

Baby Feed v12.0

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Problem Description

- Baby Feed is a website that can be simultaneously used by clinicians, researchers, and parents to monitor an infant's nutrition patterns through research-proven nutritional tracking tools such as FFQ (Food Frequency Questionnaires) and growth charts to ensure proper vitamin and mineral intake.
- Baby Feed v12.0 includes the following major updates:
 - Growth Chart Updates
 - Admin Portal: Researcher/User account bug fixes.
 - Research/Participant Portal Redesign
 - New Diet Quality Index Score (DQIS) feature
 - Downloadable DQIS Results



Problem Management

This project was developed in a semester with the following timeline: 5 Sprints

1st Sprint:

- ☐ Getting familiar with Baby Feed features (Baby Feed v11.0)
- ☐ Login to MongoDB, Azure, GitHub (text the PO for access request)

2nd Sprint:

- ☐ Adding the child collection in MongoDB and incorporating it into the code
- ☐ Button to go home from chart page
- ☐ Loading Status bar everywhere

3rd Sprint:

- ☐ Verify growth chart percentiles in code
- ☐ Fixing breast milk volume calculations
- ☐ Change “Other” Tab to “Educational Resources from Experts”
- ☐ Fix an issue with Researchers and Participants not displaying properly in Admin Portal

4th Sprint:

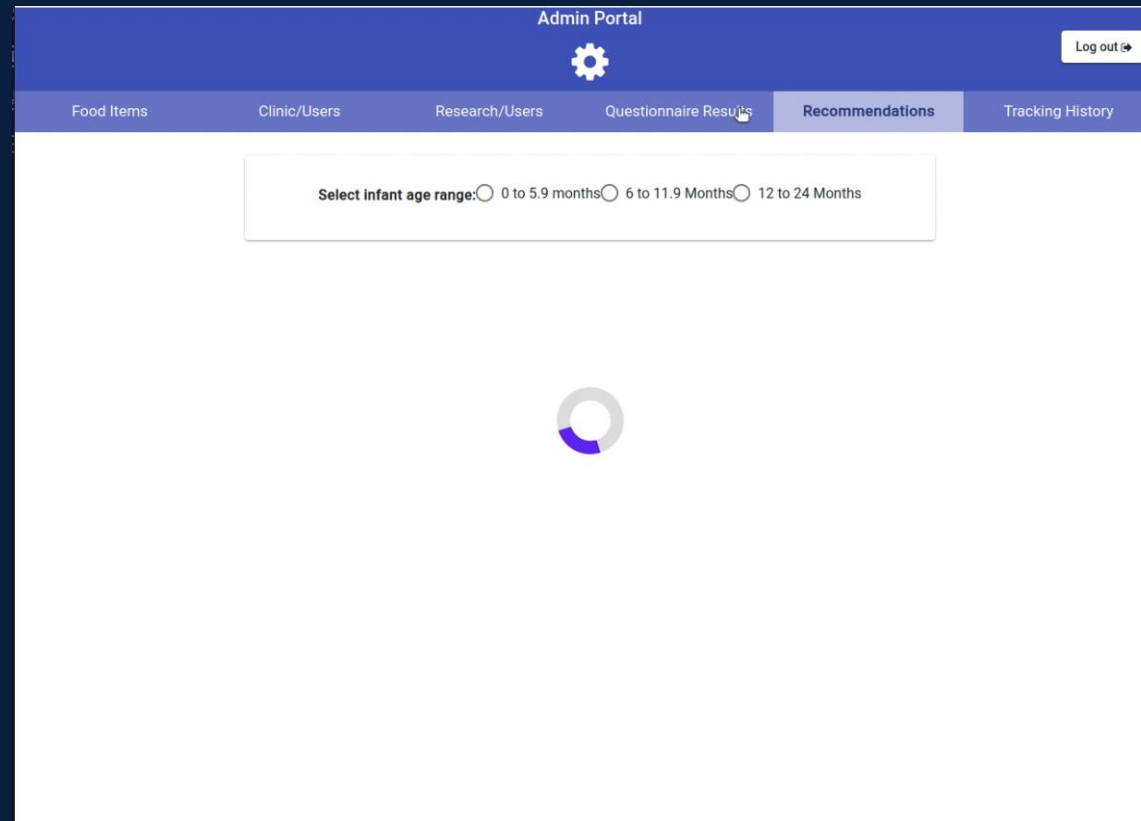
- ☐ Added Researcher participant user portal to input infants age, weight, and length
- ☐ Show results of the DQIS only in the Admin portal as a separate item and name it as DQIS
- ☐ Show pop up as a table with 2 columns: one with the food groups with total at the end and another with the corresponding score (DQIS)

5th Sprint:

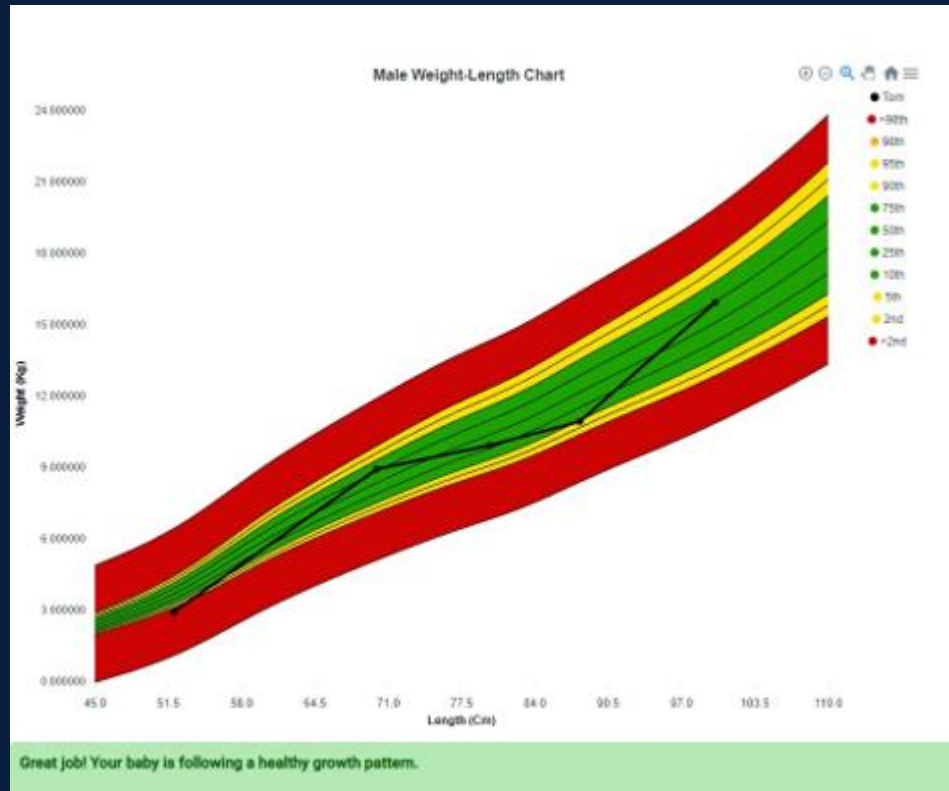
- ☐ Export DQIS on excel sheet with a button on the Admin Portal
- ☐ Pushing all the change code to production



NEW in Baby Feed v12.0 – Loading spinner added to all the website

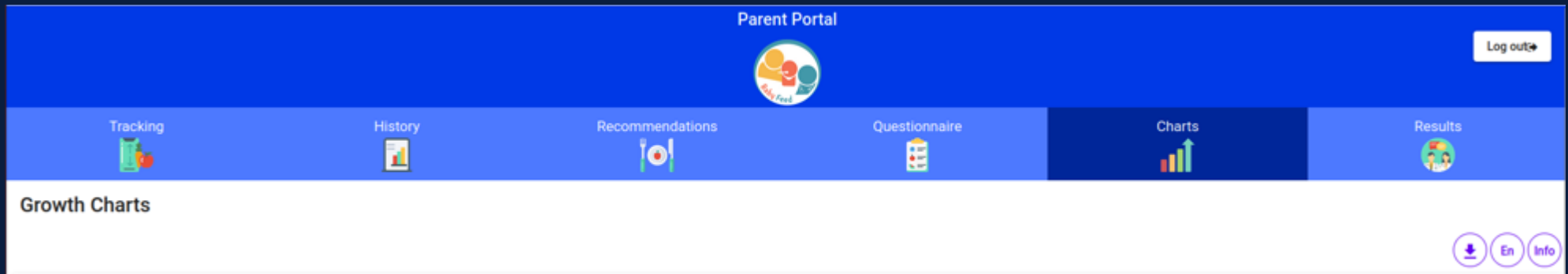


FIX in Baby Feed v12.0 – Growth chart page displays the table and saves all the information



Name	Age	Height	Weight
Sarah	1	52	3
Sarah	3	62	6
Sarah	5	72	10
Sarah	6	86	11
Sarah	7	96	16
Tom	1	52	3
Tom	5	70	9
Tom	6	80	10
Tom	7	88	11
Tom	8	100	16

NEW in Baby Feed v12.0 – Navigation Bar implemented onto the Growth Charts Page



FIXED in Baby Feed v12.0 – Researcher and Participant display properly on the Admin Portal

9 researcher user(s)

Search... | Filter by Research In... ▼

Username	First Name	Last Name	Research Institution
Panther_Researcher2	Test	Test	Baby-Act UPR
Feed_Researcher1	Jennifer	Bolton	Borinquen 2
Baby-Actresearcher_Researcher1	Elvira	Alvarez	
Panther_Researcher1	Jennifer	Bolton	Baby-Act UPR
Test_Researcher1	Test	Demo	Baby-Act UPR
RTRN_Researcher1	Stephanie	Moreira	RTRN project
RTRN_Researcher2	Jennifer	Bolton	RTRN project
RTRN_Researcher3	Alison	Macchi	RTRN project
FIU_Researcher1	test	test	Baby-Act UPR

10 participant user(s)

Search... | Filter by Research In... ▼

Username	Assigned Researcher	Account Type	Institution
FIU_4		participant	Baby-Act UPR
FIU_1		participant	Florida International University
FIU_2		participant	Florida International University
FIU_2		participant	Baby-Act UPR
FIU_3		participant	Florida International University
Florida_1		participant	Baby-Act UPR
FIU_1		participant	Baby-Act UPR
FIU_3		participant	Baby-Act UPR
RTRN_1		participant	RTRN project
Florida_8		participant	Baby-Act UPR



FIXED in Baby Feed v12.0 – Researcher and Participant can change password

Update User

Account Type

☐ Parent

☐ Clinician

☒ Participant

Username

FIU_4

Password Reset

password1234

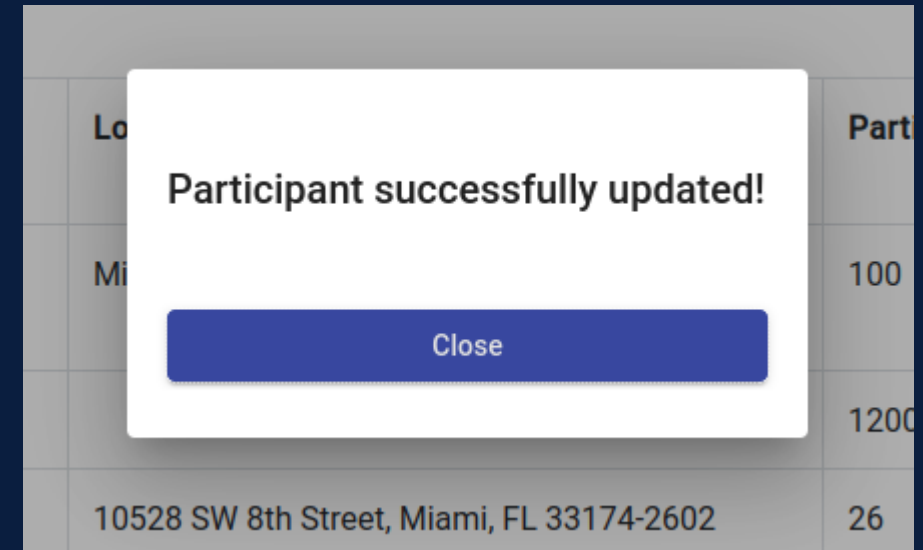
Generate new password

Choose Research Institution to assign to:

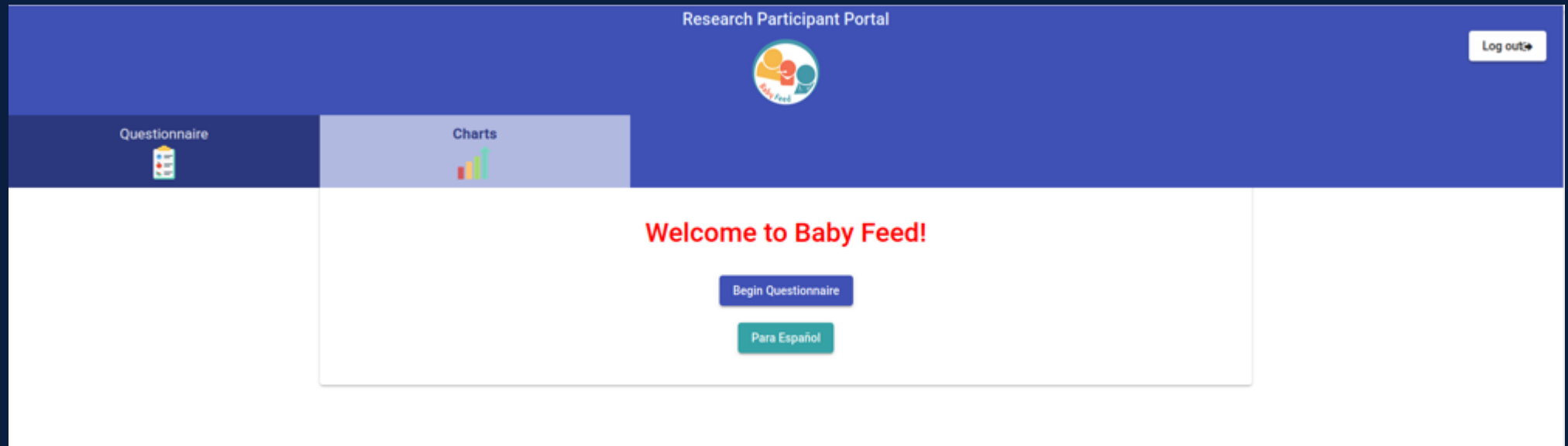
Choose Research Institution... *

Florida International ... ▾

Delete Update User



NEW in Baby Feed v12.0 – Participant Portal landing page has been redesigned



NEW in Baby Feed v12.0 – Participant can now input their child age, weight, and length on Charts

Research Participant Portal

Questionnaire Charts

Child Body Measurements

Please, provide all the information asked.

Weight units: ☐ Kilograms ☐ Pounds

Length units: ☐ Centimeters ☐ Inches

Child age in Months (mos) *

Weight in (kg) *

Length in (cm) *

Add

Save

NEW in Baby Feed v12.0 – DQIS feature on Questionnaire results



Parent Username	Date	Questionnaire ID	Infant age (In months)	Infant Gender	Nutrient Results	Food Results	DQIS
Parent_1	2023-07-09	6-1688939953095	10	male			
							Results Delete

NEW in Baby Feed v12.0 – DQIS feature displaying Total Points and Food items

DQIS

Food Item	Calculated Points
Milk	10.0
Whole Grains	0.00
Refined Grains	2.50
Proteins	0.00
Vegetables	0.00
Fruits	0.00
100% Juices	5.00
Sugary Beverages	5.00
Sweets	5.00
Salty Snacks	5.00
Total Points	32.5

Ok

NEW in Baby Feed v12.0 – Export button now displays DQIS sheet and information



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Participant	Question	Date	Name	Age	Breastmilk	Whole Gr	Refined Gr	Proteins	Vegetable	Fruits	100% Juic	Sugary Be	Sweets	Salty snac	TOTAL
2	Parent_1	6-168893	2023-07-6	Parent_1	10	10.00	0.00	2.50	0.00	0.00	0.00	5.00	5.00	5.00	5.00	32.5
3	Parent_1	6-168893	2023-07-6	Parent_1		95.00	0.00	2.50	0.00	0.00	0.00	5.00	5.00	5.00	5.00	27.5
4	Parent_1	6-168893	2023-07-6	Parent_1		810.00	0.00	2.50	0.00	0.00	0.00	5.00	5.00	5.00	5.00	32.5
5	Parent_1	6-168893	2023-07-6	Parent_1		715.00	0.00	2.50	0.00	0.00	0.00	5.00	5.00	5.00	5.00	37.5
6	FIU_1	3-168885	2023-07-6	FIU_1	2	15.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	60
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Nutrients FoodGroups Foods DQIS

Technologies Used



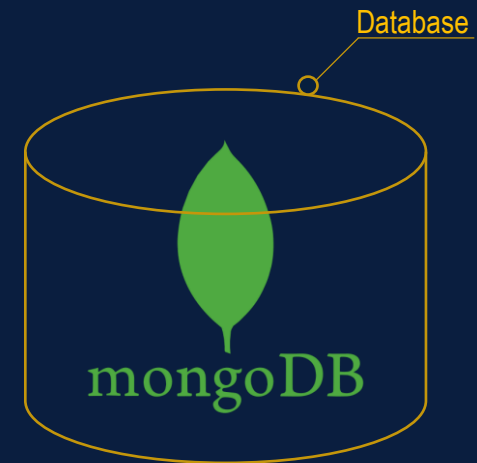
Development/Collaboration



Programming Languages

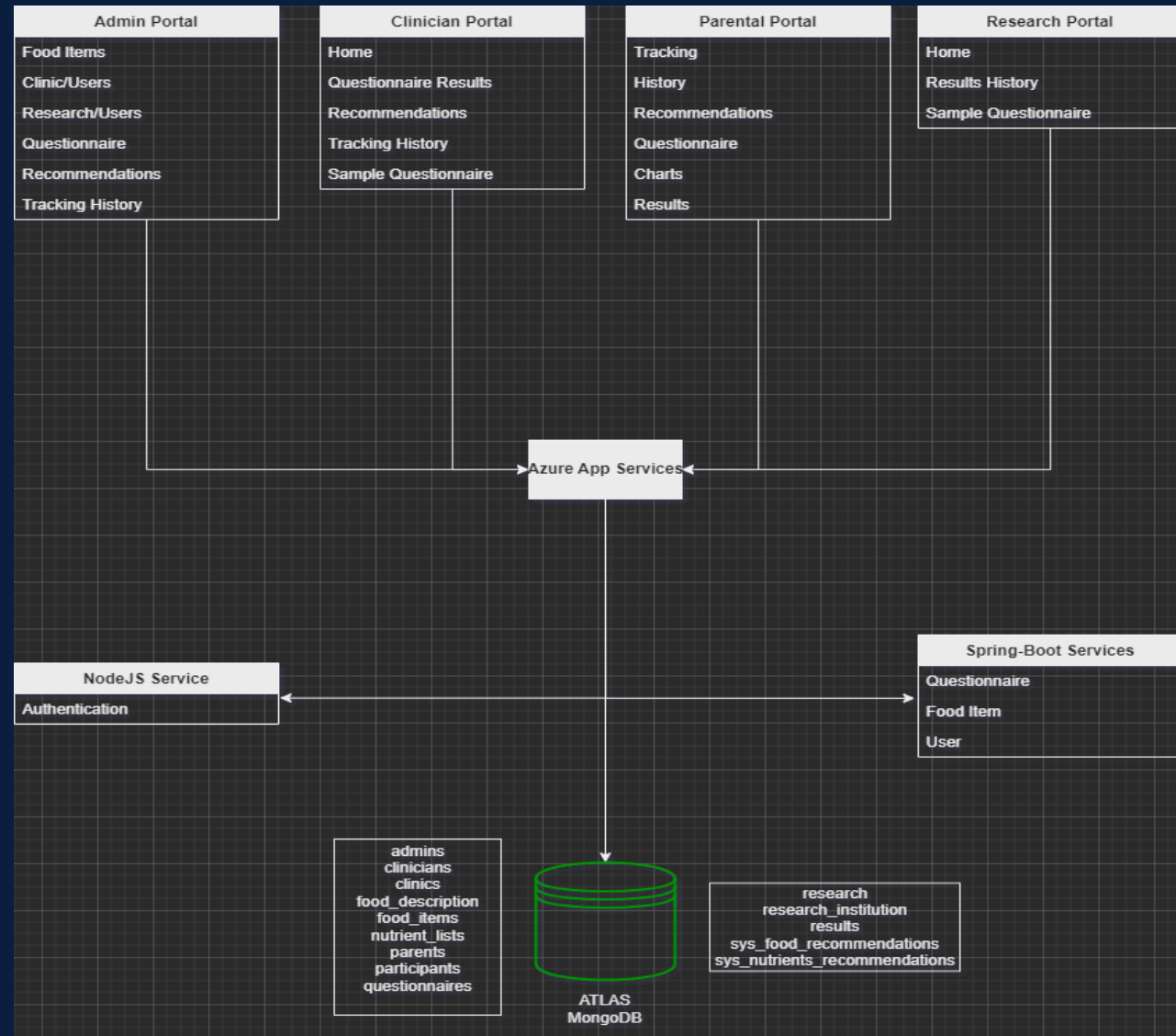


Frameworks

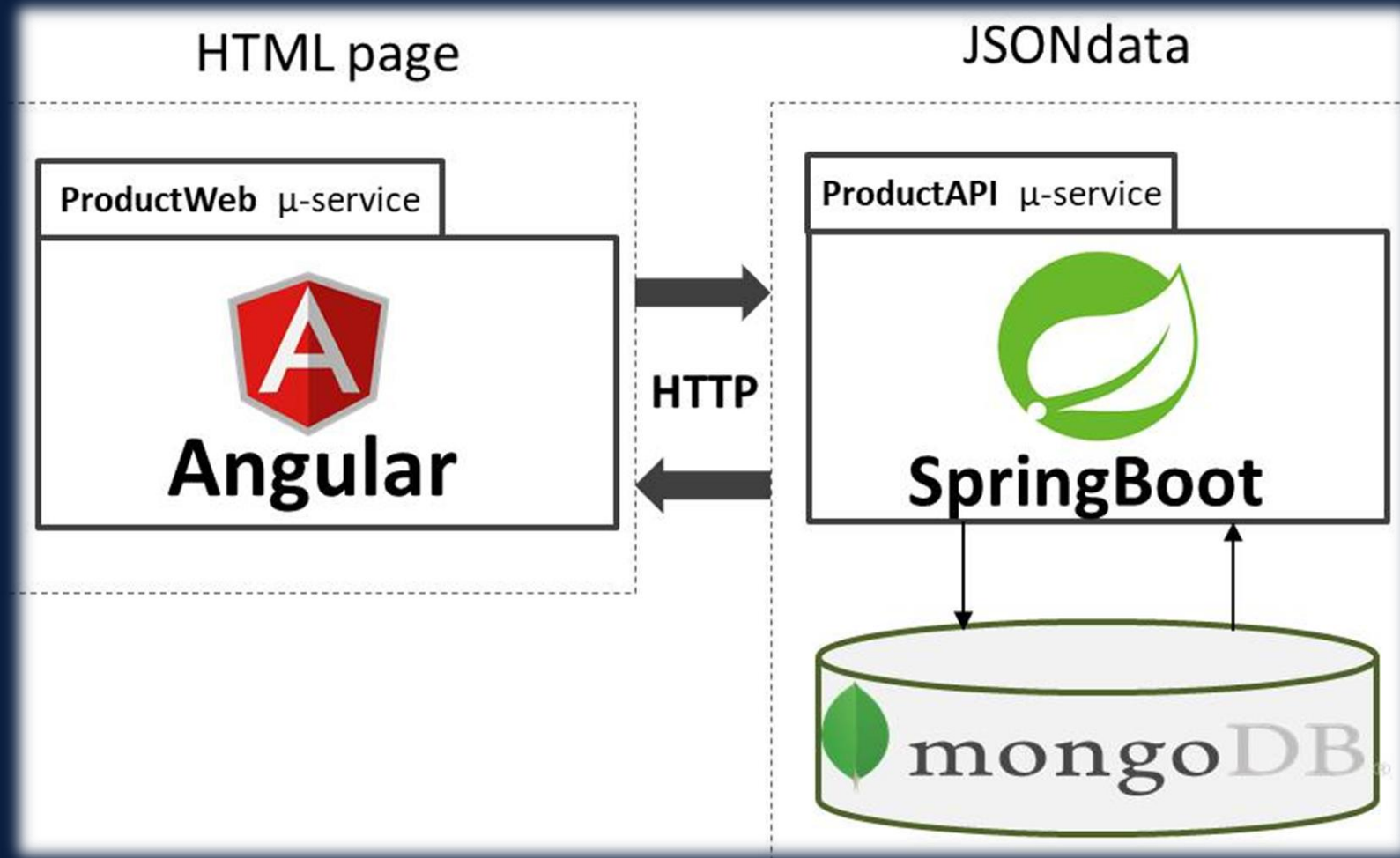


Database

System Architecture

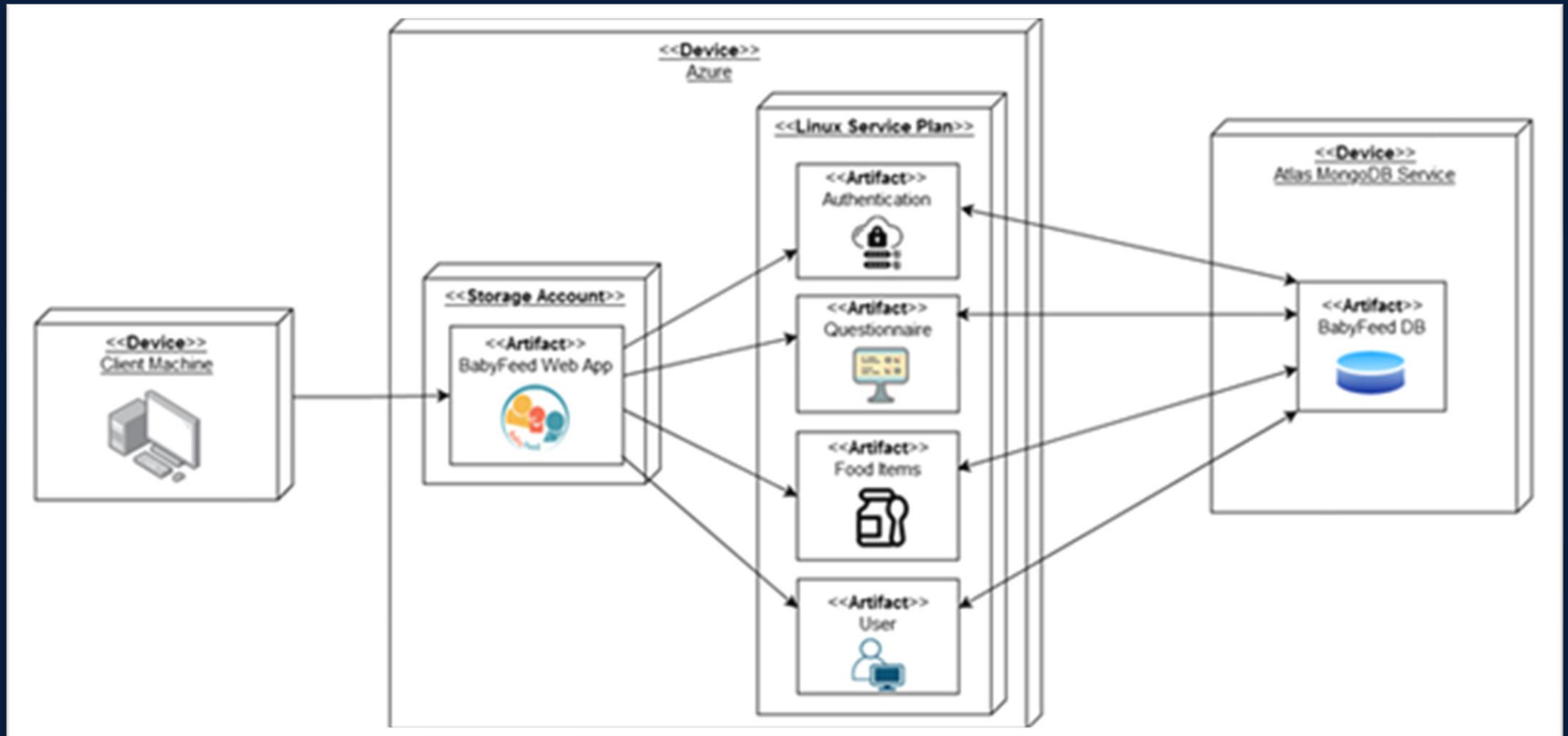


Class Diagram



Class diagram of connection between Charts tab and Database

System Design Development



Summary

- The primary objective of this development was to add the new DQIS feature as well as fix some features that were already on previous implementations of Baby Feed.
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- Professor: Masoud Sadjadi
 - Email: sadjadi@cs.fiu.edu