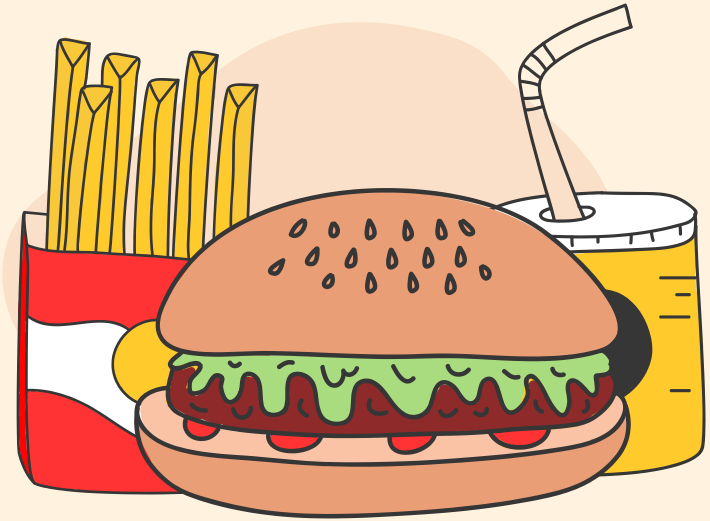
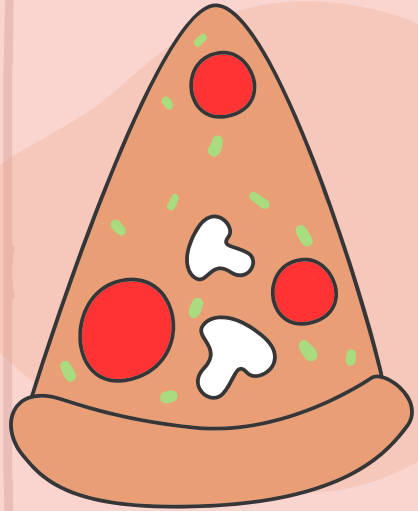


BRISKEAT

A digital solution for hunger and health



Team Members

- ADITYA PRASAD ACHARYA - Team Lead/Technical Lead
- JALAJ GUPTA - Software Tester
- LAVANYA DEY - Design Lead

PROBLEM STATEMENT

- During peak hours, huge, disorganised lines of people waiting to order meals from the canteen have been witnessed on every floor of the building. A thorough survey revealed that the pupils appeared to find the lengthy waiting to be inconvenient. The enormous time disparity between the number of clients and canteen servers makes it difficult to process orders quickly and methodically.
- There are two main problems with this whole situation:
- first, there are many willing clients who leave without ordering
- second, the rush makes the canteen servers too busy, which causes a lot of confusion when customers are clearing their orders. Having a site where orders can be placed systematically in advance will help the ordering system run more efficiently because the customer will only need to show up at the canteen to pick up the order. Additionally, it will aid in advance preparation of the order in accordance with the customer's pickup time.

CURRENT SITUATION

- To address the growing problem that students encounter on a daily basis regarding the orders they give out at the canteen.
- The area around the canteen where customers order their food is extremely chaotic during peak hours.
- The vast differences between customers and servers make it very challenging to process orders quickly.

SOCIAL BENEFIT

- It will make the ordering system and process simpler
- It will help in reducing the rush near the canteen.
- It will help the caterers in preparing their orders well on time.
- It will help scaling the canteen business on a larger platform by having

more customers on the portal.

LIMITATIONS

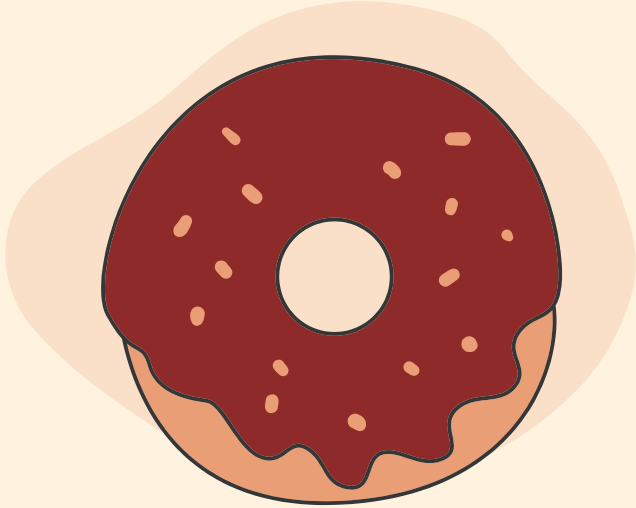
There are a few problems and risks associated with this project stated as followed:

- Since the project deals with a three-party system that is the user, the customer, the console system and the catering persons, thus any fail on any one end would lead to the failure of the whole system.

- During heavy traffic in the system, there might be certain situations wherein there is a delay in the updates that are to be sent to the customer regarding their orders.

- Due to the restricted procedure that has to be followed by the caterers,there might be situations where certain steps that might be missed when in a hurry, which may lead to making loopholes in the communication cycle between the caterers and the customer.

APPROACH



- A web-app portal
- A strong frontend
- An extensive database

METHODOLOGY

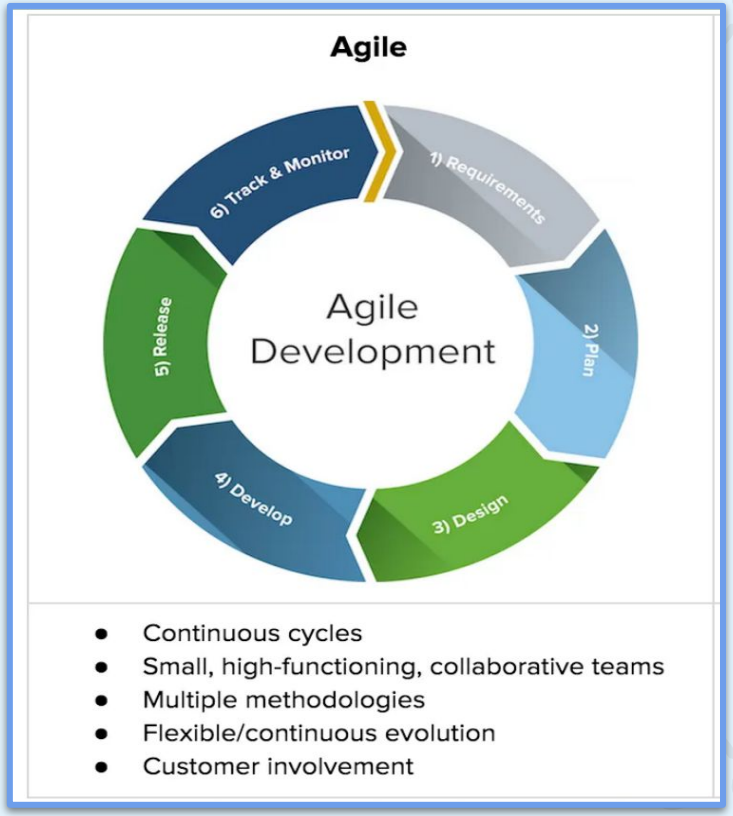
Iterative Agile methodology

- Agile lets teams offer value to their clients more quickly and with fewer difficulties through an iterative approach to project management and software development. An agile team produces work in manageable, small-scale increments rather than staking all on a "big bang" launch. Teams have a built-in mechanism for fast adjusting to change since requirements, plans, and results are regularly evaluated.

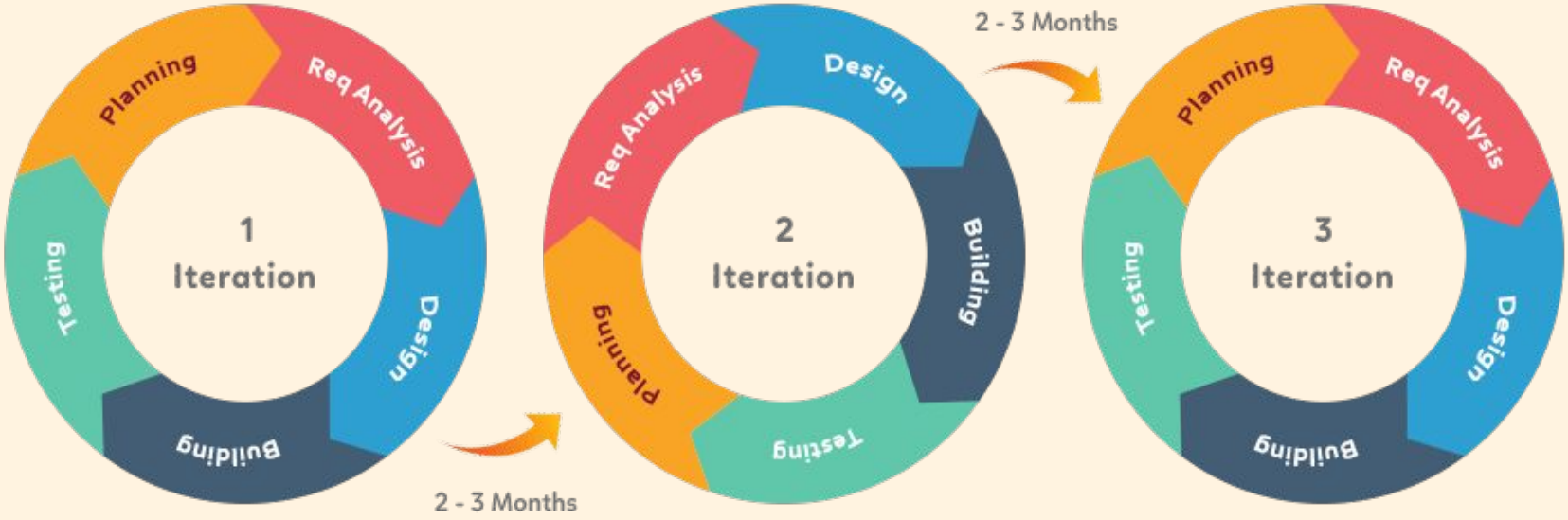
- Also as It promotes adaptive planning, evolutionary development, early delivery,continuous improvement, and encourages rapid and flexible response to change, it renders the developers more comfort and efficiency for the development of the project.

There are various phases involved in the Iterative Agile methodology

1. Requirement Analysis
2. Planning
3. Design
4. Development
5. Release
6. Track and Monitor



Graphical illustration of the Agile Model



SYSTEM REQUIREMENTS

The minimum requirements for our food takeaway web app are as followed :-

- The minimum memory requirement for Food Delivery Service is 4GB of RAM installed in your computer.
- Food Delivery Service will run on PC systems with Windows 7/8.1/10 (64-bit versions) and upwards.++

Functional Requirements

- Transaction & Checkout
- Social Media Integration
- Review and Rating
- QR code scanner
- Geofencing
- Search filters & Push Notifications
- Order History
- In app messages
- Voice Integration

Non functional requirements

- Loading speed
- Time taken to deliver server response
- User response time
- Data consumption limits

ESTIMATION

1. Effort and Cost Estimation

Effort (hr)	Cost (INR)
1	500

Activity Description	Sub-Task	Sub-Task Description	Effort (in hours)	Cost in INR
Design the user screen	E1R1A1T1 (Effort-Requirement-Activity-Task)	Confirm the user requirements (acceptance criteria)	3	1500
	E1R1A1T2	Analyze the risk factor and problems associated with this project(Risk Management)	4	2000
	E1R1A1T3	Initialization and Implementation of the resources for making the project productive (Implementation and Development of project)	15	7500
Identify Data Source for • displaying units of Energy Consumption		Go through Interface contract (Application Data Exchange) documents	5	2500
		Document	3	1500

2. Infrastructure/Resource Management [GmEx]

Infrastructure Requirement	Qty	Cost per qty	Cost per item
IR1	UI/UX Design Panel and Template	1 Design Panel 4 Design Templates	10000
IR2	Database Creation and Management server	1	5000
IR3	Payment Gateway Access	1	2000
IR4	Cloud Server for Database	1	4000
IR5	PC's	1	50000
IR6	Geofencing /Navigation	1	3000

3. Maintenance and Support Cost [OpEx]

Category	Details	Qty	Cost per qty per annum	Cost per item
People	Network, System, Middleware and DB admin Developer , Support Consultant	3	2,000,000	6,000,000
License	Operating System Database Middleware IDE	10	10000	100,000
Infrastructures	Server, Storage and Network	20	20000	400,000

Project Team Formation

1. Identification Team members

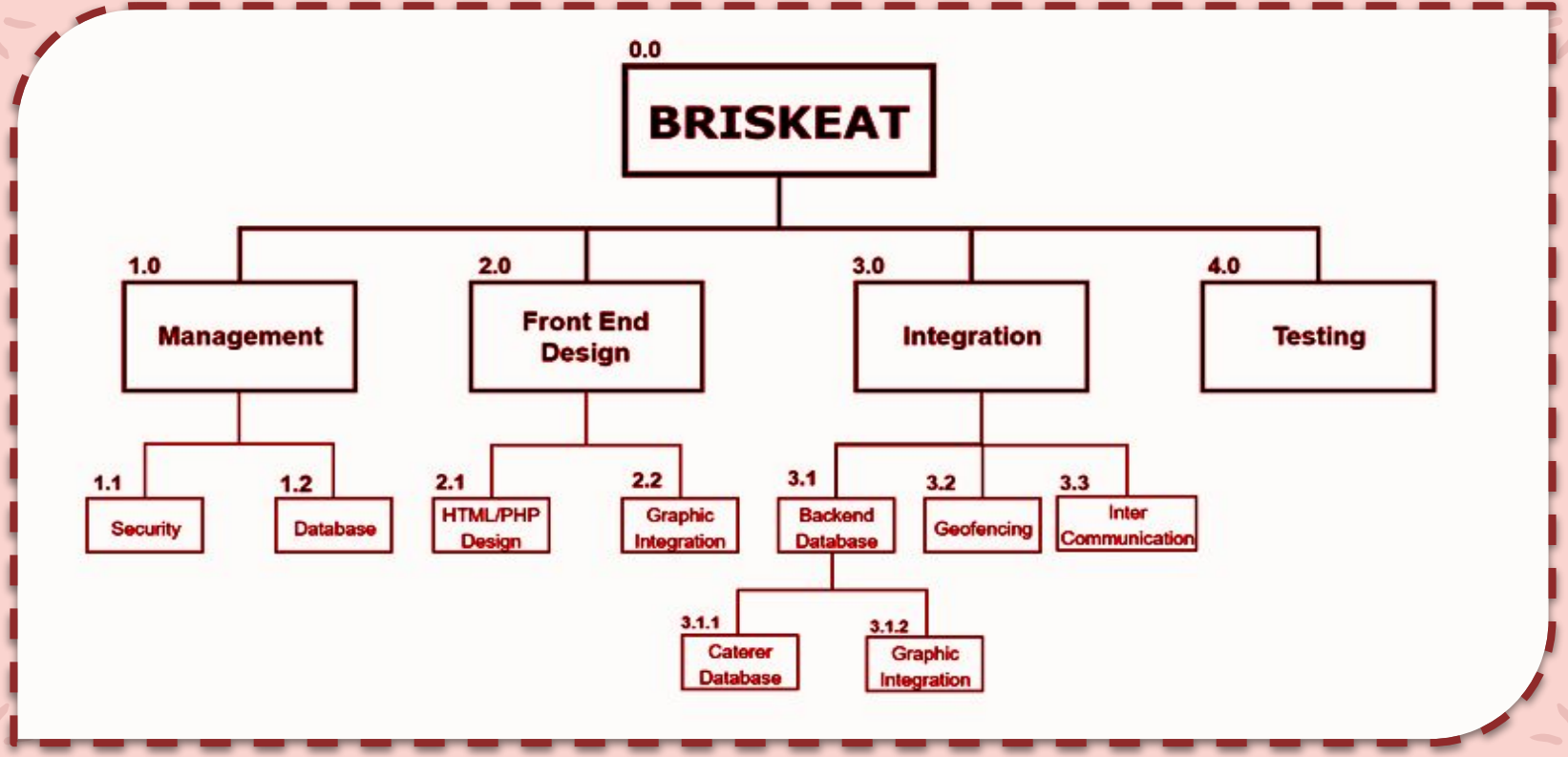
Name	Role	Responsibilities
Food Caterers/ Canteen	Key Business User (Product Owner)	Provide clear business and user requirements
Aditya Acharya	Project Manager	Manage the project
Jalaj Gupta	Business Analyst	Discuss and Document Requirements
Aditya Acharya	Technical Lead	Design the end-to-end architecture
Lavanya Dey	UX Designer	Design the user experience
Lavanya Dey	Frontend Developer	Develop user interface
Aditya Acharya	Backend Developer	Design, Develop and Unit Test Services/API/DB
Jalaj Gupta/Lavanya Dey	Cloud Architect	Design the cost effective, highly available and scalable architecture
Jalaj Gupta	Cloud Operations	Provision required Services
Jalaj Gupta	Tester	Define Test Cases and Perform Testing

2. Responsibility Assignment Matrix

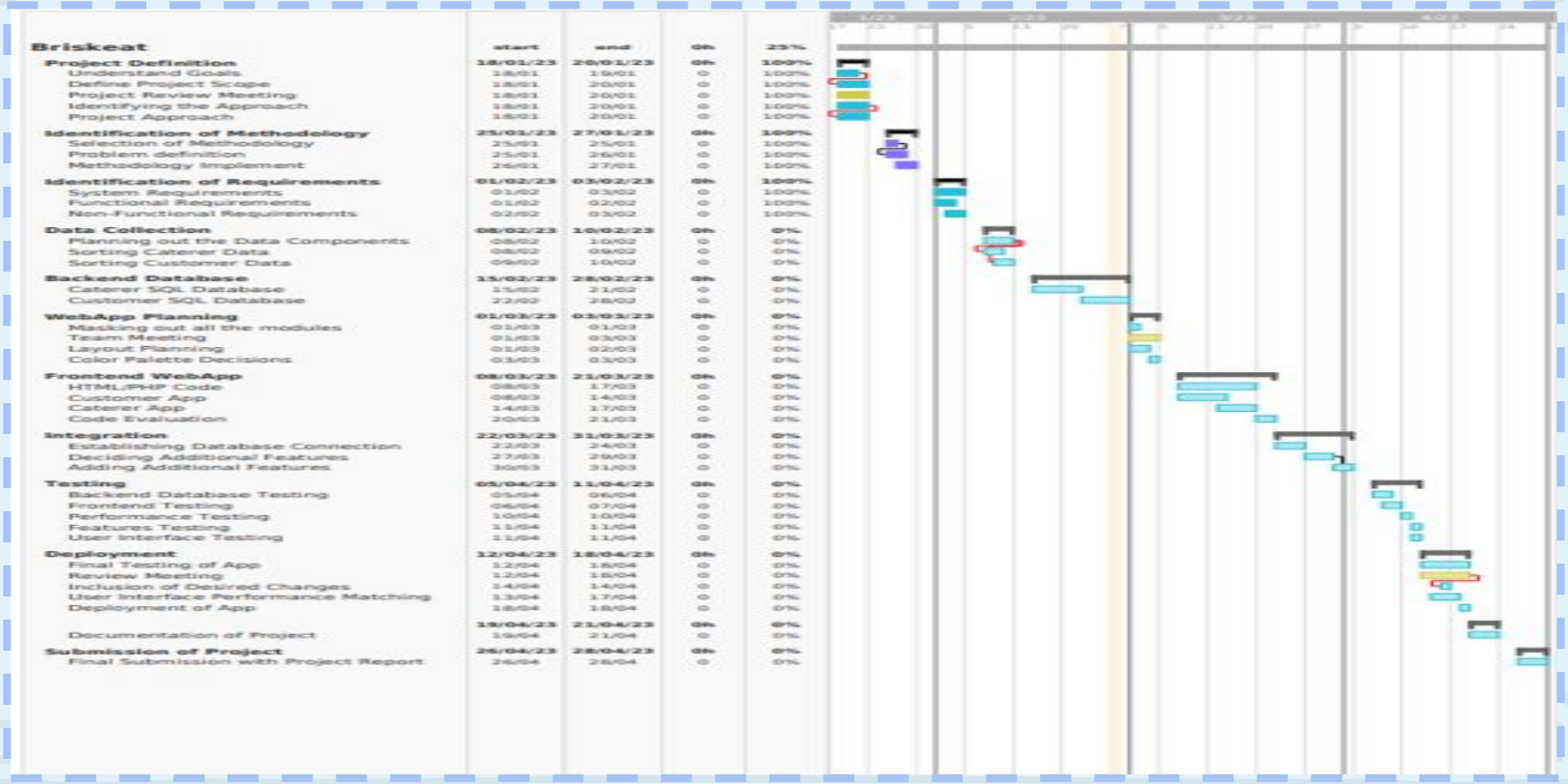
RACI Matrix	Team Members			
Activity	**Jalaj Gupta - (BA)**	**Lavanya Dey - (Developer)**	**Aditya Acharya - (Project Manager)**	**Food Caterers/ Canteen - Key Business User**
User Requirement Documentation	A/C	C/I	I	R
Advertisement	C	C	R	-
Development	C	R	I	-
Website Design	R	A	I	-
Testing / Deployment		A	C	-
Bug Fixes	A	R	I	-
Update & Upgrade	C/I	C	A	-

A	Accountable
R	Responsible
C	Consult
I	Inform

WBS Chart


0.0
BRISKEAT
1.0
Management
2.0
Front End Design
3.0
Integration
4.0
Testing
1.1
Security
1.2
Database
2.1
HTML/PHP Design
2.2
Graphic Integration
3.1
Backend Database
3.2
Geofencing
3.3
Inter Communication
3.1.1
Caterer Database
3.1.2
Graphic Integration

Timeline Chart



Briskeat	start	end	0h	25%
Project Definition	18/01/23	20/01/23	0h	100%
Understand Goals	18/01	19/01	0	100%
Define Project Scope	18/01	20/01	0	100%
Project Review Meeting	18/01	20/01	0	100%
Identifying the Approach	18/01	20/01	0	100%
Project Approach	18/01	20/01	0	100%
Identification of Methodology	25/01/23	27/01/23	0h	100%
Selection of Methodology	25/01	25/01	0	100%
Problem definition	25/01	26/01	0	100%
Methodology Implement	26/01	27/01	0	100%
Identification of Requirements	01/02/23	03/02/23	0h	100%
System Requirements	01/02	03/02	0	100%
Functional Requirements	01/02	02/02	0	100%
Non-Functional Requirements	02/02	03/02	0	100%
Data Collection	08/02/23	10/02/23	0h	0%
Planning out the Data Components	08/02	10/02	0	0%
Sorting Caterer Data	08/02	09/02	0	0%
Sorting Customer Data	09/02	10/02	0	0%
Backend Database	15/02/23	28/02/23	0h	0%
Caterer SQL Database	15/02	21/02	0	0%
Customer SQL Database	22/02	28/02	0	0%
WebApp Planning	01/03/23	03/03/23	0h	0%
Masking out all the modules	01/03	01/03	0	0%
Team Meeting	01/03	03/03	0	0%
Layout Planning	01/03	02/03	0	0%
Color Palette Decisions	03/03	03/03	0	0%
Frontend WebApp	08/03/23	21/03/23	0h	0%
HTML/PHP Code	08/03	17/03	0	0%
Customer App	08/03	14/03	0	0%
Caterer App	14/03	17/03	0	0%
Code Evaluation	20/03	21/03	0	0%
Integration	22/03/23	31/03/23	0h	0%
Establishing Database Connection	22/03	24/03	0	0%
Deciding Additional Features	27/03	29/03	0	0%
Adding Additional Features	30/03	31/03	0	0%
Testing	05/04/23	11/04/23	0h	0%
Backend Database Testing	05/04	06/04	0	0%
Frontend Testing	06/04	07/04	0	0%
Performance Testing	10/04	10/04	0	0%
Features Testing	11/04	11/04	0	0%
User Interface Testing	11/04	11/04	0	0%
Deployment	12/04/23	18/04/23	0h	0%
Final Testing of App	12/04	18/04	0	0%
Review Meeting	12/04	18/04	0	0%
Inclusion of Desired Changes	14/04	14/04	0	0%
User Interface Performance Matching	13/04	17/04	0	0%
Deployment of App	18/04	18/04	0	0%
	19/04/23	21/04/23	0h	0%
Documentation of Project	19/04	21/04	0	0%
Submission of Project	26/04/23	26/04/23	0h	0%
Final Submission with Project Report	26/04	26/04	0	0%

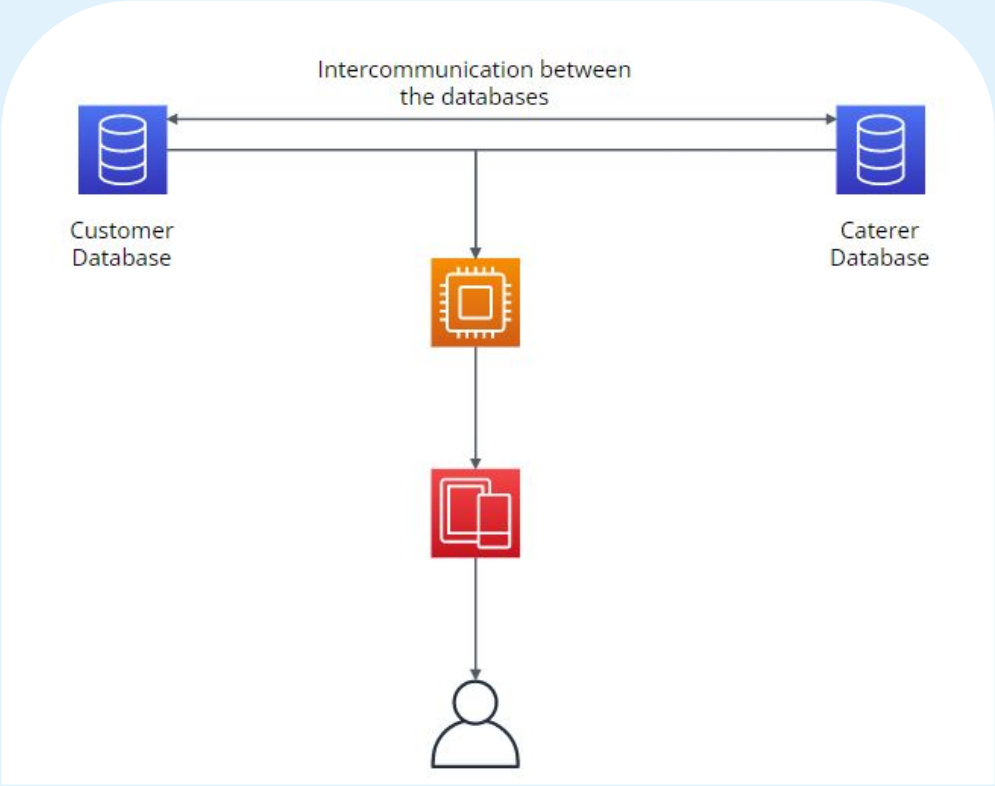
SWOT Analysis

Strengths	• User friendly interface. • Efficient checkout process. • Strong and efficient database interlink. • Colourful frontend experience.
Weaknesses	• Improper data integrity. • Delayed update messages and notifications. • Lags during order checkout process.
Opportunities	• Additional intriguing features. • Bringing up newer updates. • Improvisation in the app on-demand.
Threats	• Possibility of disagreement in the app from any one party of the app user. • Inappropriate working of app due to too much user traffic.

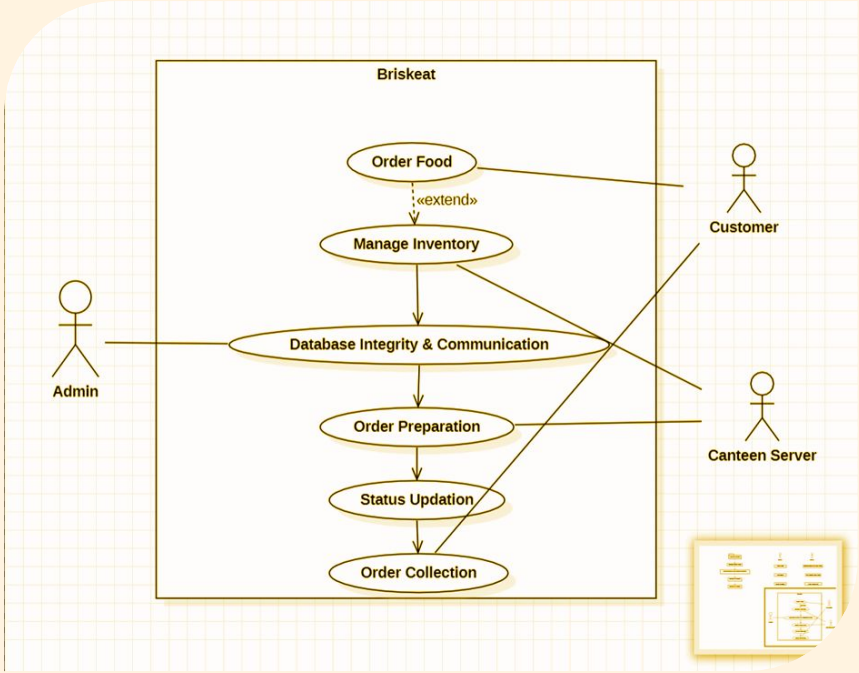
RMMM :

RESPONSE	STRATEGY	EXAMPLE
Avoid	Risk avoidance is a strategy where the project team takes action to remove the threat of the risk or protect from the impact.	• Module disagreements. • Changes in execution strategy.
Transfer	Risk transference involves shifting or transferring the risk threat and impact to a third party. Rather transfer the responsibility and ownership.	• Database management and integrity. • Securing the databases. • Marketing of the app.
Mitigate	Risk mitigation is a strategy whereby the project team takes actions to reduce the probability of the risk occurring. This doesn't risk or potential impact, but rather reduces the likelihood of it becoming real.	• App features.
Accept	Risk acceptance means the team acknowledges the risk and its potential impact, but decides not to take any pre-emptive action to prevent it. It is dealt with only if it occurs.	• Delays in in-app messaging and updates to the user. • Geo-fencing issues.

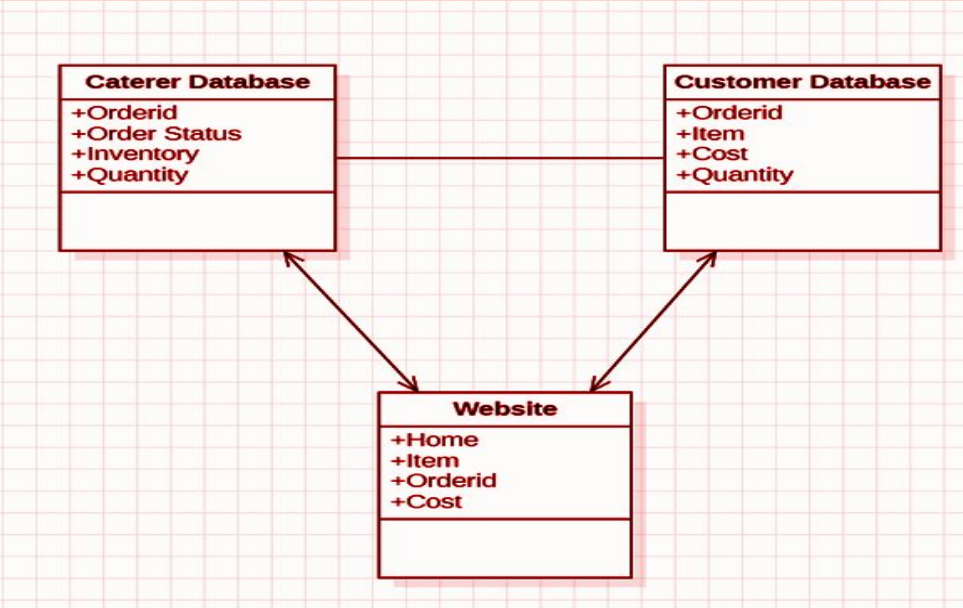
System Architecture



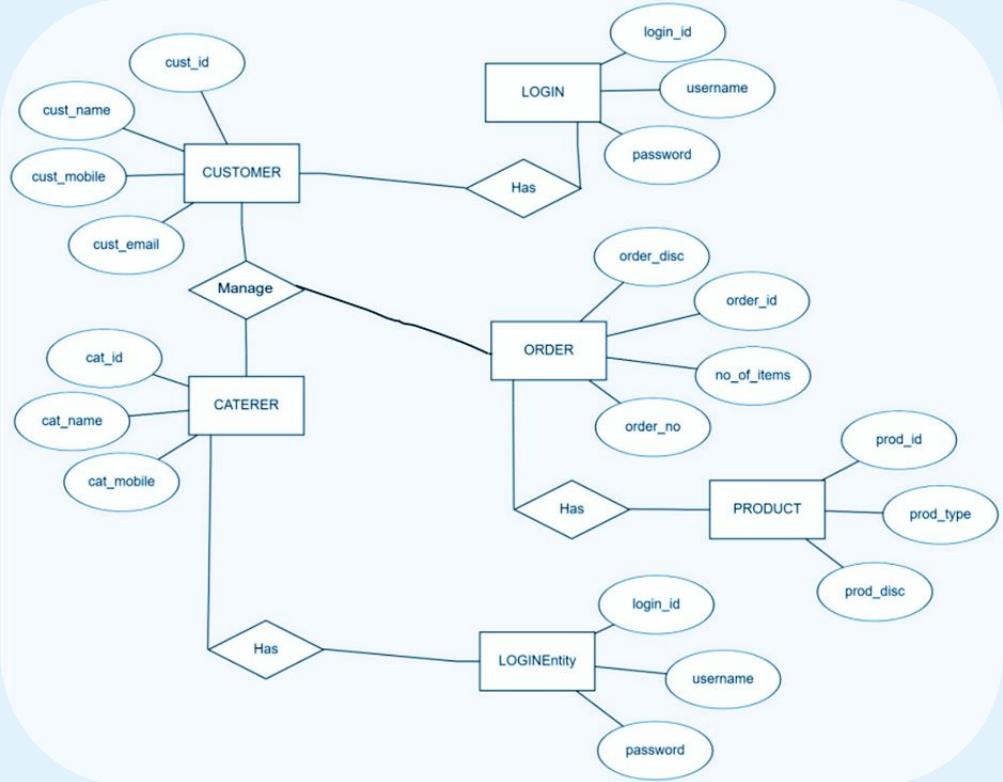
Use Case Diagram



Class Diagram

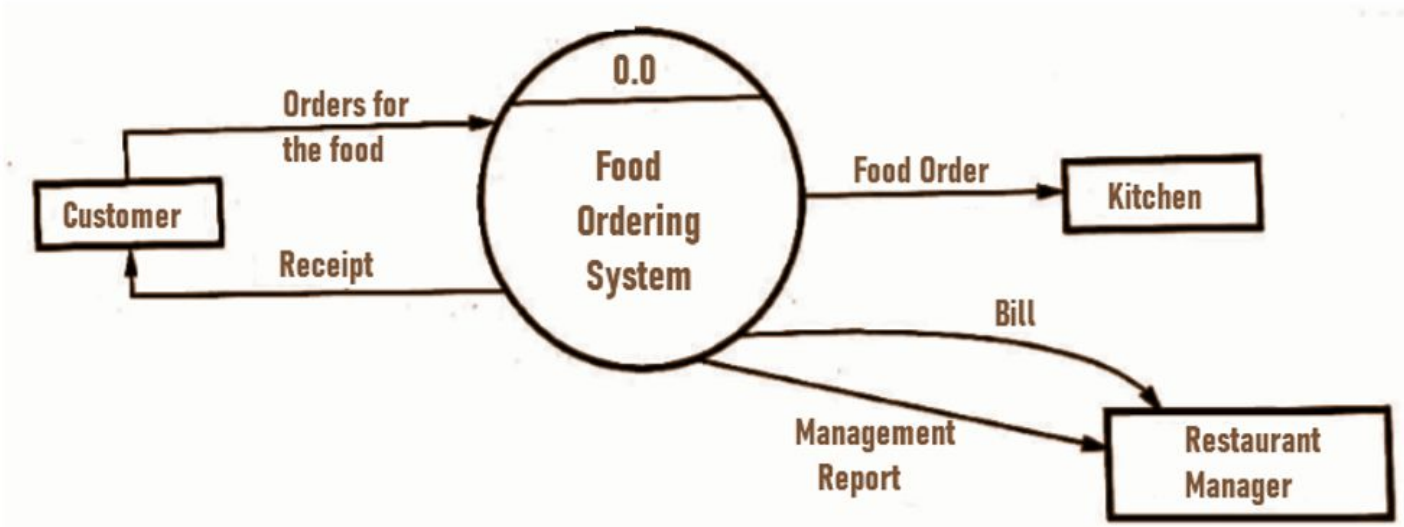


ER Diagram


login_id
LOGIN
username
password
cust_id
cust_name
cust_mobile
CUSTOMER
cust_email
Has
Manage
order_disc
order_id
ORDER
no_of_items
order_no
cat_id
cat_name
CATERER
cat_mobile
prod_id
Has
PRODUCT
prod_type
prod_disc
login_id
Has
LOGINEntity
username
password

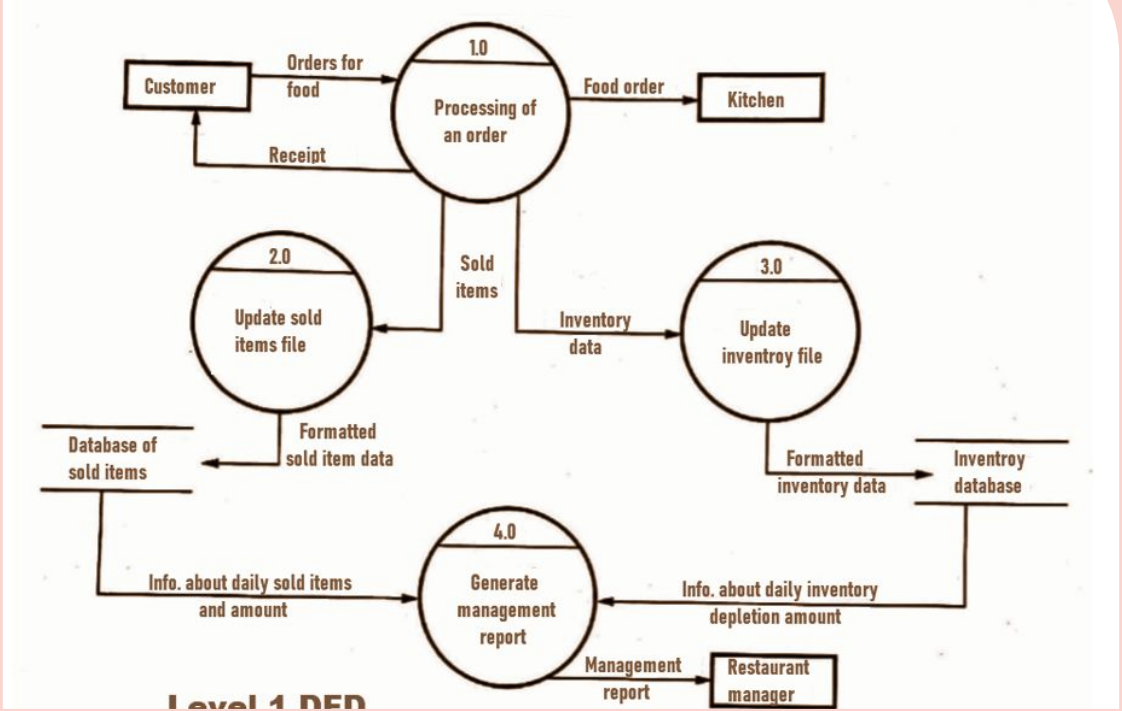
Data Flow Diagram-1

DFD Level 0



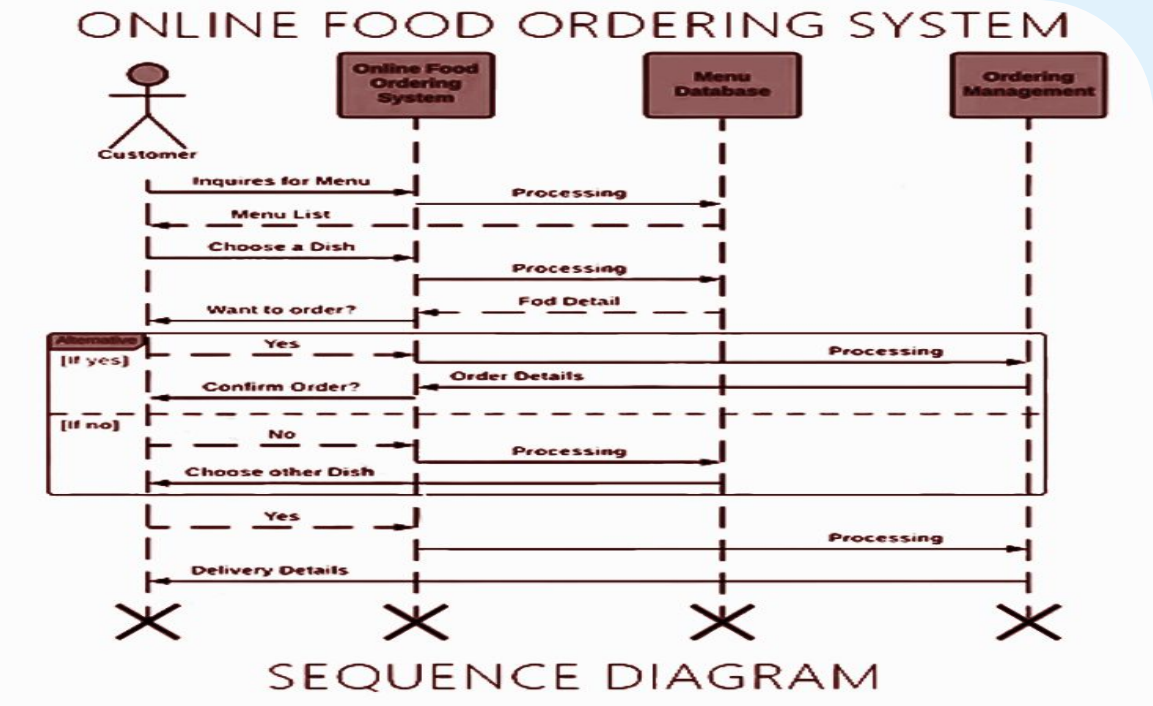
Data Flow Diagram-2

DFD Level 1

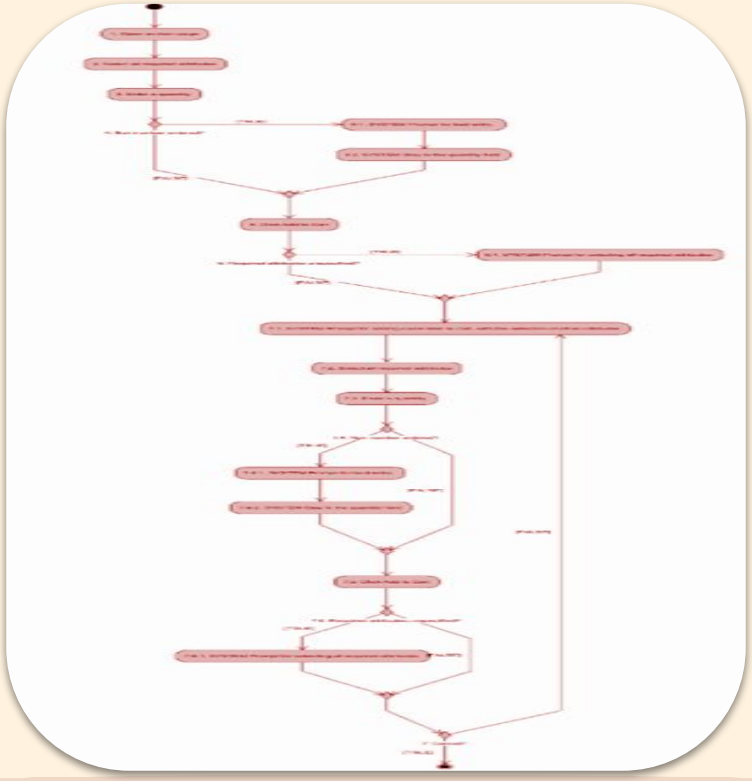


Level 1 DFD

Sequence Diagram



Collaboration Diagram



Manual Test Case Report

Manual Test Case Report:

Category	Progress Against Plan	Status
Functional Testing	Green	Completed
Non-Functional Testing	Amber	In Progress

Summary of the current progress

Summary of the current progress:

Functional	Test Case Coverage (%)	Status
Accept valid details of the user, valid email id, and password.	30%	Completed
send the order details to the caterer, then push the order status to the customer.	30%	Completed
Testing the functionality of the buttons available	20%	Completed

Non-Functional	Test Case Coverage (%)	Status
Check whether the interface is proper in various other browsers.	20%	In progress (Need to check still few kinds of systems and servers)

Present obstacles to proceed further

- There is a risk of change in the user interface and malfunctioning of minute functionalities of the web browser.
- Though they cannot be notified by a common user, we intend to provide a seamless experience to a technical user too, thus there is still a need to check the UI of web browsers with a few more kinds of systems and PCs.

Help from stakeholders

- We expect a little more time to check the smooth working of the browser.
- We also expect access to more kinds of systems asked for as early as possible which are in good working condition.


Giving your hunger a new option
#BRISKEAT