Student Management System (SMS) Application for Education Industries

In this Case Study we are going to develop a customized "School Management System" application using Force.com platform.

This application is supposed to provide solutions to automate complete process of a School Management System following processes to reduce manual efforts and time.
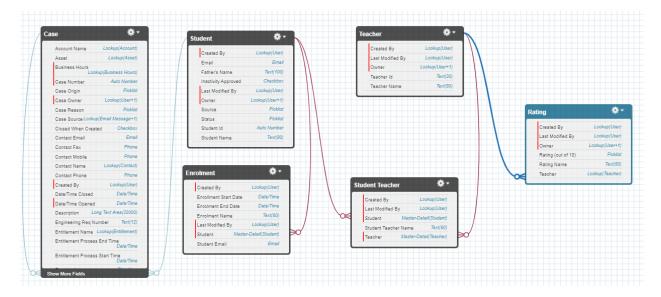
- **Different Entities would be**: Student, Enrolments, Teacher, Student Teacher, Cases, Ratings
- **Description of different objects:**
  - **Student**: To capture student details
  - **Enrolment**: To capture admission/enrolment details for student
  - **Teacher**: Details regarding Teacher
  - **Student Teacher**: It's a Junction Object between Student and Teacher.
  - **Ratings:** To capture feedback for performance regarding Teacher
  - **Cases:** To capture different issues pertaining to Student/ from Student
- **Object Wise Fields are:** -
  - **Student:** Name, Email, Father Name, Source (Picklist values based on Record Type), Student Id (Auto-Number), Status (Active/Inactive)-Picklist, Inactivity Approved (Checkbox)
  - **Enrolments:** Start Date, End Date, Student Email, Student (MD)
  - **Teacher:** Teacher Id (Auto-Number)**,** Teacher Name
  - **Student Teacher:** Student Teacher Name (Auto Number), Student (MD), Teacher (MD).
  - **Cases(standard):** Case Origin, Description, Student (lookup on Student)
  - **Ratings:** Rating Name, Rating (out of 10), Teacher (LKP on Teacher)

Student Management System (SMS) Application for Education Industries

Relationships among Objects as below:

ERD:

Assumptions/Details

- Possible values for **source** are**: -**
  - **Marketing:** Social Media, Newspaper
  - **Non-Marketing:** Direct, Referral.
- **OWD would be Private by default unless stated for All Object.**
- Possible values for **Status** are: Active and Inactive
- Users using our application have Profile similar to 'Cloned System Admin Profile i.e., Helpdesk Profile' for Helpdesk User with below permissions: -
  - **Student**: Read, Create
- **Relationship between different combinations to be identified: -**
  - Student & Teacher (Many to Many)
  - Student & Enrolment (One to Many)
  - Student & Case (One to Many)
  - Ratings & Teacher (One to Many)

Student Management System (SMS) Application for Education Industries

- **Following Fields should be visible for Student View: -**
    - **Marketing Record Type (RT):** Name, Email, Father Name, Source, Status, Student Id, Inactivity Approved
    - **Non-Marketing Record Type (RT):** Name, Email, Father Name, Source, Status, Student Id, Inactivity Approved

Business Rules/Scenarios: -

Validation Rules: -

1. User should not be able to enter new Student record without Email Id. – Using Validation

2. Status for **Student** cannot be inactive while creating new record.

3. **Enrolment** Start Date can't be in past.

Workflow Rules: -

4. If no status entered while **Student** creation, Assign status as active for Student.

5. Send email to 'Student email' on **Enrolment** creation (auto email population) -> we have to perform 2 actions.

      a. Student Email field update on Appointment from Student Email Field

      b. Email Alert

Process Builder:

6. If **Student** become inactive than update all related child cases status to closed

7. Create a Dummy **Enrolment** whenever a new student record is created

Flows: -

8. Create a mechanism where user can submit feedback for Teacher on scale 0-10 using Screen flow.

9. If Status of **Student** is Active set source as direct (using record triggered)

Student Management System (SMS) Application for Education Industries

Sharing Rules/Manual Sharing

10. Share Student record with Mr. Sumit<<**Helpdesk User**>> if source is newspaper.

11. Share All Student with Mr. Sumit<<**Helpdesk User**>> which are created by admin

Field History Tracking

12. All Changes on Student should be tracked.

Assignment Rules

13**.** Case assignment should be as follows: -

- If Priority is High-> **High Priority Queue**
- IF Priority is low-> **Low Priority Queue**

Escalation Rules

14. Cases should be dealt as per below: -

- o High Priority Cases should be closed in 1 Hours otherwise assigned to Admin
- o Low priority cases should be closed in 2 Hours otherwise assigned to Admin

Approval process (==Auto submission==)

15. Whenever status got changed to **inactive (Picklist)** for a student, it should go to Admin for the approval and once Admin approved **'Inactivity approved'** checkbox must be checked.

Note: this checkbox is read only on page layout.

Reports and dashboards

16. **Information Required by Higher Management (create reports accordingly)**: -

- o Create a Dashboard which would give quick view about Students as per different sources.
- o Create a dashboard which would give quick view about Teacher's ratings.

Student Management System (SMS) Application for Education Industries

Permission Set

17. One Student Mr. Sumit<<**Helpdesk user**>> having same profile needs edit access on student object

Data Loader

18. Perform all operations on student object: -
   a. Export
   b. Insert
   c. Update
   d. Delete
   e. Upsert

Apex Batch & Schedulable:

19. Create a daily job to delete inactive students where Inactivity Approved is checked and Status in Inactive.

Web Services

 20. Create a Webservices where you have to create a new record for Teacher's Object (Teacher Id, Teacher Name) from third party application using Workbench

LWC (Lightning Web Component)

21. Create a LWC Component where you have to search Student details either by Name or email and then populate searched result

   a. Searched result must include following fields:
      a. Student Id, Name, email, Inactivity Approved