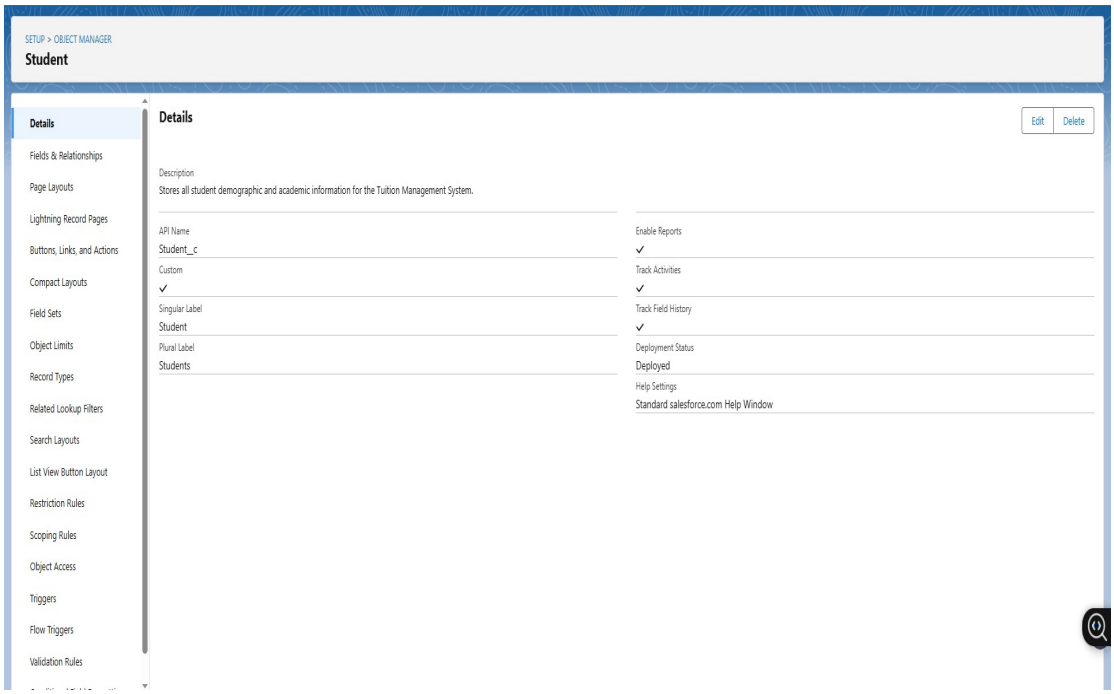
Phase 3: Data Modeling & Relationships

1. Standard & Custom Objects

We created several **custom objects** to form the core data model for the Tuition Management System. These custom objects store all the information related to the business. The standard objects we used were Task and User.

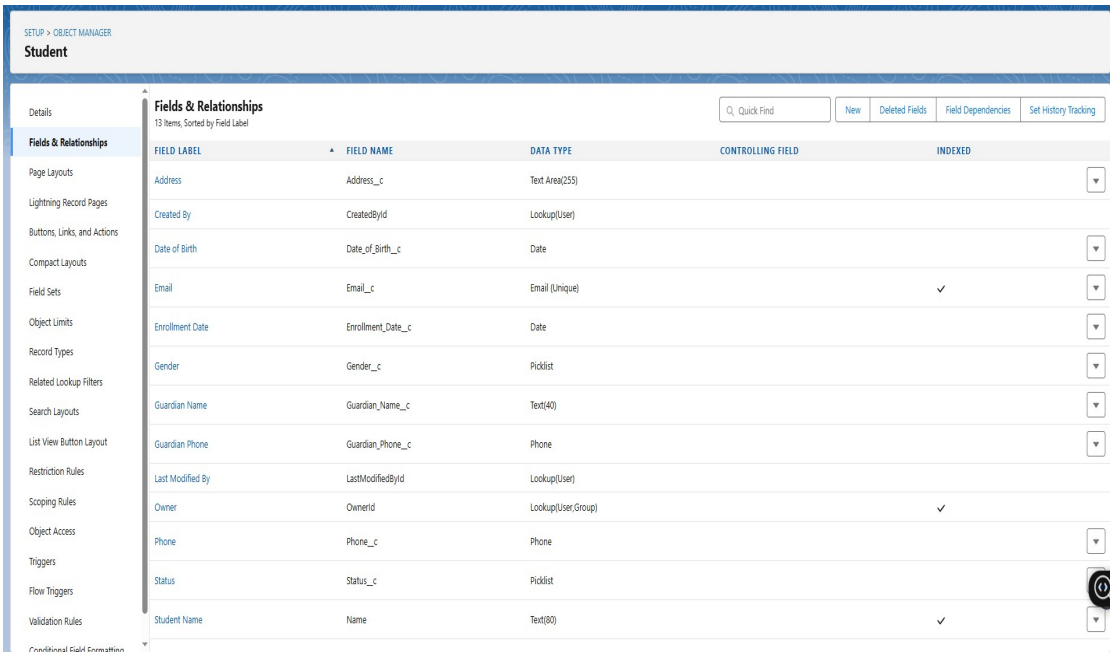
The custom objects we created are:

- **Student**
- **Teacher**
- **Course**
- **Enrollment**
- **Payment**
- **Doubt Resolution**



2. Fields

We defined a comprehensive set of **custom fields** for each of the objects to capture all necessary data.

- **Student:** Gender, Date of Birth, Phone, Email, Address, Guardian Name, Guardian Phone.
- **Teacher:** Gender, Phone, Email, Address, Salary, Subject.
- **Course:** Credits, Start Date, End Date, Description.
- **Enrollment:** Enrollment Date, Amount, Status.
- **Payment:** Payment Date, Status, Payment Method, Transaction ID, Amou
- **Doubt Resolution:** Status, Due Date, Description, Resolution Notes.
- 

3. Relationships

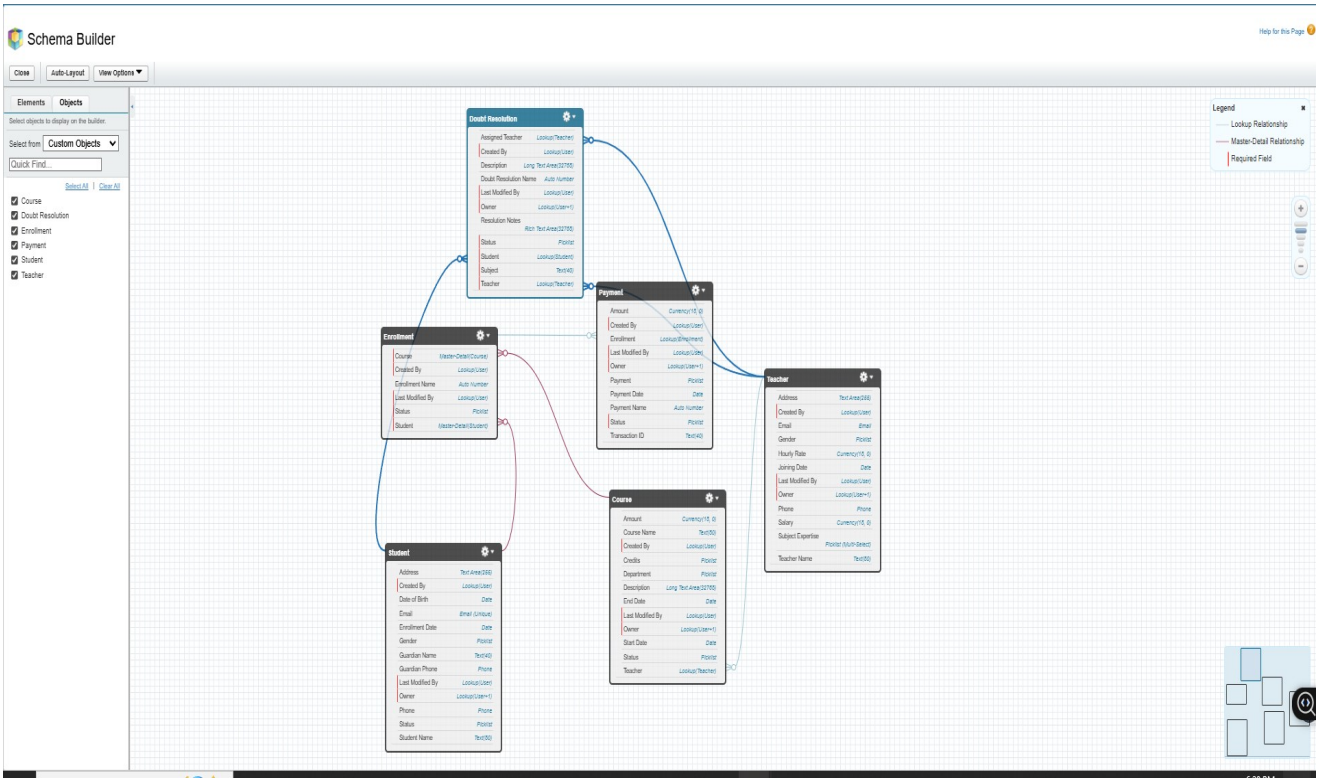
We established **lookup relationships** to connect our objects and create a complete data model. A lookup relationship links one object to another and allows us to reference information from the related record. The relationships we implemented are:

- **Enrollment** has a lookup to **Student** and a lookup to **Course**. This links a student to the courses they are enrolled in.
- **Payment** has a lookup to **Enrollment**. This links a payment to the specific enrollment it is for.
- **Doubt Resolution** has a lookup to **Student** and a lookup to **Teacher**. This links a doubt to the student who submitted it and the teacher assigned to resolve it.

We did not implement **Master-Detail** or **Hierarchical** relationships. **Junction Objects** were not needed because our relationships were simple lookups, and **External Objects** were not required as all data is stored within Salesforce.

4. Schema Builder

While building the data model, we used the **Schema Builder** to visualize the objects and their relationships. This is a powerful tool that helps to understand the structure of the data model and ensure that all objects are correctly linked.



5. Record Types, Page Layouts, & Compact Layouts

We discussed these concepts, which are used to customize the user interface. We did not implement all of them, but we discussed their purposes:

- **Record Types:** We can use these to define different business processes or picklist values for records of the same object, such as creating a separate record type for an "Online Course" and a "Live Course".

- **Page Layouts:** We discussed how to use page layouts to control the fields, sections, and related lists a user sees on a record page, ensuring that a teacher only sees relevant student information while an admin sees all of it.

- **Compact Layouts:** We can use these to control the fields that appear in a record's header, giving users a quick, at-a-glance summary of the most important information, such as a student's name and contact information.