UML

Use Case: Predictions

Primary Actor: Registered User

Scope: Server/Database

Level: User Goal

Brief: A registered user connects to the database via the online portal to retrieve a prediction data set for a specific timeframe in order to make sure there is enough inventory for said timeframe.

Stakeholders: Food pantry management, DBA.

Post conditions: More food is requested by pantry if the predictions are higher than the inventory. Database is updated as more food comes in.

Preconditions: There will be no previous data for the first semester. At the second-year mark, user will have an account. Inventory will have a quantity >= 0 in database system.

Triggers: DBA/user would have successfully entered data/orders throughout the first year of the pantry.

Basic Flow (Similar to Place an Order):

Year One:

1. User/student log in.

2. Fill out required fields in form.

3. Press the submit button.

4. Database updated.

5. Pantry staff prepares food for pickup.

6. User picks up order.

Year Two:

7. DBA/pantry management log in.

8. Fill out date to make predictions.

9. Check inventory against predictions.

10. Purchase/request more food accordingly.

11. Update inventory when food is received.

API

1. Log in process;

```
{
 "action": "log in"
 "username": "User1"
 "password": "***"
}
=>
{
 "success": "true"
 "message": "Welcome username!"
}
OR
{
 "success": "false"
 "message": "Incorrect username and/or password. Please try again."
}
```

2. Fill in Form (For Predictions Only);

```
{
 "action": "Fill required fields"
 "field x (Date From)": "some date 1"
 "field Y (Date To)": "some date 2"
}
=>
{
 "success": "true"; "there is data for the dates entered"
 "action": "Predictions are shown to user"
}
```

OR

{

 "success": "false"; "there is no data for the dates entered"

 "message": "There is no record data for the dates entered, please enter a new date set."

}