# **Salesforce Student Admission Management System**

# Phase 1 (Problem Understanding & Industry Analysis):

#### • Problem Statement

Many colleges and universities still rely on manual processes, paper forms, and spreadsheets to manage admissions. These methods lead to inefficiencies, errors, and delays in the admission lifecycle. Applicants lack transparency and real-time updates, while admission officers struggle with high volumes, manual evaluations, and fragmented tracking of applications, enrollments, and fees.

Administrators also face challenges with limited analytics, making it hard to forecast trends or optimize resources. Legacy solutions often fail to provide the customization and unified experience institutions need.

This project addresses these issues by offering a cloud-based, automated platform that streamlines applications, supports structured decision workflows, automates enrollment tracking, and delivers actionable insights through reports and dashboards.

#### **Problem Understanding & Industry Analysis**

## • Requirement Gathering

Collected requirements from the perspective of a university admissions team: online student application, review workflow, enrollment tracking, and reporting needs.

# • Stakeholder Analysis

Identified stakeholders such as Admission Officers, Faculty Reviewers, Students/Applicants, and Administrators, along with their roles and expectations in the admission lifecycle.

# • Business Process Mapping

Mapped the end-to-end admission process starting from student application submission  $\rightarrow$  review & evaluation  $\rightarrow$  decision publishing  $\rightarrow$  enrollment confirmation.

# • Industry-specific Use Case Analysis

Researched admission challenges faced by educational institutions: high application volumes, manual data entry, lack of real-time tracking, and reporting inefficiencies.

# Phase 2 (Org Setup & Configuration):

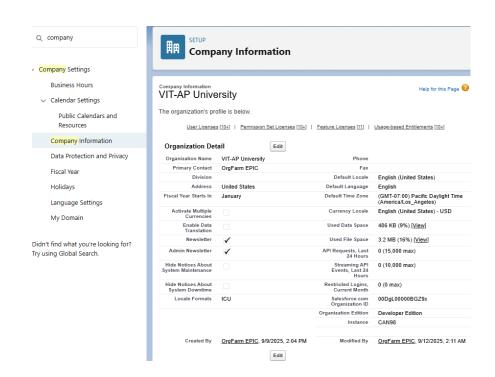
In this phase, the Salesforce Developer Org was configured to align with the requirements of the Student Admission Management System. Key configuration activities included:

#### Salesforce Edition Selection

A Salesforce **Developer Edition** was used to build and test the project, as it provides core CRM features, customization, and LWC development capabilities at no cost.

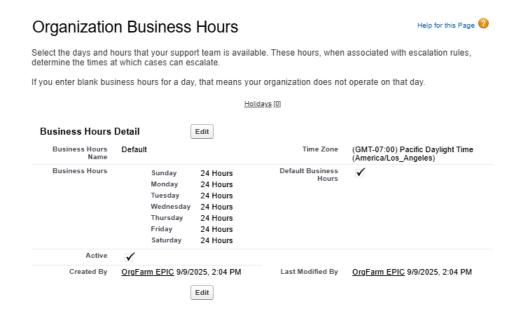
#### Company Profile Setup

The company profile was configured with institution details such as College/University name, locale, time zone, currency, and default language, ensuring consistency across records.



## Business Hours & Holidays

Defined admission office working hours and academic holidays to be used in workflows (like application submission SLAs or automated responses)

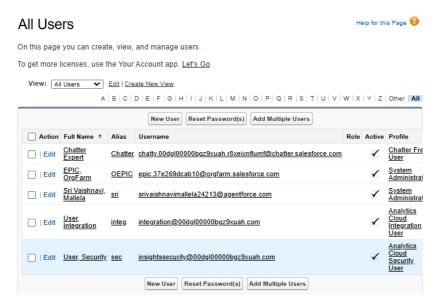


#### Fiscal Year Settings

Configured fiscal year settings to align with the **academic calendar** for reporting admission data semester/annual basis.

## • User Setup & Licenses

Created sample users (e.g., Admission Officer, Faculty Reviewer, System Admin) with appropriate Salesforce licenses for testing.



#### Profiles & Roles

Configured **custom profiles** (e.g., Admission Officer, Student Counselor) and **role hierarchy** (University → Admissions Director → Admission Manager → Admission Officer) to reflect the institution's structure.

# Your Organization's Role Hierarchy Collapse All Expand All The VIT-AP University Add Role Admissions Director Edit | Del | Assign Add Role Admissions Manager Edit | Del | Assign Add Role Admissions Officer Edit | Del | Assign Add Role Add Role

#### Permission Sets

Built **permission sets** for granting extra access to specific users (e.g., granting access to dashboards or LWC components).

## Organization-Wide Defaults (OWD)

Set baseline record-level security:

- o Student Applications → **Private** (only owners & managers can see)
- o Courses → **Private** (since they're institution-wide)
- o Enrolled Students → **Private** (sensitive student details)



# Sharing Rules

Created sharing rules so **Admission Officers** can access applications submitted in their department, while **Admins** retain full access.

## Login Access Policies

Configured policies for secure login, including session timeout and trusted IP ranges.

## Dev Org Setup

Installed Salesforce CLI and linked VS Code to the Dev Org for metadata deployment and retrieval.

	NS OUTP	PUT DEBUG CONSOLE	TERMINAL	PORTS I	HISTORY	
PS C:\Users\HP\OneDrive\Desktop\Salesforce crm\StudentAdmissionCRM> sfdx force:org:list						
A	lias	Username		Org Id	Status	
M	ySanbox	srivaishnavimallela	24213@agentf	force.com	00DgL00000BGZ9xUAH	Connected

#### Sandbox Usage

Though not mandatory in Developer Edition, sandbox strategies were discussed (e.g., UAT for testing, Full Sandbox for production-like data).

## • Deployment Basics

Learned deployment methods:

- Change Sets (Admin way)
- o SFDX CLI & GitHub (Developer way, used in this project)

# **Phase 3 (Data Modelling & Relationships):**

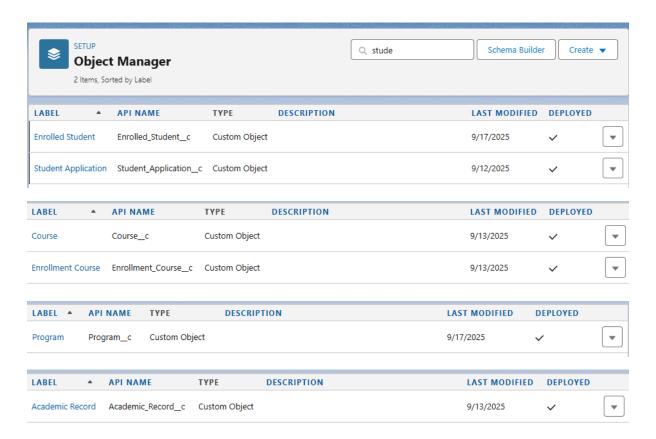
# Standard & Custom Objects:

• **Standard objects:** User, Contact for student contacts and admission officers.

# • Custom objects:

- Student\_Application\_\_c stores student application details (name, DOB, email, GPA, program applied)
- Enrolled\_Student\_\_c tracks enrolled students and links to Student Application
- Course\_\_c stores available coursese

- Enrollment\_Course\_\_c junction object linking students to courses
- o Program\_c stores programs offered by the institution
- Academic Records c stores student grades and transcripts



#### Fields:

- Defined fields for each object:
  - Student\_Application\_\_c: First Name, Last Name, Email, Program (Lookup), GPA, Status, Submitted Date etc
  - Enrolled\_Student\_\_c: Student (Lookup), Application (Lookup, required), Enrollment Status, Start/End Dates, Fees Paid etc
  - o Course\_c: Name, Course Code, Credits, Program (Lookup) etc
  - o Program\_c: Name, Duration, Type etc
  - Academic\_Records\_\_c: Student (Lookup), Course (Lookup),
     Grade, Semester etc
- Used appropriate data types: Text, Number, Date, Lookup, Picklist, Auto Number

# Student\_Application\_\_c:

Fields & Relationships 17 Items, Sorted by Field Label		
FIELD LABEL	FIELD NAME	DATA TYPE
Admission Officer	Admission Officer_c	Lookup(User)
Applicant First Name	Applicant_First_Name_c	Text(80)
Applicant Full Name	Applicant Full Name_c	Formula (Text)
Applicant Last Name	Applicant Last Name_c	Text(80)
Application Number	Name	Auto Number
Created By	CreatedByld	Lookup(User)
Date of Birth	Date_of_Birthc	Date
Decision Comments	Decision_Comments_c	Long Text Area(32000)
Email	Email_c	Email
High School GPA	High_School_GPA_c	Number(3, 2)
Last Modified By	LastModifiedByld	Lookup(User)
Notes	Notes_c	Long Text Area(32768)
Owner	Ownerld	Lookup(User,Group)
Phone	Phone_c	Phone
Program	Program_c	Lookup(Program)
Status	Status_c	Picklist
Submitted Date	Submitted_Date_c	Date/Time

# Enrolled\_Student\_c:

#### Fields & Relationships

12 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE
Application	Application_c	Lookup(Student Application)
Created By	CreatedByld	Lookup(User)
End Date	End_Date_c	Date
Enrollment Number	Name	Auto Number
Enrollment Status	Enrollment_Status_c	Picklist
Fees Paid	Fees_Paidc	Currency(16, 2)
Last Modified By	LastModifiedByld	Lookup(User)
Name	Name_c	Text(30)
Owner	Ownerld	Lookup(User,Group)
Payment Status	Payment_Statusc	Picklist
Start Date	Start_Date_c	Date
Student Contact	Student_Contactc	Lookup(Contact)

## Course\_\_c:

#### Fields & Relationships

8 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE
Course Code	Course_Code_c	Text(20)
Course Name	Name	Text(80)
Created By	CreatedByld	Lookup(User)
Credits	Credits_c	Number(2, 0)
Current Student Count	Current_Student_Countc	Number(18, 0)
Last Modified By	LastModifiedByld	Lookup(User)
Owner	Ownerld	Lookup(User,Group)
Program	Program c	Lookup(Program)

# Program\_c:

#### Fields & Relationships

10 Items, Sorted by Field Labe

FIELD LABEL	FIELD NAME	DATA TYPE
Active	Active_c	Checkbox
Created By	CreatedByld	Lookup(User)
Department	Department_c	Picklist
Description	Description_c	Long Text Area(32768
Duration (Months)	Duration_c	Number(3, 0)
Last Modified By	LastModifiedByld	Lookup(User)
Owner	Ownerld	Lookup(User,Group)
Program Code	Program_Codec	Text(20)
Program Name	Name	Text(80)
Tuition Fees	Tuition_Feesc	Currency(16, 2)

# Academic\_Record\_\_c:

#### Fields & Relationships

9 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE
Academic Record Name	Name	Text(80)
Applicant	Applicant_c	Lookup(Student Application)
Created By	CreatedByld	Lookup(User)
Degree	Degree_c	Text(255)
GPA	GPA_c	Number(3, 2)
Institution	Institution_c	Text(255)
Last Modified By	LastModifiedByld	Lookup(User)
Owner	Ownerld	Lookup(User,Group)
Year Completed	Year_Completedc	Number(4, 0)

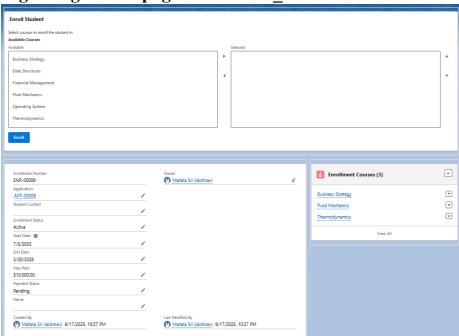
## Record Types & Page Layouts:

- Record types to differentiate program types or application types (optional).
- Customized page layouts for each object to show key fields:
  - Student\_Application→ applicant details, decision picklist, comments, uploaded documents
  - o Enrolled Student → enrollment info, fees, selected courses
  - Home\_Page\_Default → Home Page layout of my App, consists of rich text, reports, recent records, list view, recent items, quicklinks.
- Compact layouts for mobile and Lightning pages for quick info access

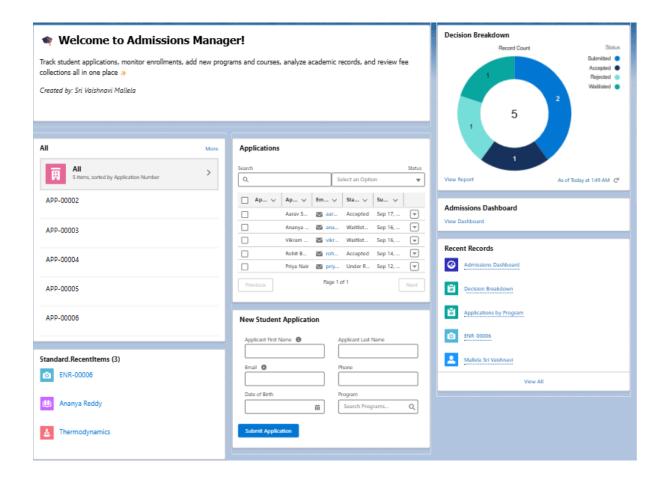
## **Lightning record page of Student\_Application:**



# Lightning record page of Enrolled\_Student:

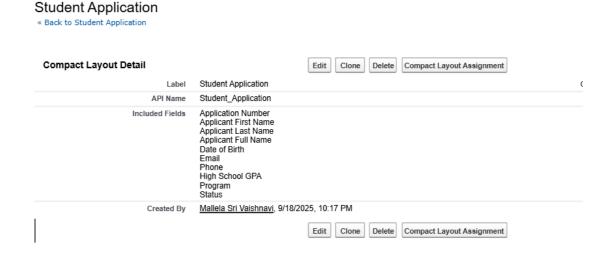


## Lightning record of Home Page Default:



# **Compact Layout for mobile:**

Student Application Compact Layout



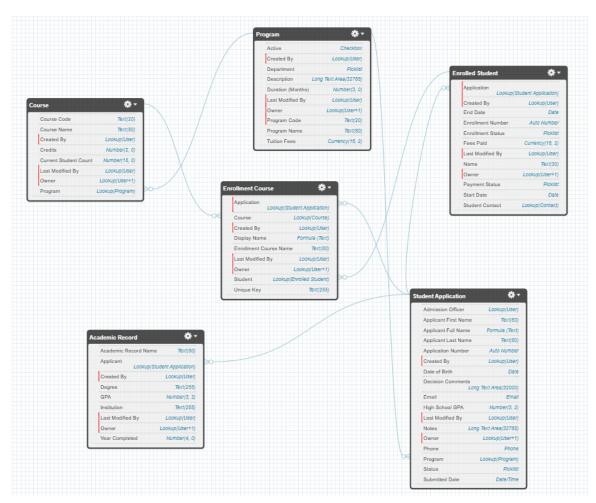
## • Relationships:

- Lookup and Master-Detail relationships:
  - Enrolled\_Student\_c → Student\_Application\_c : Lookup (required)
  - $_{\circ}$  Enrollment\_Course\_\_c → Enrolled\_Student\_\_c : Lookup
  - $\circ$  Enrollment\_Course\_ c → Course\_ c : Lookup
  - o Academic\_Records\_\_c → Student\_\_c: Lookup
  - $\circ$  Academic Records  $c \rightarrow Course$  c : Lookup

## • Junction Objects:

• Enrollment\_Course\_\_c enables many-to-many tracking between students and courses.

#### Schema Builder:



# **Phase 4 (Process Automation (Admin)):**

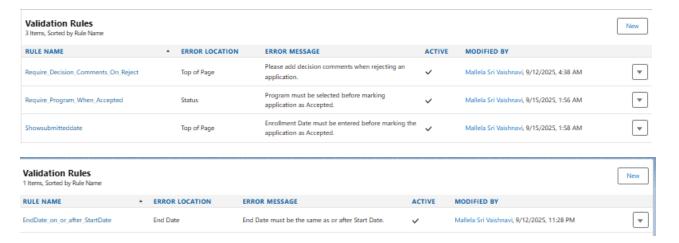
**Objective:** Automate repetitive administrative tasks in the admission lifecycle to ensure accuracy, save time, and provide a seamless applicant experience.

#### Validation Rules:

Ensured data quality and consistency in admission workflow.

- Implemented rules in Student\_Application\_\_c, Academic\_Record\_\_c,
   Enrollment Course object:
  - 1. **Require\_Decision\_Comments\_On\_Reject** Prevents rejecting an application unless decision comments are added.
    - Example: If Admission Officer tries to reject without filling
       Comments\_\_c, an error appears.
  - 2. **Require\_Program\_When\_Accepted** Forces the officer to select a **Program\_c** before marking the application as Accepted.
    - Example: Officer cannot approve without assigning a program.
  - 3. **Showsubmitteddate** Ensures **Enrollment\_Date\_\_c** is entered before marking the application as Accepted.
    - Example: Students cannot be accepted without enrollment date filled.
  - 4. Validate\_GPA\_Range Ensures GPA entered is between **0.0** and **4.0**.
    - Example: Prevents saving record if GPA = 4.5 or GPA = -1.
  - 5. EndDate\_on\_or\_after\_StartDate -- Used in Courses / Programs to validate date ranges.
    - Example: Prevents creating a course/program with an End Date earlier than Start Date.





#### **Workflow Rules:**

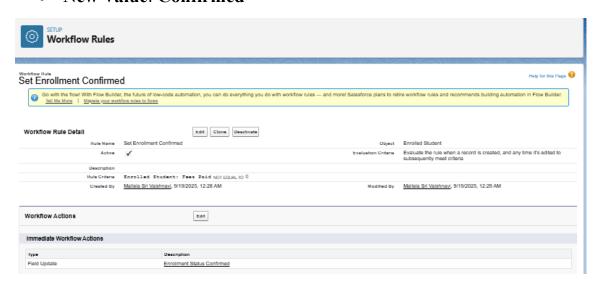
#### **Set Enrollment Status to Confirmed**

- **Objective**: Automatically update a student's enrollment status once the admission fee is paid.
- Object: Enrolled Student c
- Evaluation Criteria: Rule runs when a record is created, and every time it's edited to meet the condition.
- Rule Criteria:

 $\circ$  Fee\_Paid\_\_c = TRUE

# Field Update Action: Enrollment Status Confirmed

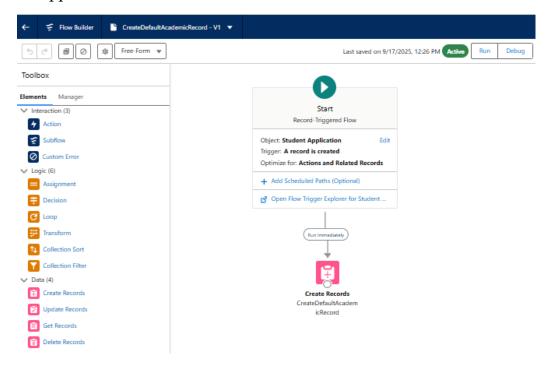
- Action Name: Enrollment Status Confirmed
- Field to Update: Enrollment\_Status\_c
- New Value: Confirmed



#### Flow Builder:

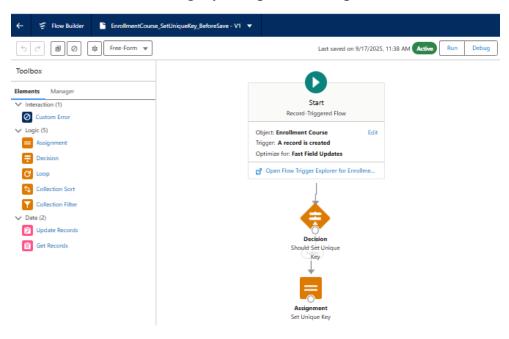
# 1) CreateDefaultAcademicRecord (Autolaunched Flow)

• Automatically creates a default academic record when a new student application is submitted.



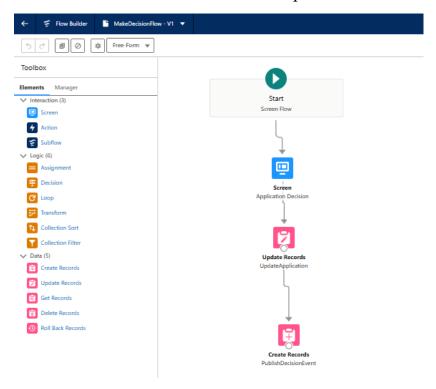
# 2) EnrollmentCourse\_SetUniqueKey\_BeforeSave (Autolaunched Flow)

- Generates a unique key for each enrollment-course record before save.
- Ensures data integrity and prevents duplicates.



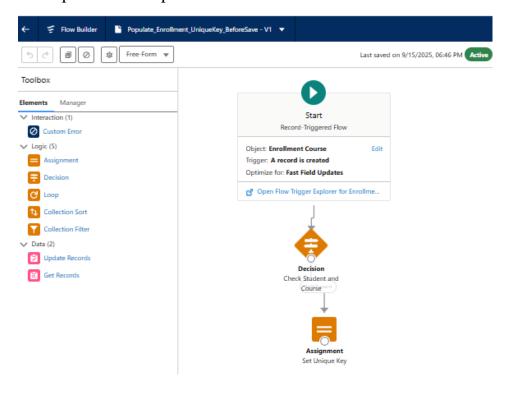
## 3) MakeDecisionFlow (Screen Flow)

- Guided screen flow for admission officers to mark applications as Accepted, Rejected, or Waitlisted.
- Collects decision comments and updates the record.



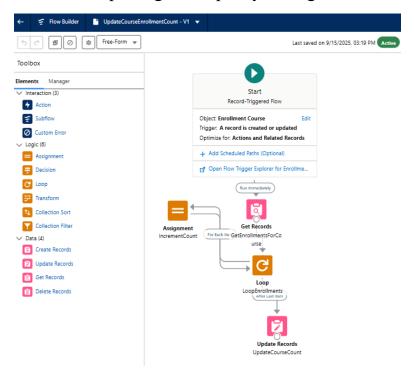
# 4) Populate\_Enrollment\_UniqueKey\_BeforeSave (Autolaunched Flow)

• Populates a unique identifier on enrollment records at save time.



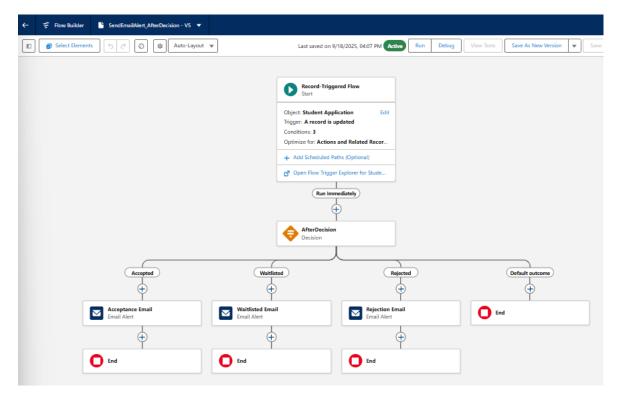
# 5) UpdateCourseEnrollmentCount (Autolaunched Flow)

- Updates the number of enrolled students whenever enrollment changes.
- Useful for reporting and capacity management.



# 6) SendEmailAlert\_AfterDecision (Autolaunched Flow)

• Sends an **acceptance / rejection / waitlist** email to applicants after a decision is made.



## **Email Templates in Project:**

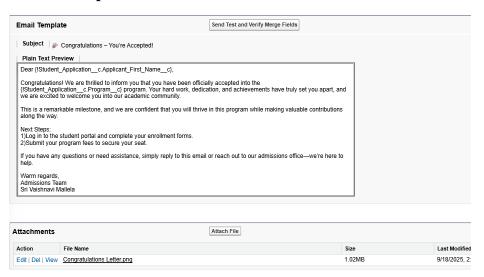
To ensure timely and consistent communication with applicants, **Email Templates** were configured and connected to Flows/Email Alerts.



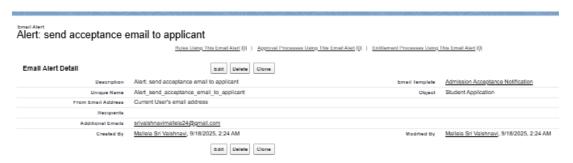
## **Implemented Templates**

- Admission Acceptance Notification
  - Type: Text
  - Purpose: Sent automatically when an applicant is marked Accepted

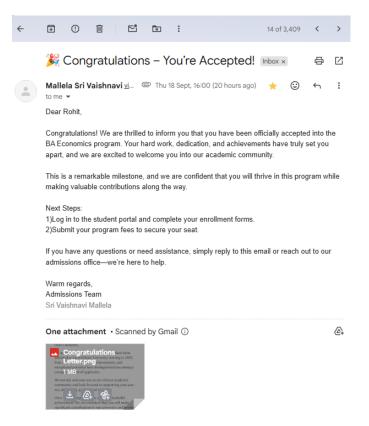
#### **Email Template:**



#### **Email Alert:**



#### **Email Notification:**

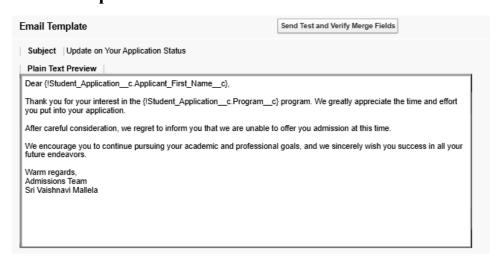


## Admission Rejection Notification

o **Type:** Text

• Purpose: Sent when an applicant's status changes to Rejected.

## **Email Template:**



#### **Email Alert:**



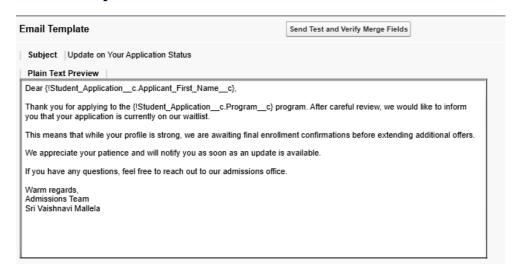
#### **Email Notification:**



#### Admission Waitlisted Notification

- o **Type:** Text
- o **Purpose:** Sent when an applicant is **Waitlisted**, giving transparency to students about their status.

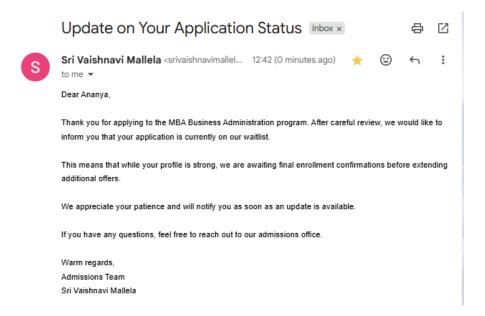
#### **Email Template:**



#### **Email Alert:**



#### **Email Notification:**

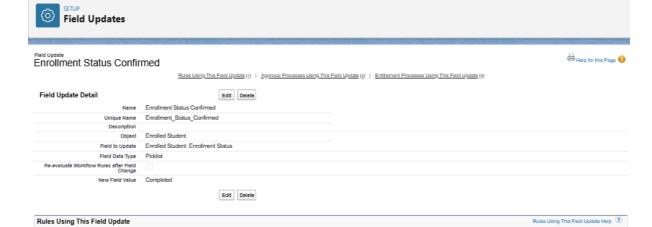


# **Field Updates:**

- Enrollment Status Confirmed
  - Action Name: Enrollment Status Confirmed
  - **Object**: Enrolled Student c
  - Field to Update: Enrollment Status c
  - Operation: Update field value
  - New Value: Completed

#### **Purpose:**

- Ensures that once the workflow condition (e.g., Fee Paid = true) is satisfied, the student's enrollment record is automatically updated.
- Reduces manual intervention for the admissions team.



Object Enrolled Student

Action Rule Name
Edit | Del | Deactivate Set Enrollment Confirmed