The Problem (Kata):

Farmacy Food is a tech-enabled healthy food startup that takes the “Let food be thy medicine” quote literally and creates tasty meals around peoples’ dietary needs and active lifestyles to support their overall well-being. Their mission is to make health and wellness radically affordable and accessible.

Architecture Characteristics:

Reliability and Fault tolerance - around food inventory and Payment. Handle faults gracefully and do not leave the user transaction or inventory in inconsistent state. Less reliable inventory management can result in user dissatisfaction.

Availability - People to depend on and trust this solution, it requires very high availability. People have strict mealtimes and availability could be the key factor here. Also, food is perishable commodity and low availability can incur losses due to accumulation of stale food.

Interoperability and Integration - with 3rd party Fridges and POS

Elasticity (certain times of the day will have more user load then other, during breakfast, lunch, or dinner time)

Scalability (They have plans to expand their solution to thousands of users and other geographies)

Cost (affordability)

Security - Payment, PII data, user’s preference, and health conditions

Data consistency - to ensure 0 overbooking.

Performance - primarily for users

Configurability - to quickly manage menu updates( addition or removal of items, dietary updates, change in pricing etc.)

UX -Accessibility

UX - Responsiveness

Domains aka functional aspects

**End User –**

Login

View the fridges in nearby vicinity

View Menu and food availability

Can Order food online - via payment gateways – Not clear to me on how this handshake will happen.

View dietary and nutritional info

Get and use coupons and promotional pricing

Can give feedback and in-app surveys

Mobile and Web accessible

Set user settings and dietary preferences.

**Fridge -**

Provide inventory details

Provide purchase details

Receive purchase

Enter into system and

mark item as sold

**POS -**

Provide inventory details

Provide purchase details

Receive purchase

Enter into system and

mark item as sold

**System -**

Authorize user

Authenticate users

User's profile and food preference

Provide Menu and Pricing

Inventory management

Coupons and promotions management

Provide Nutritional and dietary information

Track users activity and purchase history

Tracking fridges nearby user's location

Receive and Manage feedback and surveys

Integrate with fridges and POS

Get inventory details

Get purchase details

**Kitchen** -

Receive inventory details

Update inventory details

Get Menu details

Get Dietary and nutritional spec for menu items

Domain to Arch characteristics mapping

TBD

Component Identification

TBD