



FstFd

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Project Purpose and Goals

- Implement an application with real benefits to everyday living
- Create a new process in which to aid the ability to take care of ourselves physically
- Gain experience with new technologies



Intellectual Merits

- Creating meal plans at a very granular level of specificity
- Creating an easy and streamlined process to new recipes



Broader Impacts

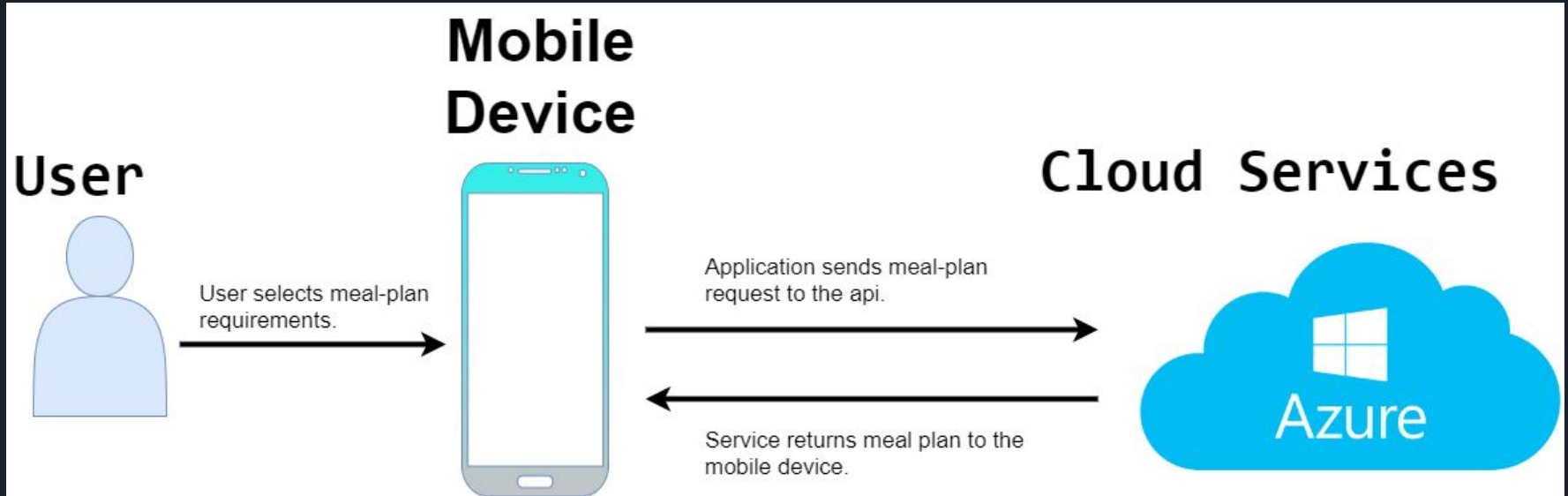
- FstFd has the potential to create a far deeper understanding of our health and provide each unique body with the nutrients it needs. Under some sicknesses, certain vitamins and minerals are required in order to fight the sickness. It can be difficult to find recipes that fit the bill of very specific requirements and FstFd will be able to address those needs.



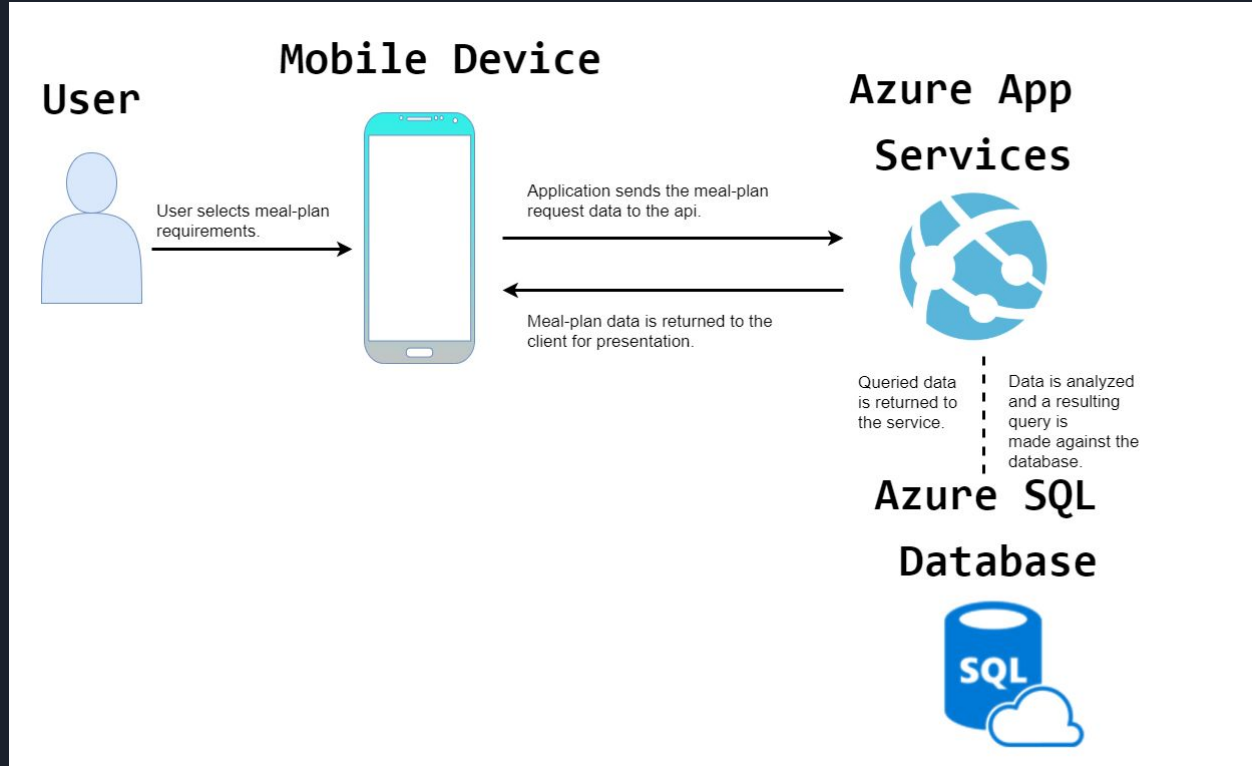
Design Specifications

- Mobile Application
- REST API
- 3rd Party Recipe API
- SQL Server Database

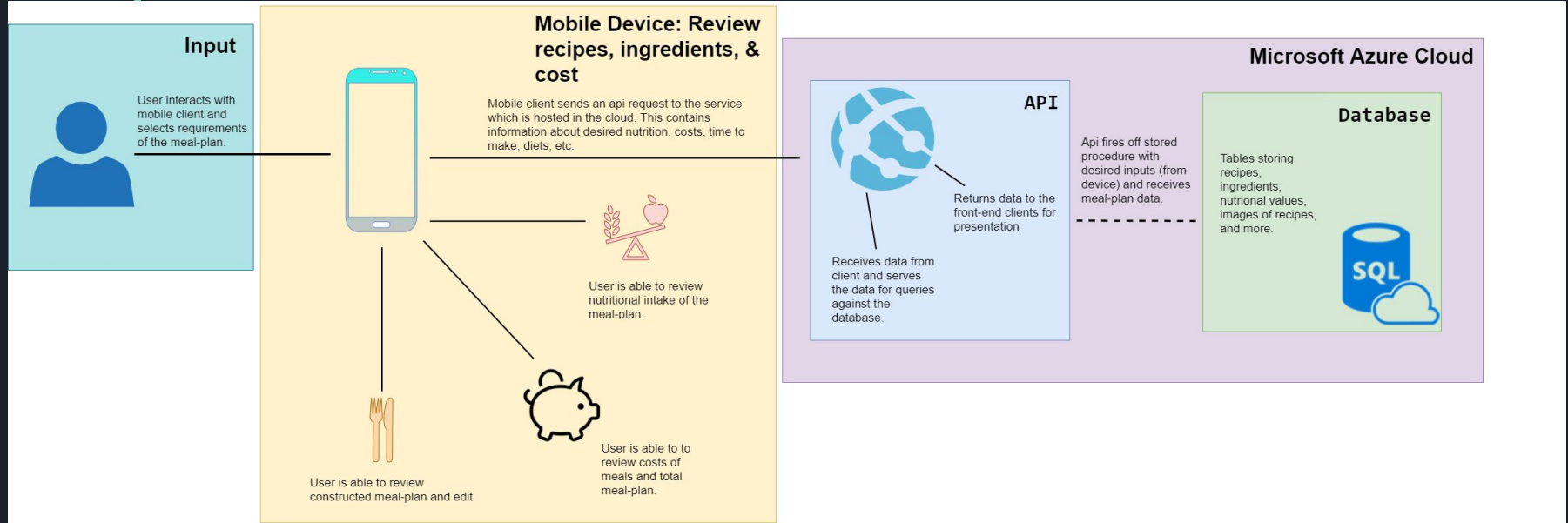
Design Diagram Level 0



Design Diagram Level 1



Design Diagram Level 2





Technologies

Being utilized in this project are technologies such as:

- Flutter, a new cross-platform mobile development framework
- Stable REST API development practices using .NET Core
- TSQL backend processes stored on SQL Server.
- Potentially utilizing Azure Cloud Services.

Milestones

Timeline			Effort Matrix	
Task/Milestone	Start Date	Completion Date	Primary Owner	Effort Hours
Complete design details / solidify technologies and scope of project	10/2	10/9	Both	3
Gather data from web to use as resources	10/2	10/9	Sam	3
Research and understand different popular diets (athlete, daily needs, etc.)	10/2	10/4	Zac	1
Create recipe database with ingredients dataset and compose table structures	10/9	10/23	Zac	6
Research mobile application platforms/languages	10/9	10/16	Sam	3
Obtain any necessary software or licenses	ongoing	ongoing	Both	2
Build mobile application Flutter	10/16	11/13	Sam	12
Build Restful api	10/23	11/20	Zac	12
Iterate on the Previous Two after winter break	1/8	1/15	Both	3
Integrate api into Azure web services	1/22	2/5	Zac	6
Develop tests for creating meal plans	1/22	2/5	Sam	6
Host DB in Azure Cloud	2/5	2/12	Zac	3
Evaluate functionality	3/5	3/12	Both	3
Explore Additional Functionality	3/12	3/19	Both	3
Tweak project for better results	3/19	3/26	Both	3
Write up report/presentation	3/26	4/9	Both	6



Results

- Achieved:
 - Ability to create recipes under specific nutritional constraints
 - Ability to share recipes and meal plans with friends
 - Ability to store and retrieve past meal plans
 - Ability to see details regarding specific recipes
- Finishing tasks:
 - Design
 - Fluidity of application
 - End-to-end Testing



Challenges

- Working with the limitations of a third party API
- Designing simple & responsive layouts
- Creating custom widgets for complex functionality
- Connecting Local API to Local Instance of Mobile Application