# Practical 3: List out the entities and identify the relationship between them. Also, identify related attributes supposed to be recorded while considering the normalization rule.

**Entities:**

1. **User**
   * Attributes:
     + UserID (Primary key)
     + Name
     + Email
     + Password (Hashed)
     + Role (Student/Faculty)
2. **Project**
   * Attributes:
     + ProjectID (Primary key)
     + Title
     + Description
     + Status (Available/Unavailable)
     + FacultyID(Referencing Faculty.facultyId)
3. **Proposal**
   * Attributes:
     + ProposalID (Primary key)
     + StudentID (Foreign key referencing User.UserID)
     + ProjectID (Foreign key referencing Project.ProjectID)
     + Status (Approved/Rejected/Pending)
4. **Faculty**
   * Attributes:
     + FacultyID (Primary key, also referencing User.UserID)
     + Department
     + Position

**Relationships:**

* **User - Proposal** (One-to-Many)
  + One user can have multiple proposals.
* **User - Faculty** (One-to-One)
  + A user can either be a faculty member or a student. This is represented through their role attribute.
* **Proposal - Project** (Many-to-One)
  + Multiple proposals can be made for one project.
* **Faculty - Project** (One-to-Many)
  + A faculty member can have multiple projects.

**ER Diagram**

A screenshot of a computer

Description automatically generated