

# Institute Management System Using Salesforce CRM

## Phase 1: Problem Understanding & Industry Analysis

### 1. Requirement Gathering

Institute Management require a system to manage student details, course enrollments, attendance, grades, and fees in a centralized manner. The requirements were gathered from administrators, teachers, and students to identify challenges in manual management.

### 2. Stakeholder Analysis

- **Students** – Need easy enrollment, grade tracking, and fee updates.
- **Teachers** – Need to record attendance, manage grades, and monitor performance.
- **Administrators** – Require centralized control over student data, reporting, and fee collection.
- **Parents/Guardians (Future)** – Require visibility into student performance and attendance.

### 3. Business Process Mapping

- **Student Admission** → Creation of student record.
- **Course Enrollment** → Mapping students to multiple courses.
- **Attendance Tracking** → Daily attendance marking per course.
- **Grade Management** → Entering marks and calculating GPA.
- **Fee Management** → Recording payments, balances, and due alerts.
- **Reporting & Analytics** → Generating performance, fee, and attendance reports.

### 4. Industry-specific Use Case Analysis

- Current systems in schools and colleges rely on **spreadsheets/manual records**, causing redundancy and errors.
- Industry trend is shifting to **cloud-based CRMs** like Salesforce for data accuracy and accessibility.
- Similar use cases:
  - University student portals.
  - Training centers managing course enrollments.
  - Coaching institutes tracking performance.

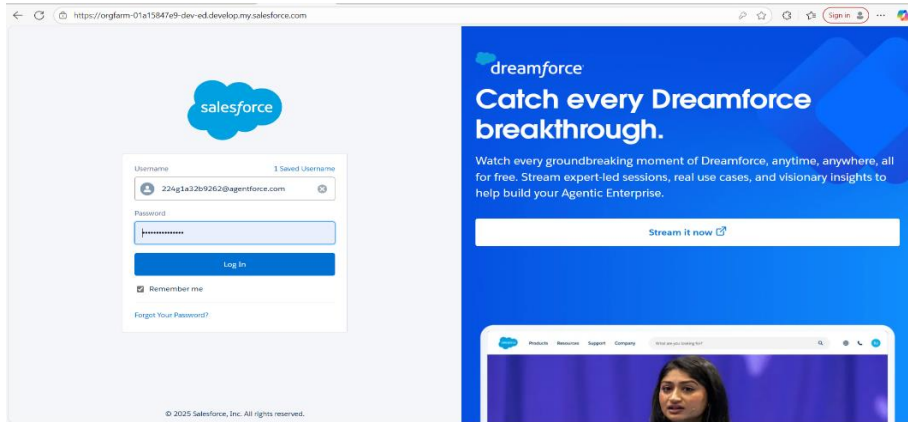
## 5. AppExchange Exploration

- Explored Salesforce **AppExchange** solutions for education management.
- Found apps like:
  - **Salesforce Education Cloud** – Comprehensive education CRM.
  - **Attendance & Fee Management Apps** – Useful but often paid solutions.
- Decided to **build a custom Institute Management System** tailored for specific institutional needs instead of relying fully on prebuilt paid apps.

# Phase 2: Org Setup & Configuration – Institute Management System

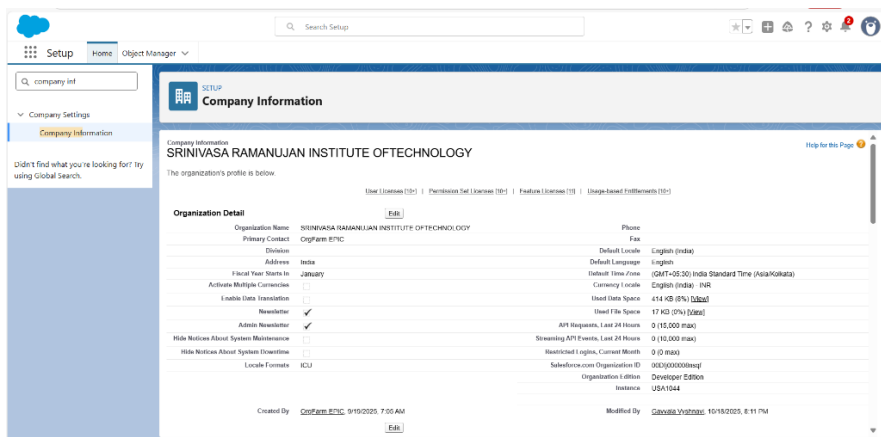
## 1. Salesforce Edition

- **Developer Edition (Dev Org)** used for project setup.



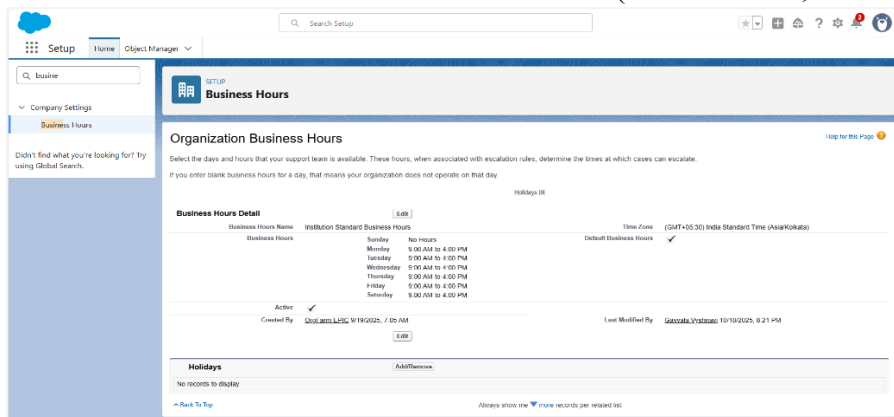
## 2. Company Profile Setup

- Configured **Institution Name, Address, Default Time Zone, Currency, and Locale.**

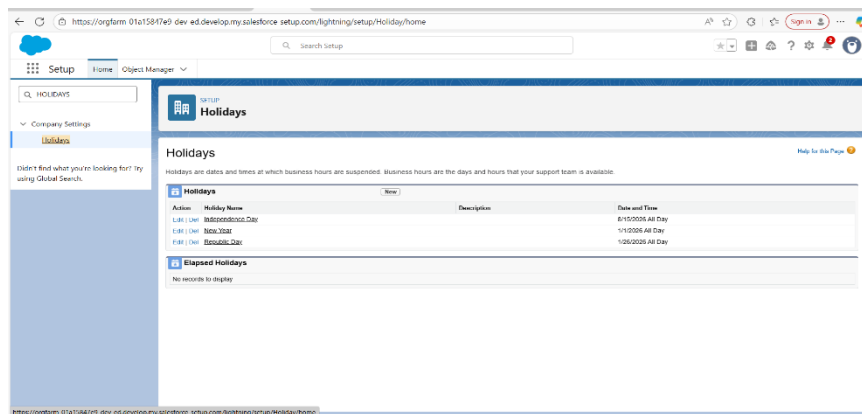


## 3. Business Hours & Holidays

- Defined **Standard Business Hours (9 AM – 6 PM, Mon–Sat).**

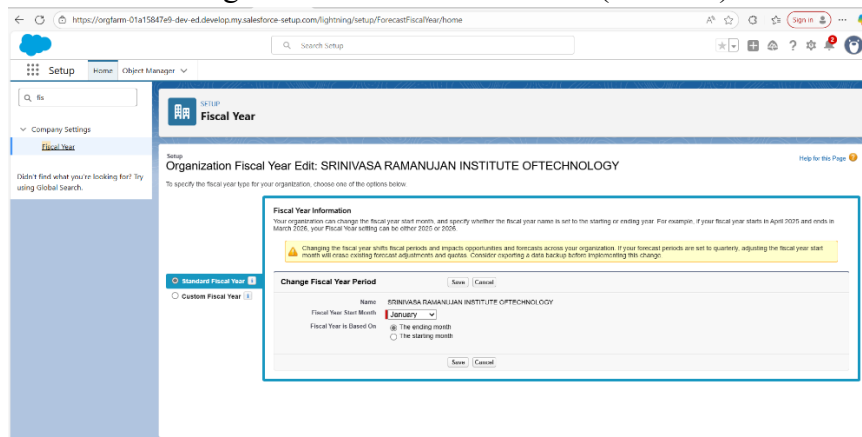


- Added holidays (e.g., Independence Day, New Year, Republic Day).



## 4. Fiscal Year Settings

- Configured Standard Fiscal Year (Jan–Dec).



## 5. User Setup & Licenses

- Created sample users with **Salesforce licenses**:
- **System Administrator** – Full access.
- **Faculty User** – Limited teaching access.
- **Student User** – Read-only/student data access.

## 6. Profiles

- Created/Modified Profiles:
- **System Administrator** (default full access).

The screenshot shows the Salesforce Setup interface for the 'System Administrator' profile. The left sidebar contains navigation links for 'Setup', 'Home', and 'Object Manager'. The main content area displays the profile details for 'System Administrator'. The 'Profile Detail' section includes fields for Name, User License, Created By, and Modified By. The 'Page Layouts' section lists various standard object layouts and their associated page layouts, such as 'Global', 'Email Application', 'Home Page Layout', 'Account', 'Alternative Payment Method', 'Appointment Invitation', 'Location Group Assignment', 'Macro', 'Object Milestone', 'Operating Hours', 'Opportunity', and 'Opportunity Product'.

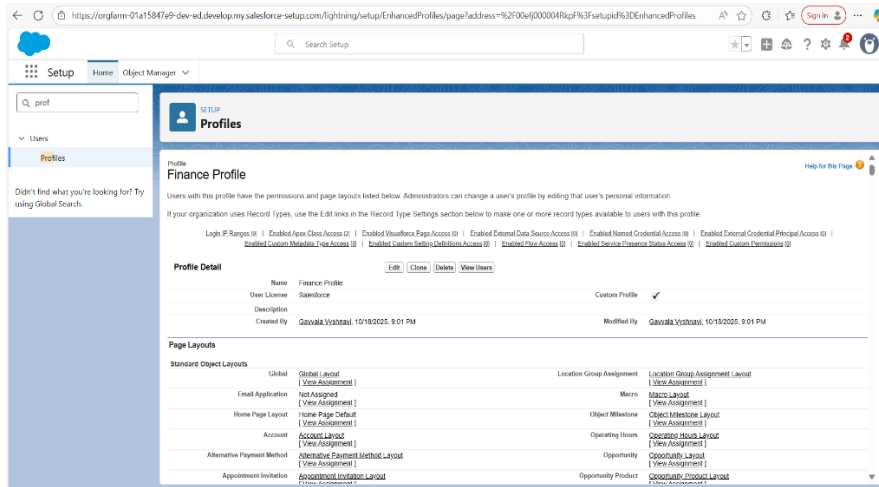
- **Teacher Profile** – Access to Students, Courses, Attendance, Grades.

The screenshot shows the Salesforce Setup interface for the 'Teacher Profile'. The left sidebar contains navigation links for 'Setup', 'Home', and 'Object Manager'. The main content area displays the profile details for 'Teacher Profile'. The 'Profile Detail' section includes fields for Name, User License, Description, Created By, and Modified By. The 'Page Layouts' section lists various standard object layouts and their associated page layouts, such as 'Global', 'Email Application', 'Home Page Layout', 'Account', 'Alternative Payment Method', 'Appointment Invitation', 'Location Group Assignment', 'Macro', 'Object Milestone', 'Operating Hours', 'Opportunity', and 'Opportunity Product'.

- **Student Profile** : To check the student details in the read only mode.

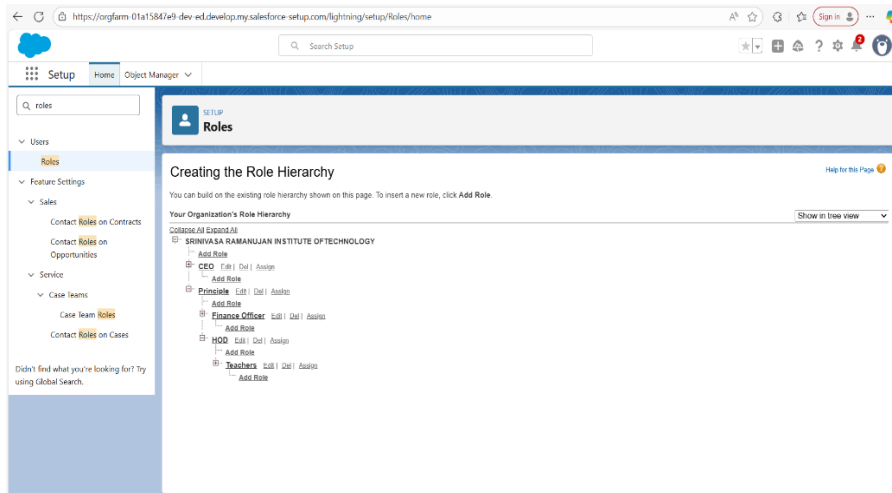
The screenshot shows the Salesforce Setup interface for the 'Student Profile'. The left sidebar contains navigation links for 'Setup', 'Home', and 'Object Manager'. The main content area displays the profile details for 'Student Profile'. The 'Profile Detail' section includes fields for Name, User License, Description, Created By, and Modified By. The 'Page Layouts' section lists various standard object layouts and their associated page layouts, such as 'Global', 'Email Application', 'Home Page Layout', 'Account', 'Alternative Payment Method', 'Appointment Invitation', 'Location Group Assignment', 'Macro', 'Object Milestone', 'Operating Hours', 'Opportunity', and 'Opportunity Product'.

- **Finance Profile – Access to Fees object.**



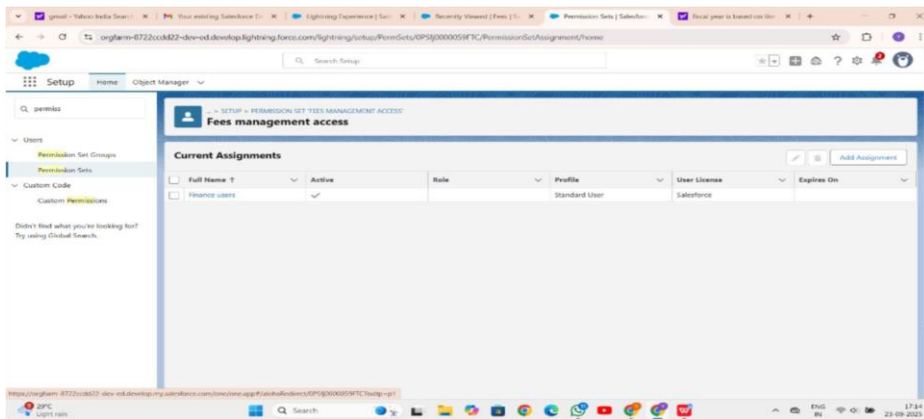
## 7. Roles

- **Defined Role Hierarchy:**
  - **Principal (Top Role)**
    - HOD
    - Finance Officer
    - Teacher



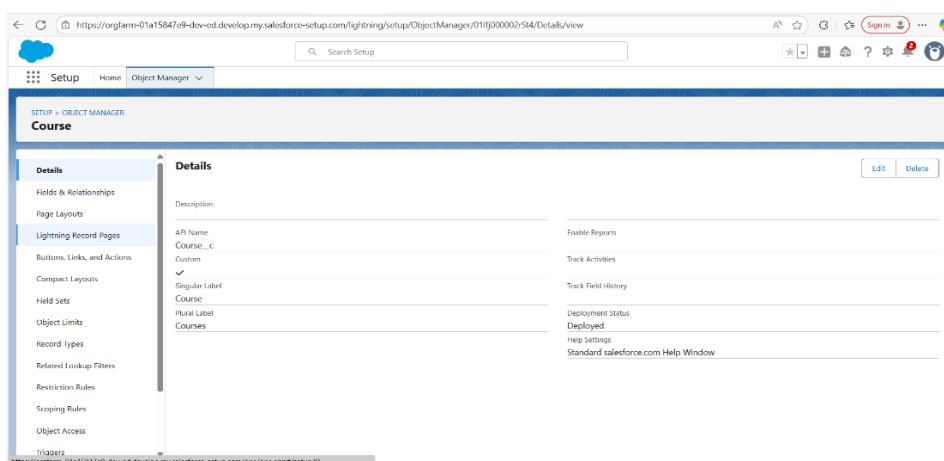
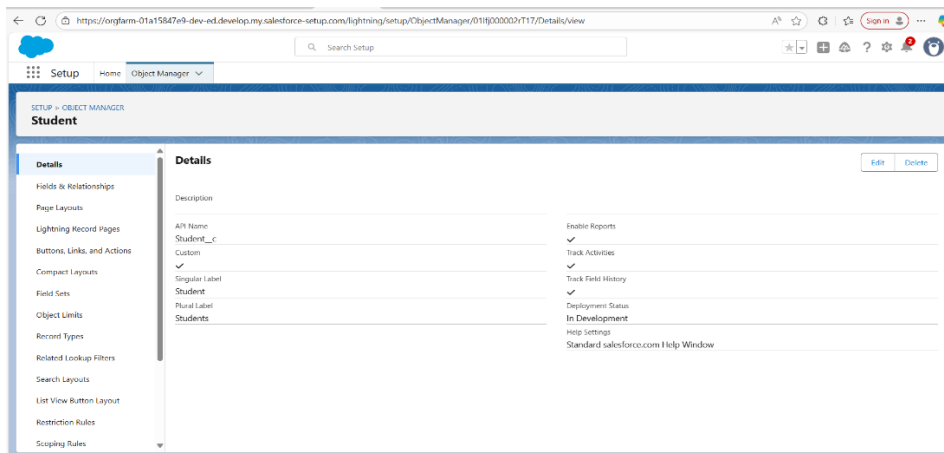
## 8. Permission Sets

- **Created Permission Sets for additional access:**
  - **Report Access – Extra reporting permissions.**
  - **Fee Management Access – Extended access to Fees object.**



## 9. Objects Created

- **Student (Custom Object)** – Manage student details.
- **Course (Custom Object)** – Store course information.
- **Enrollment (Junction Object)** – Relationship between Student & Course.
- **Attendance (Custom Object)** – Track daily student attendance.
- **Grades (Custom Object)** – Store marks, grades, GPA.
- **Fees (Custom Object)** – Manage payments and pending balances.



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Setup Home Object Manager

Setup > OBJECT MANAGER

### Enrollment

Details

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Restriction Rules
- Scoping Rules
- Object Access
- Triggers

Details

Description

API Name: Enrollment\_\_c

Custom

✓

Singular Label: Enrollment

Plural Label: Enrollments

Enable Reports

Track Activities

Track Field History

Deployment Status: Deployed

Help Settings: Standard salesforce.com Help Window

Edit Delete

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Setup Home Object Manager

Setup > OBJECT MANAGER

### Attendance

Details

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules
- Scoping Rules

Details

Description

API Name: Attendance\_\_c

Custom

✓

Singular Label: Attendance

Plural Label: Attendances

Enable Reports

Track Activities

Track Field History

Deployment Status: Deployed

Help Settings: Standard salesforce.com Help Window

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Setup Home Object Manager

Setup > OBJECT MANAGER

### Grade

Details

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules
- Scoping Rules

Details

Description

API Name: Grade\_\_c

Custom

✓

Singular Label: Grade

Plural Label: Grades

Enable Reports

Track Activities

Track Field History

Deployment Status: Deployed

Help Settings: Standard salesforce.com Help Window

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Setup Home Object Manager

Setup > OBJECT MANAGER

### Fee

Details

- Fields & Relationships
- Page Layouts
- Lightning Record Pages
- Buttons, Links, and Actions
- Compact Layouts
- Field Sets
- Object Limits
- Record Types
- Related Lookup Filters
- Search Layouts
- List View Button Layout
- Restriction Rules
- Scoping Rules

Details

Description

API Name: Fee\_\_c

Custom

✓

Singular Label: Fee

Plural Label: Fees

Enable Reports

Track Activities

Track Field History

Deployment Status: Deployed

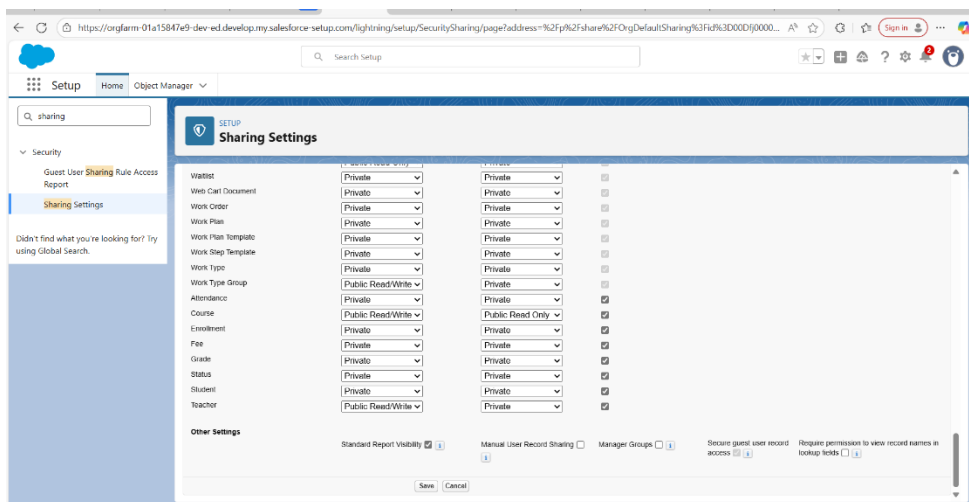
Help Settings: Standard salesforce.com Help Window

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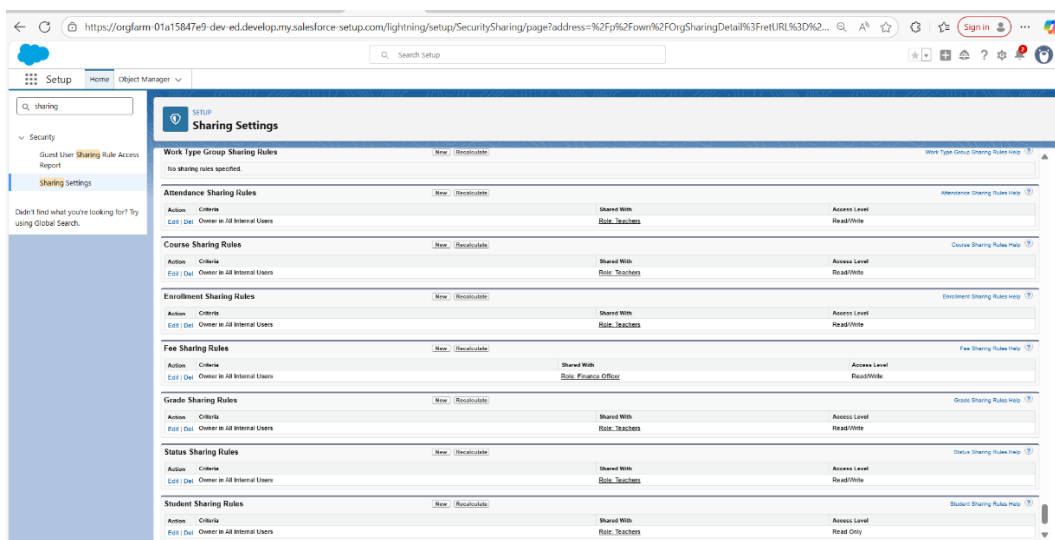
## 10. OWD (Org-Wide Defaults)

- **Student** → Private
- **Course** → Public Read Only
- **Enrollment** → Private
- **Attendance** → Private
- **Grades** → Private
- **Fee** → Private



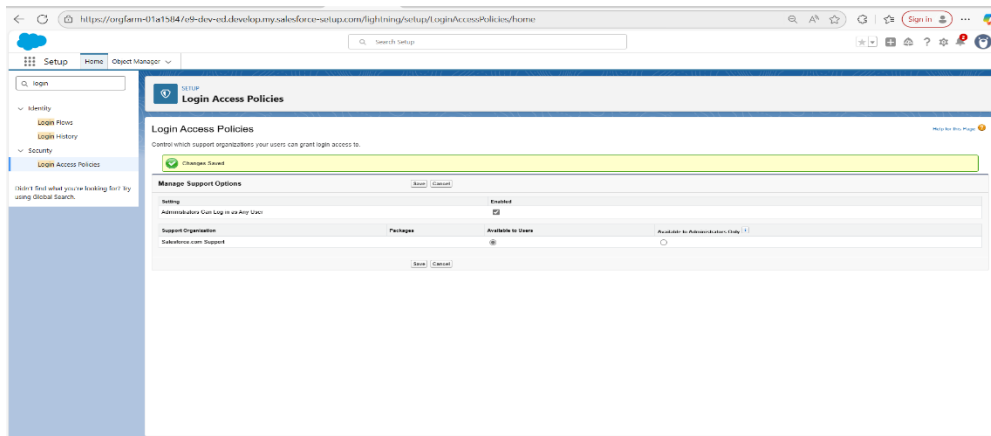
## 11. Sharing Rules

- Shared **Courses** with all Faculty.
- Shared **Student Records** read-only with Faculty (except Finance objects).
- Finance users granted access to **Fees object**.



## 12. Login Access Policies

- Enabled **Administrators Can Log in as Any User**.
- Configured **Trusted IP Ranges** for secure login.



## 13. Dev Org Setup

- Enabled **Dev Hub** in Developer Org.
- Connected CLI:
- `sf org login web --set-default-dev-hub --alias DevHub`

## 14. Sandbox Usage

- **Not available** in Developer Edition.
- Documented sandbox usage for real-world projects (Dev, Test, UAT).

## 15. Deployment Basics

- Practiced deployment commands:
- `sf project retrieve start --manifest manifest/package.xml -o DevHub`
- `sf project deploy start --target-org ScratchOrg`
- Source code and configuration stored in **GitHub repo** for version control.