



EASYEATS

FOOD AT YOUR FINGERTIPS

Link to Presentation : https://universityofexeteruk-my.sharepoint.com/:v:/g/personal/st787_exeter_ac_uk/EU8LaU-a0tFJkaGwA_mB_msBA9CdslvaA8rdNSSGTVjj0Q?e=szEqZh

CONTENT OVERVIEW

Food Order Application



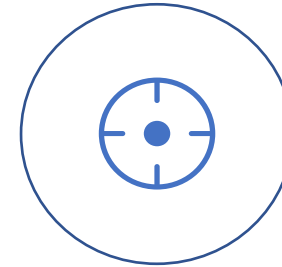
EASYEATS



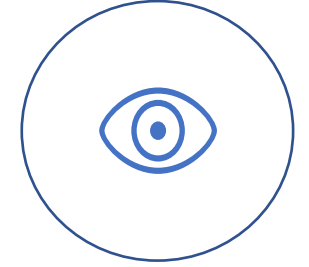
USE CASE



DATABASES



**POLYGLOT
PERSISTENCE**



CODE DEMO



EASYEATS

Food Order Application

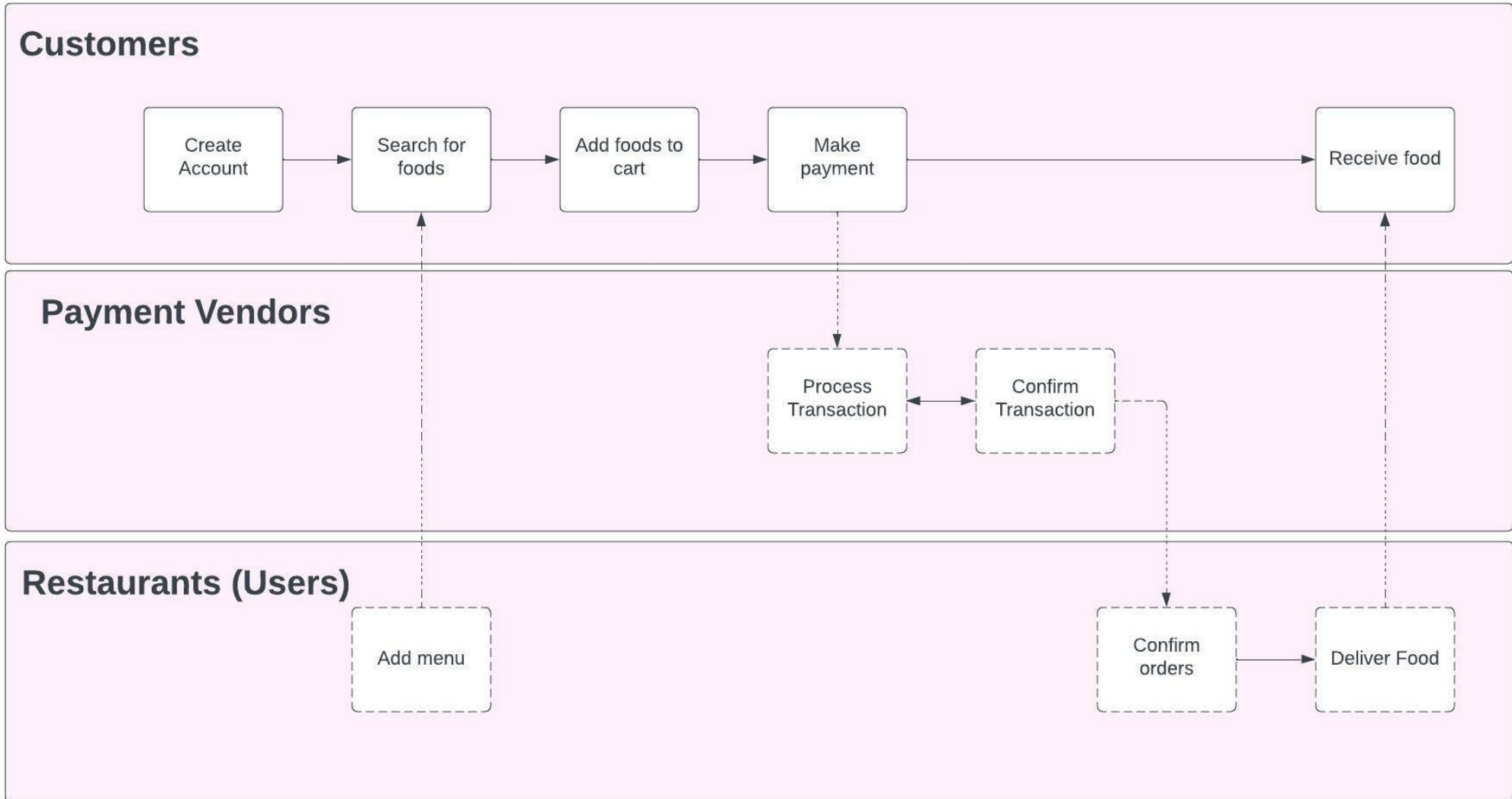
EasyEats is the online food order platform, allowing customers to search for foods, place the orders then pay easily with a good amount of discount.

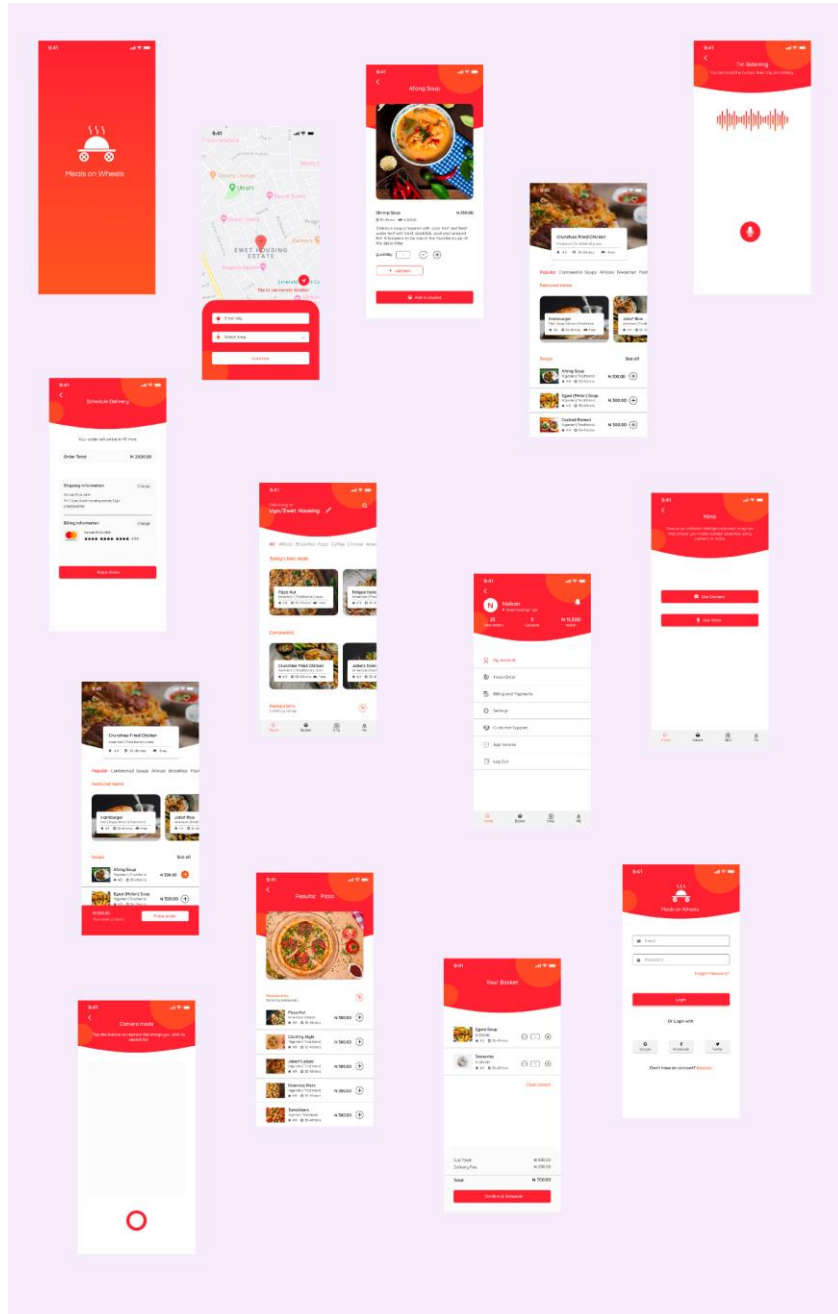
Orders will be sent to restaurants then the restaurants will prepare and deliver foods to the customers.

Customers can exclude foods with the allergic or unwanted ingredient.

USE CASE

Food Order Application





FEATURES

Customers

Sign up

Search for foods

Add foods to Basket

Process order

Pay via transaction gateway

Restaurants (Users)

Sign Up

Own multiple restaurants

Create/Edit menus

Add/remove foods

Add notes (Ingredients, Spicy Levels, Diets)

Payment Gateway Vendors

Process Payments

Confirm Transactions

DATABASE CHOICES

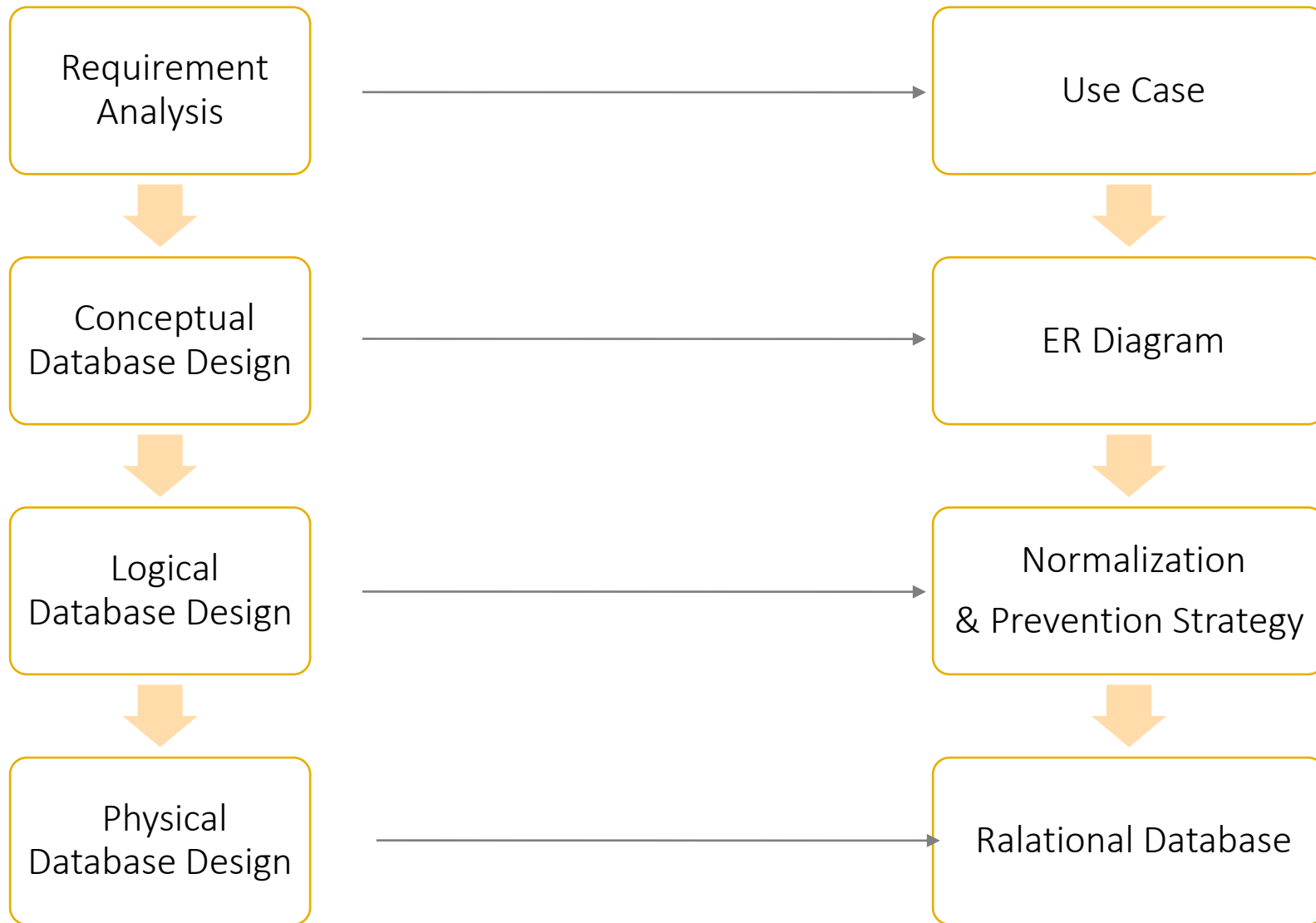


- ☐ Data integrity, Data consistency and Data redundancy
- ☐ Data Manipulation
- ☐ Data independence
- ☐ Database system maintenance, improved data quality, enforced database security, ease of implementation.

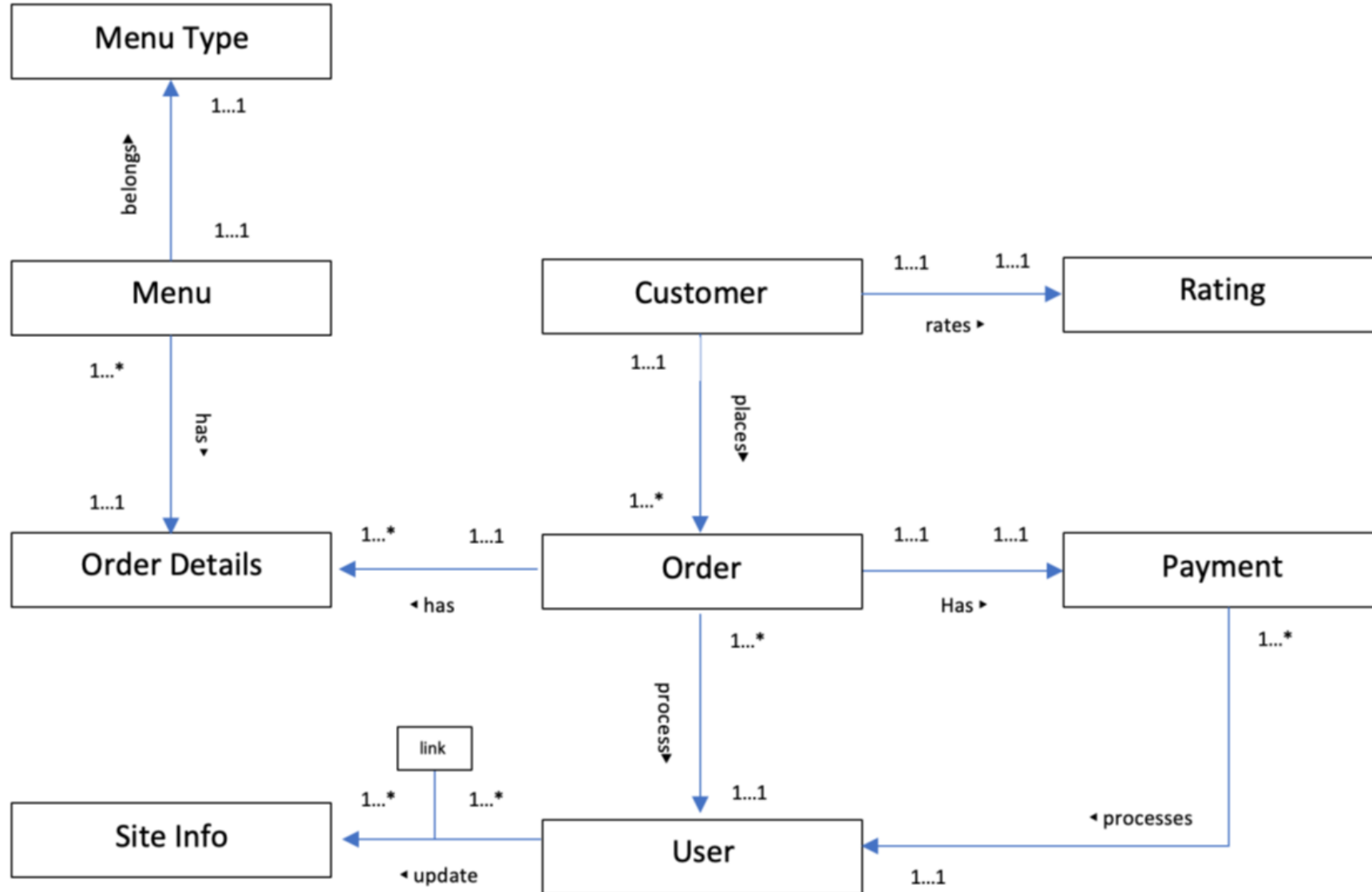


- ☐ Real-time data store
- ☐ Caching and session storage
- ☐ Queuing and messaging

DATA MODELLING



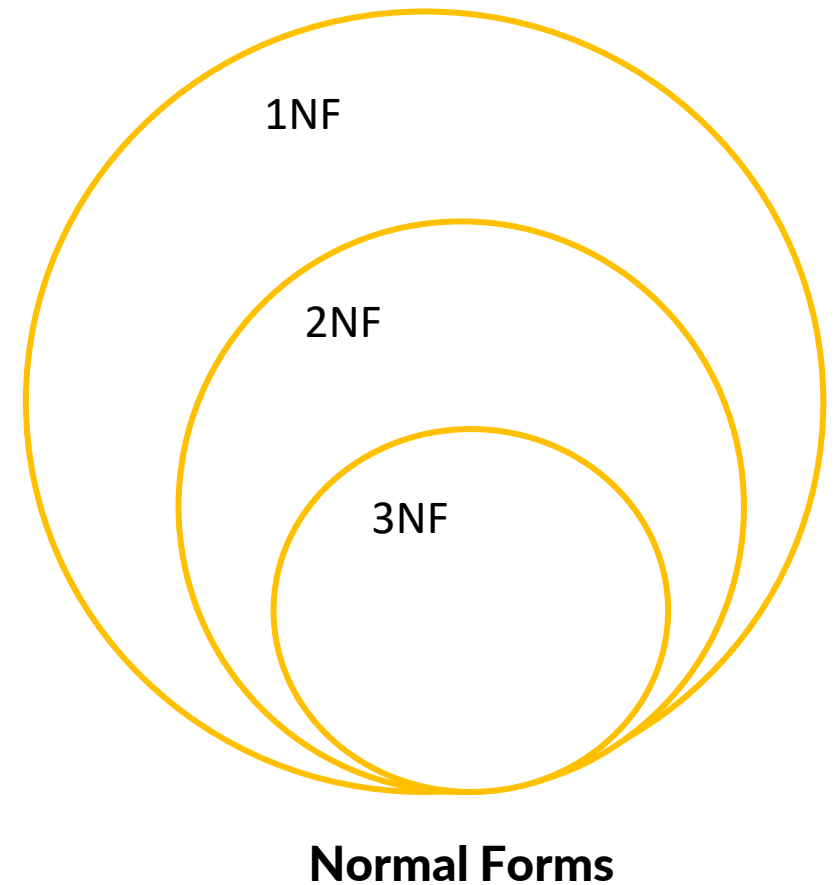
ER DIAGRAM



NORMALIZATION

Normalization: a set of tables with minimal redundancy that support the data requirements

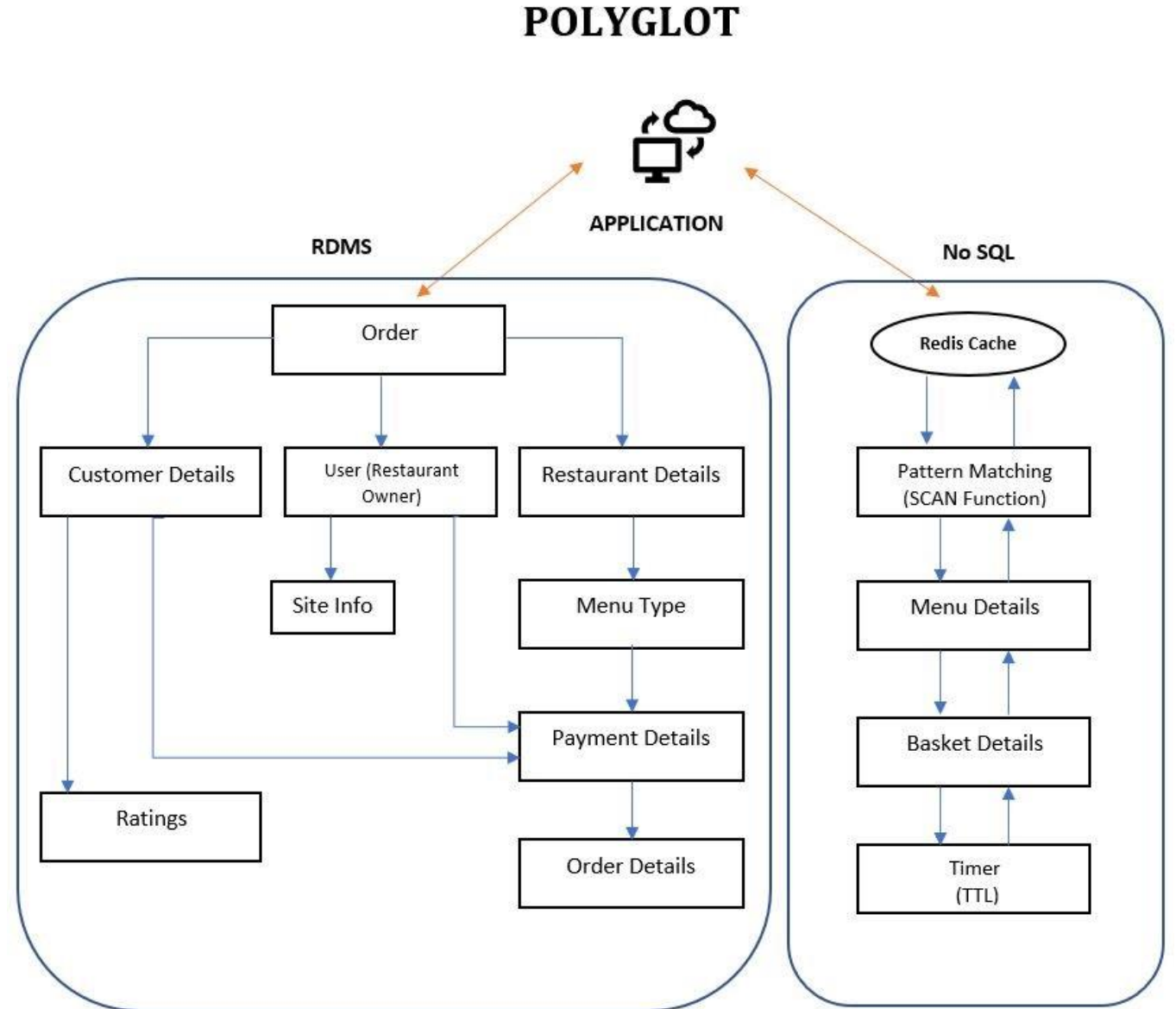
- 1NF: Table have a primary key and has no multi-value.
- 2NF: Should be in 1NF and no partial dependencies
- 3NF: Should be in 1NF and 2NF; no transitive dependencies



POLYGLOT PERSISTENCE

Food Order Application

- Using different data storage technologies to support various data types.
- Same Idea behind Polyglot Programming
- Benefits :Simplifies operation, improves efficiency, creates faster response time
- Drawbacks : Complexity, longer maintenance and repair time and costlier to implement.



JUSTIFICATION FOR DATABASES

Functionality	Consideration	Database Used
User & Site Details	Stores the details about the restaurant owner and the site and requires data security.	RDMS
Payment Details	Requires transactional updates and data security.	RDMS
Order	Stores the details about the order being made and requires data security.	RDMS
Customer Details	Stores the details of the customer, this requires data privacy and security.	RDMS
Menu Type	Details regarding types of Menus. Requires occasional updating.	RDMS
Restaurant Details	Details of Restaurant and its contact info. It requires occasional updating.	RDMS
Menu Details	Has all the details of the ingredients and customers selected the required dietary preference and allergen information	Redis
Basket Details	It has a timer and the data stored is not important	Redis

CODE DEMO

Food Order Application