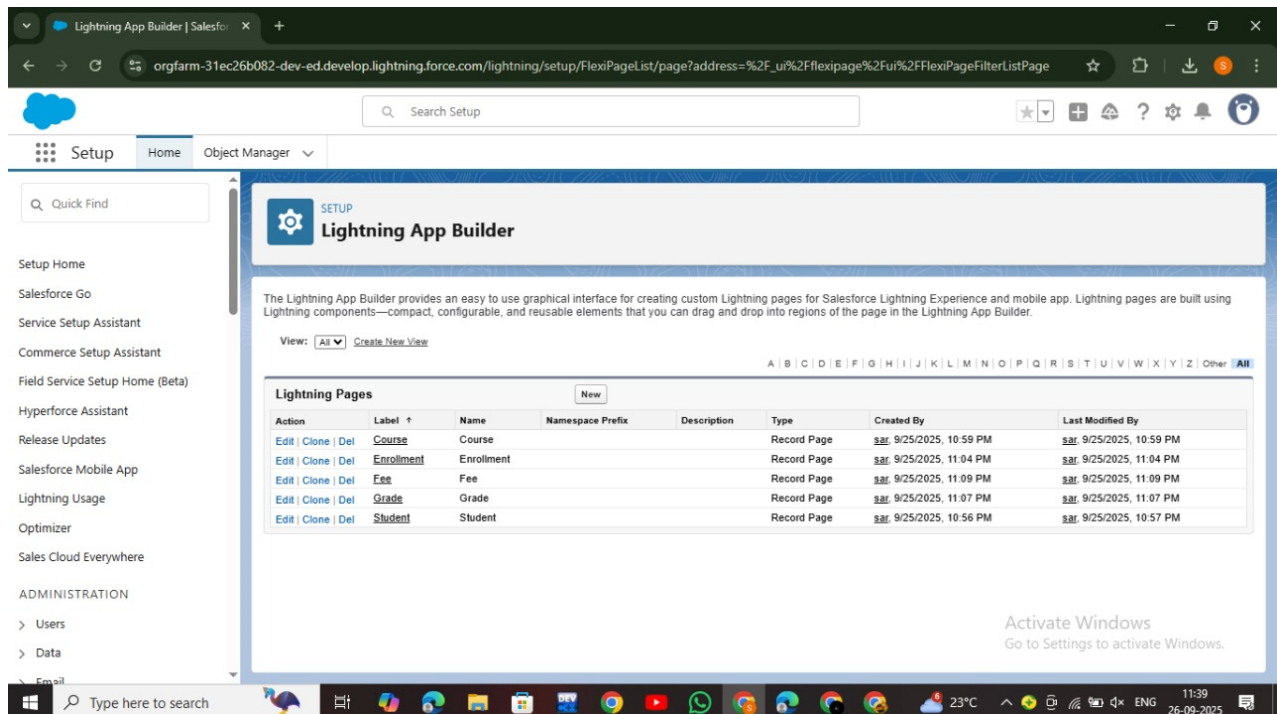# Phase 6 — User Interface Development (Student CRM)

**1. Lightning App Builder**

- Path: **Setup → App Builder → Lightning Record Pages**

- Create record pages:

    o **Student – Teacher View**

        ▪ Display: Assigned Students, related Grades, Course Enrollments.

    o **Student – Parent View**

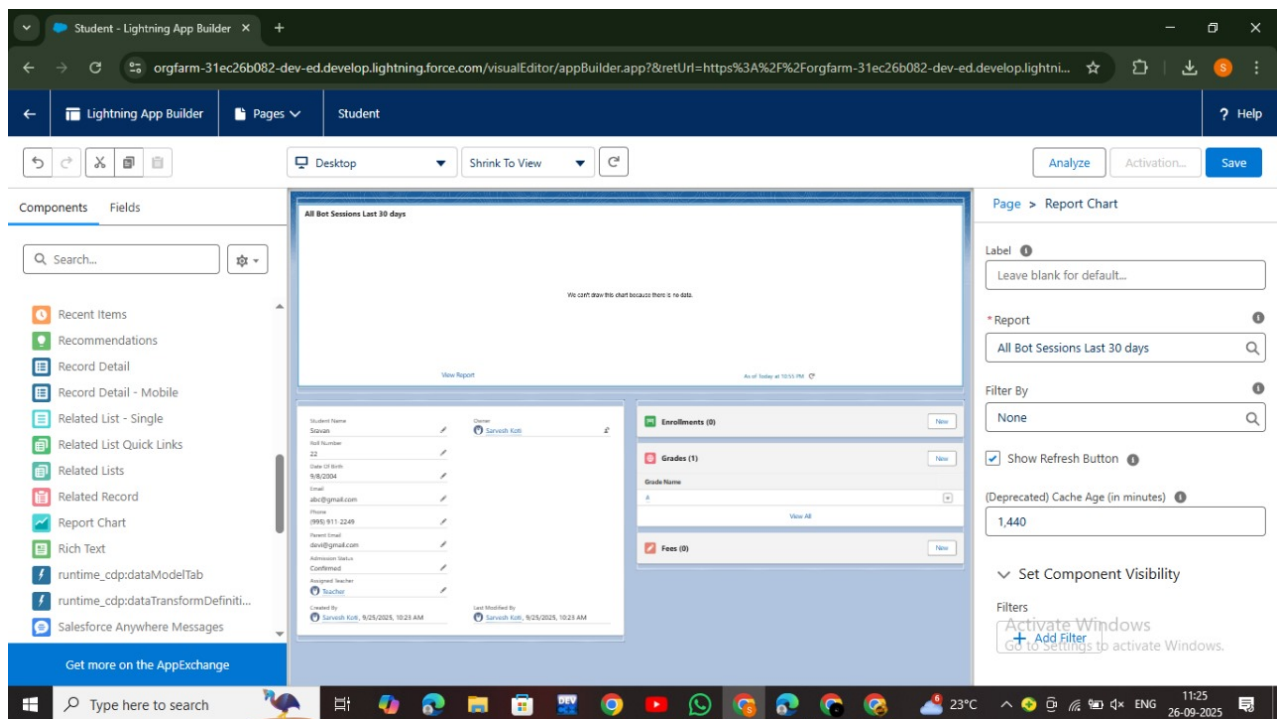        ▪ Display: Child's information, Grades, Fee Status (*Read-only*).



- Assign each record page to respective profiles:

    o Teacher → Teacher View

    o Parent → Parent View

**2. Record Pages**

- **Student – Teacher View**

  Components:

  - Student Details

  - Assigned Students List (via Related List)

  - Grades

  - GPA Summary

  - Fee Summary (*Read-only*)



- **Student – Parent View**

  Components:

  - Student Details

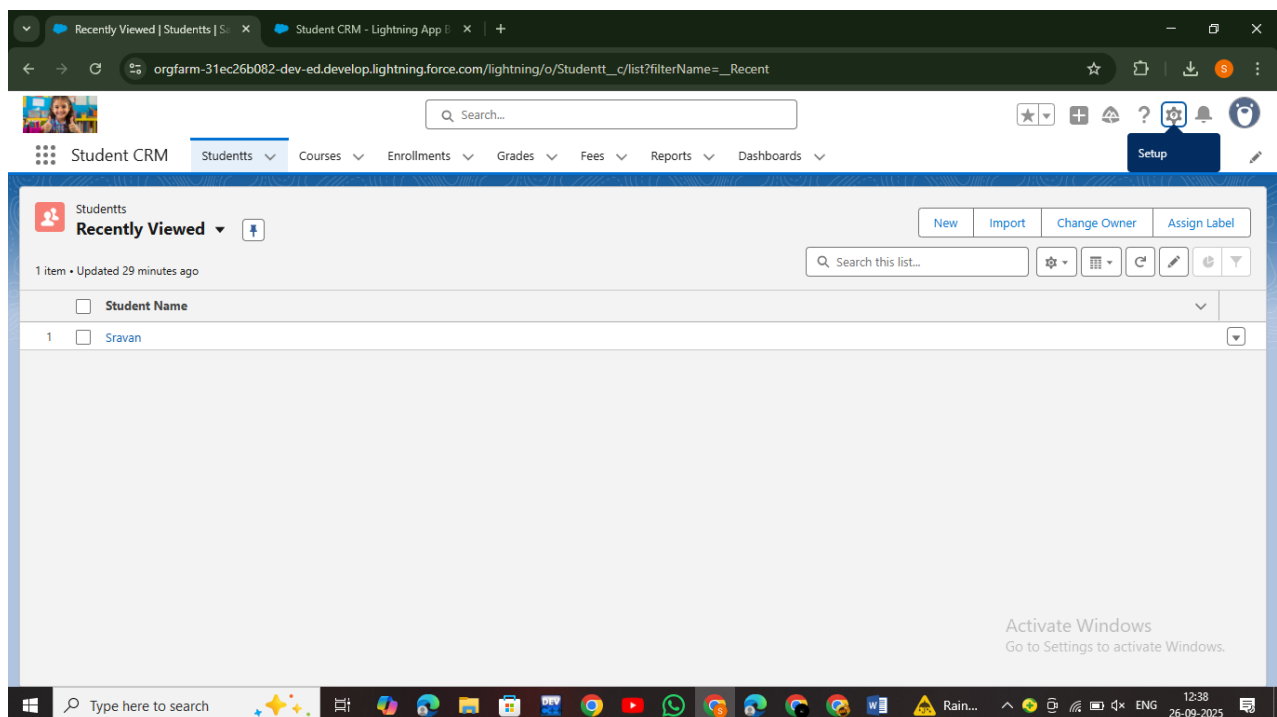  - Child's Grades

  - Fee Details

- **Admin View**

  Components:

- o Courses

- o Fees

- o Grades

- o Enrollments

- **Action:** Activate each page per profile/record type.

## 3. Tabs

Expose key objects as tabs in the Student CRM app:

- Students

- Courses

- Enrollments

- Grades

- Fees

- Reports

- Dashboards

**4. Home Page Layout**

Custom **Student CRM Home Page** should include:

- **Dashboard Component**
  - Pending Fees Report
  - Average GPA Report

- **List Views**
  - Recently Admitted Students
  - Upcoming Exams

- **Reports**
  - Student Count by Course
  - Fees Paid vs Pending

**5. Utility Bar**

Utility Bar for Student CRM App:

- Quick Actions:
  - "Create Student"
  - "Record Fee Payment"
- Reports/Dashboards:
  - One-click analytics access

**6. Lightning Web Component (LWC) — Upcoming Exams / Fee Due**

LWC should display:

- **Upcoming Exams**
  - Course + Date + Student
- **Pending Fees**

   o Student + Fee Type + Due Date + Status

Placement:

- Teacher View → Upcoming Exams

- Finance View → Pending Fees

## 7. Apex with LWC

Create Apex Class **StudentController** to query:

- All **Grade__c** records with *Exam_Date__c in future*

- All **Fee__c** records with *Status = "Pending"*

- LWC calls this class via **@wire adapter** to fetch data

## 8. Wire Adapters

- Use **@wire** in LWC for real-time updates.

- Data auto-refreshes when changes occur.

- No manual refresh required.

## 9. Results to Validate

- Teachers → See live list of upcoming exams & assigned students.

- Parents → View child's details, grades, fee status (custom page).

- Finance Officers → Quickly view pending fees & record payments.

- Admin → Real-time monitoring of Students, Courses, Fees, Grades.

- Utility Bar → One-click access to reports, analytics, quick actions.