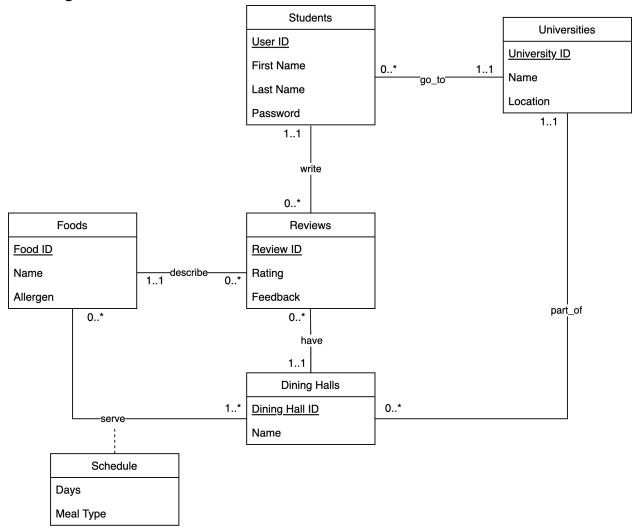
### **UML Diagram**



### **Assumptions**

- Dining Halls might not serve any Food
- Each Food must be served at at least 1 Dining Hall
- Universities might not have any Dining Halls
- A Dining Hall can only be located at one University
- Universities might not have any Students
- Each Student must go to exactly one University
- A Review can only be written by one Student
- A Student can write many Reviews
- A Review can only be written for one Food at one Dining Hall
- For each Dining Hall, each Foods can have zero or many Reviews

# Relationships

Entity 1	Entity 2	Relationship Description	Relationship Type
Foods	Reviews	Foods may have many Reviews but each Review describes only one Food	1-many
Foods	Dining Hall	Dining Halls may serve many different Foods and each Food is served in at least 1 Hall	many-many
Dining Halls	Reviews	The Food served in Dining Halls may have many Reviews but each Review must be part of 1 Dining Hall	1-many
Universities	Dining Halls	Each University may have many Dining Halls but each Dining Hall must have 1 University	1-many
Universities	Students	Each University may have many Students, but each Student must have 1 University	1-many
Students	Reviews	Each Student may write many Reviews but each Review must have only 1 Student	1-many

#### **Relational Schema**

### Foods(

Food\_ID: INT [PK], Name: VARCHAR(255), Allergen: VARCHAR(400))

#### Reviews(

Review\_ID: INT [PK],

User\_ID: INT [FK to Students.User\_ID], Food ID: INT [FK to Foods.Food ID],

Dining\_Hall\_ID: INT [FK to Dining\_Halls.Dining\_Hall\_ID],

Rating: REAL,

Feedback: VARCHAR(255))

### Students(

User\_ID: INT [PK],

University\_ID: INT [FK to Universities.University\_ID],

First\_Name: VARCHAR(255), Last\_Name: VARCHAR(255), Password: VARCHAR(50))

#### Universities(

University\_ID: INT [PK], Name: VARCHAR(100), Location: VARCHAR(255))

#### Dining\_Halls(

Dining\_Hall\_ID: INT [PK],

University\_ID: INT [FK to Universities.University\_ID],

Name: VARCHAR(255))

### Schedule(

Food\_ID: INT [FK to Foods.Food\_ID] [PK],

Dining\_Hall\_ID: INT [FK to Dining\_Halls.Dining\_Halls\_ID] [PK],

Days: VARCHAR(100),

Meal\_Type: VARCHAR(100))

## **Updates From Our Last Submission (Stage 1)**

- We have since removed the "Likes" attribute from our reviews so there will no longer be
  a system to track upvotes on user reviews of the food. We realized this would have
  necessitated more tracking of which users liked which comments, and this feature is not
  integral to our core functionality.
- We added a "Feedback" attribute to our reviews because we realized we were missing an attribute to store the actual text content of a user's reviews of the food.