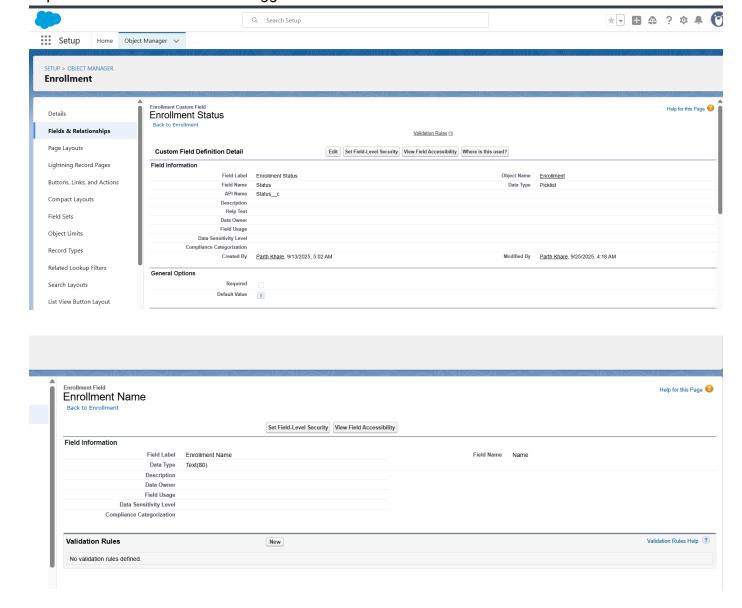# Phase 5: Data Management & Deployment

Project: EdTech Enrollment Automation | Author: Parth Khare

Data Management Strategy
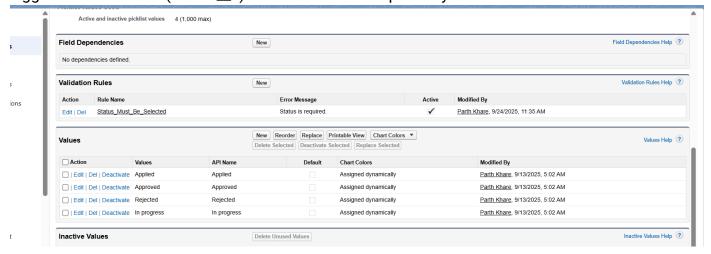
1. Field Audit & Naming Consistency

Reviewed all custom fields on Enrollment__c, Student__c, and Course__c
Ensured consistent naming conventions (Enrollment_Status__c,
Enrollment_Date__c) Added help text for admin usability and future maintenance
Deprecated unused fields and flagged them for archival

2. Picklist Handling

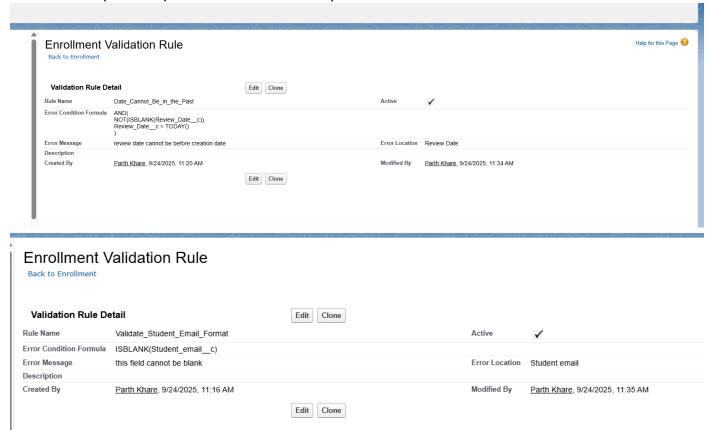Identified Status__c as a picklist field

Used ISPICKVAL(Status__c, "Approved") in validation rules and Apex triggers Avoided TEXT(Status__c) due to formula compatibility issues

3. Validation Rule Optimization

Refactored Require_Status_Selection to: ISPICKVAL(Status__c, "") && NOT(ISNEW())
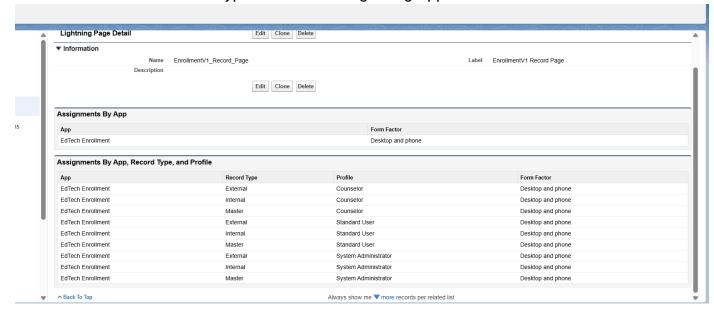
Prevented premature modal errors during record creation
Documented picklist quirks and safe formula practices

4. Record Type Strategy

Confirmed use of "Internal" and "External" Record Types for Enrollment

Created formula fields (IsInternal__c, IsExternal__c) to support Lightning Page visibility filters Avoided direct Record Type filters due to Lightning App Builder limitations

5. Email Template Management

Migrated from Email Alerts to Send Email Actions for dynamic notifications Organized templates under "Enrollment Notifications" folder Enabled merge fields and conditional logic for personalized messaging

Deployment Strategy

1. Packaging & Metadata

Created Change Set with:
   Flows: Enrollment Automation, Fault Logging
   Apex Triggers: PreventFutureEnrollmentDate, AutoAssignEnrollmentOwner, LogEnrollmentStatusChange
   Custom Fields, Validation Rules, Email Templates
   Quick Actions and Lightning Page assignments

2. Pre-Deployment Checklist

Sandbox testing: simulated record creation, Flow triggers, Apex logic
Profile & Permission Set review: ensured access to all fields and objects

3. Post-Deployment Tasks

Created test Enrollment record to validate:
    Flow execution
    Trigger logic
    Email delivery
    Status change logging

Monitored Enrollment_Log__c and Flow_Error_Log__c for 48 hours

Issue	Resolution	Notes
Validation rule firing on modal open	Added NOT(ISNEW())	Prevented UI block
Picklist field causing formula errors	Used ISPICKVAL()	Avoided TEXT() pitfalls
Blank screen on record creation	Set default value for Status__c	Ensured UI stability

Visibility filters failing	Used formula fields	Avoided Record Type limitations
Field renaming risk	Relabeled instead of renaming API name	Preserved Flow and Apex references