YALLAEAT.AI

Arabic Restaurants Ordering Chatbot

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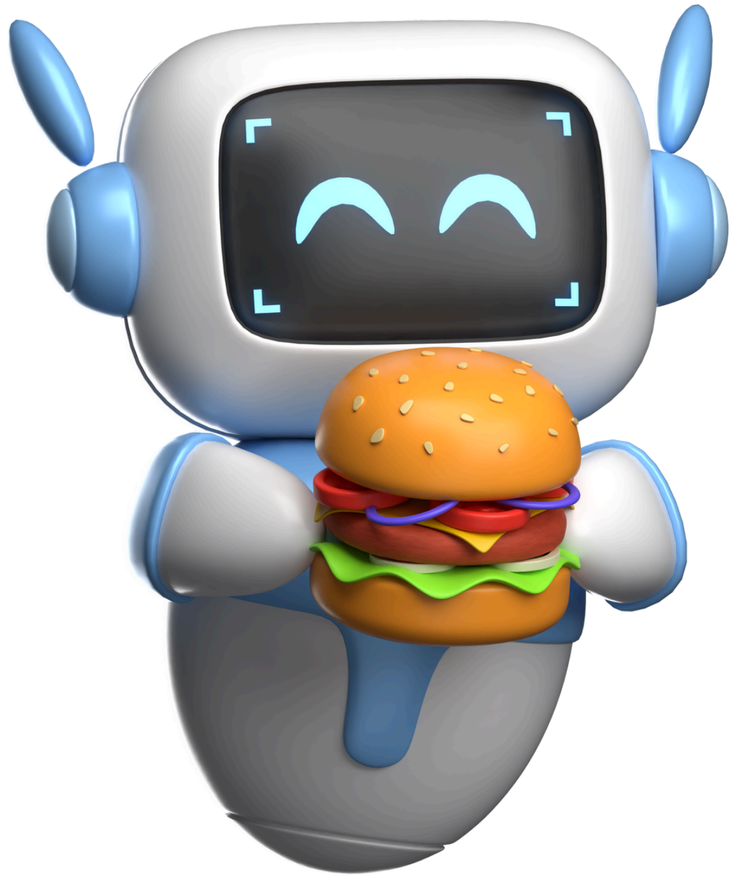
Introduction

1. What is YallaEat.ai?

An AI-powered assistant that makes restaurant food ordering faster, smarter, and more personalized – all in natural Arabic conversations.

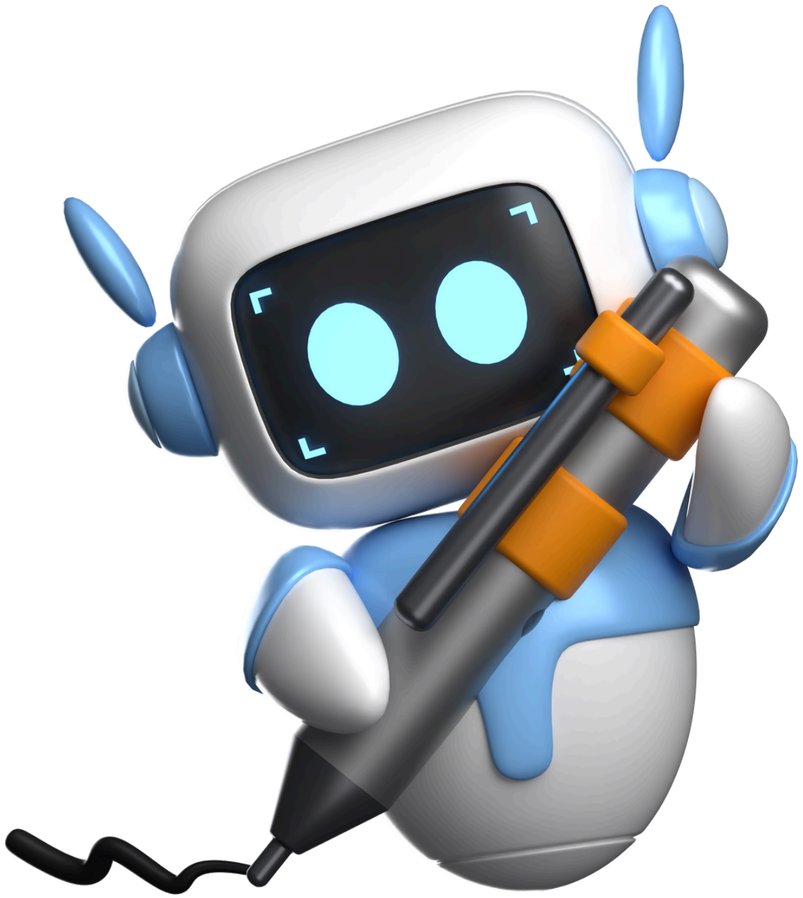
2. Why it matters.

Helping restaurants reduce wait times and giving customers a seamless ordering experience in their own language.

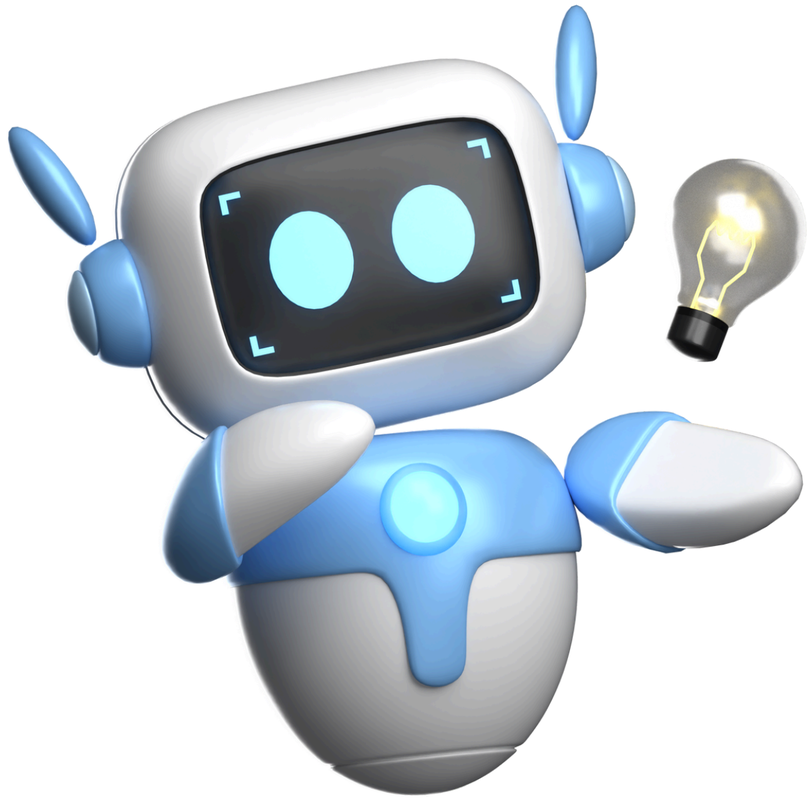


The Problem

1. Slow & inefficient ordering during peak hours.
2. Repeating customer info every time
3. Missed or delayed orders due to human errors.
4. Lost customer and Financail losses



Our Solution



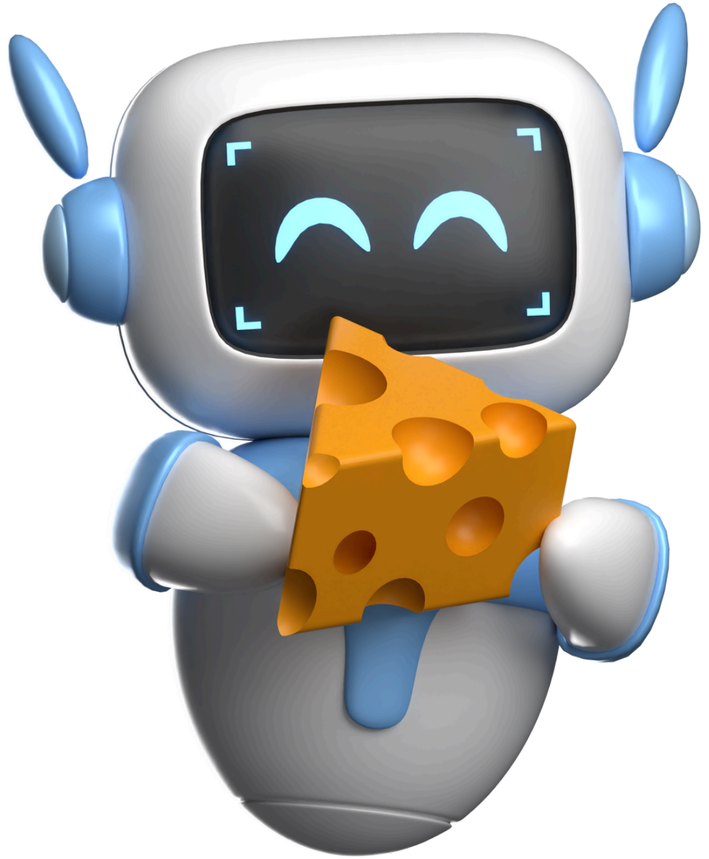
1. Customer Solution: a smooth, fast, and natural ordering experience

2. Admin Solution: tools for restaurants to manage menus, track orders, and improve efficiency.

Offering

For Customers

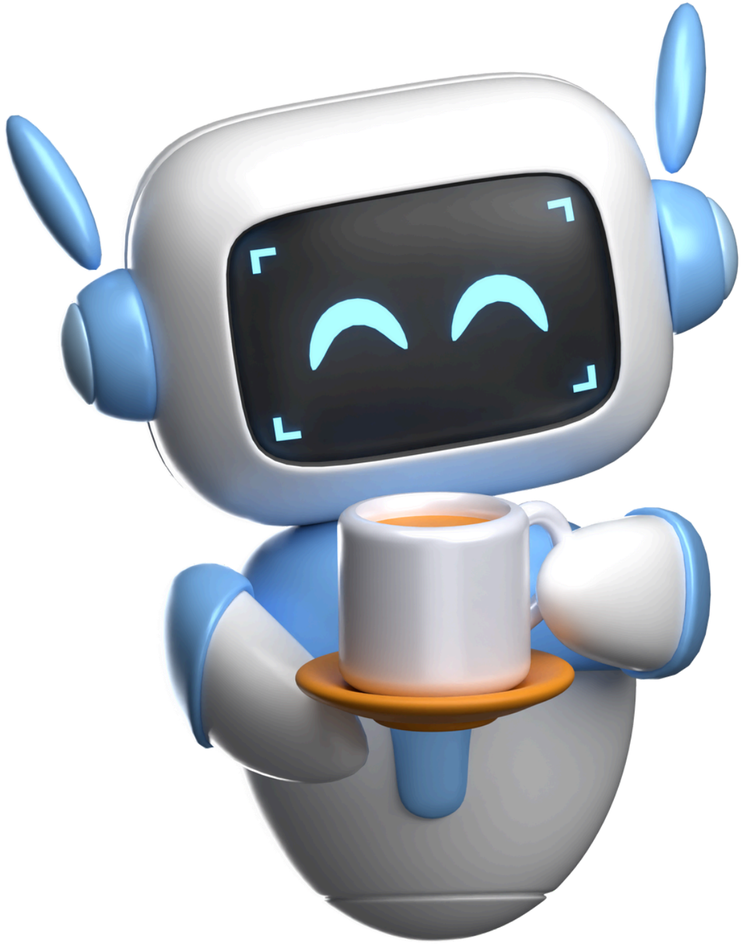
1. Seamless and fast ordering experience.
2. Natural Arabic conversations with the chatbot.
3. Personalized meal suggestions.



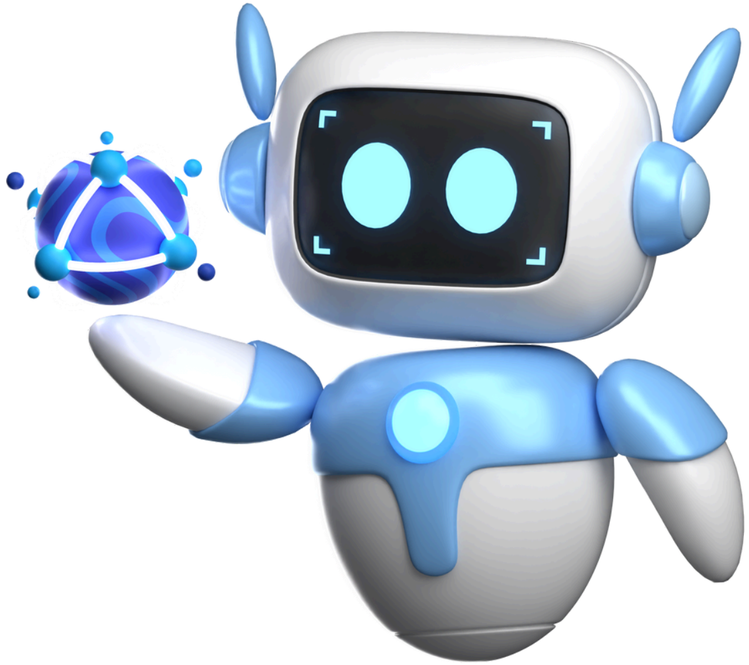
Offering

For Restaurants

1. Reduce order handling time & staff workload.
2. Minimize order errors.
3. Enhance customer satisfaction & loyalty.

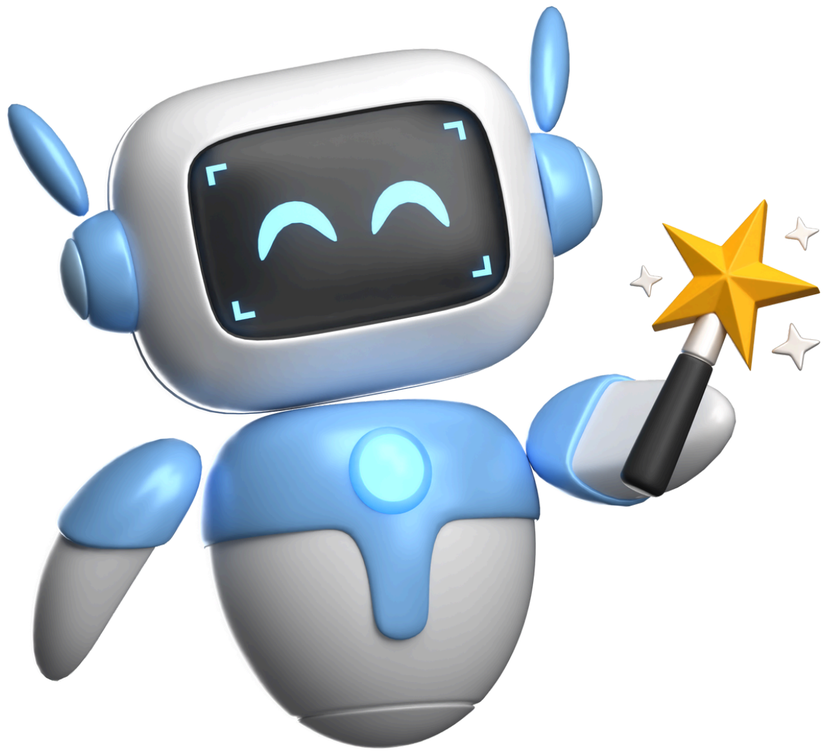


Features & Scope Overview



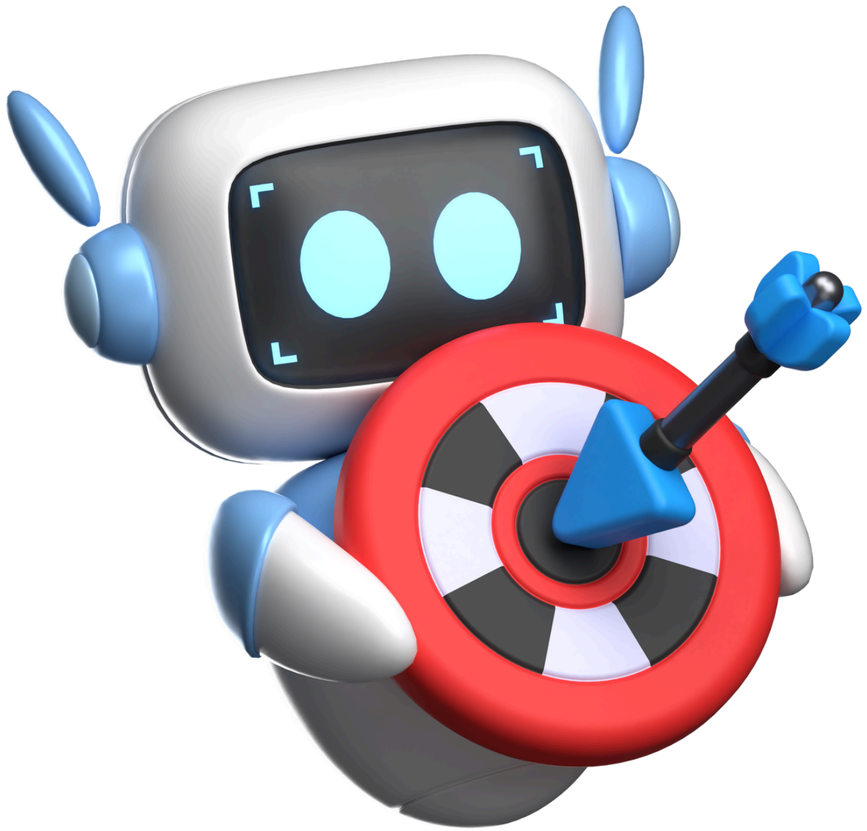
Features

- User Authentication
- Menu Interaction
- Recommendations
- Order Placement
- Order Tracking
- Order Processing



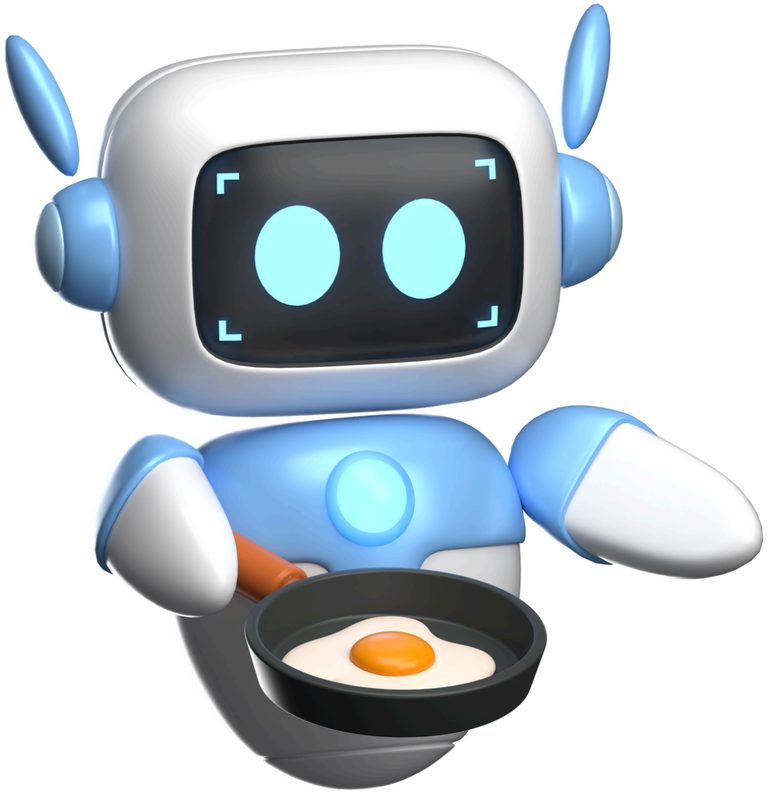
- Reservation
- Menu Management
- Analytics
- Multi language support
- Voice Interaction
- Feedback & Review

MVP Features



- User Authentication
- Menu Management
- Menu Interaction
- Ordering System
- Recommendations

Additional Features



- Specify dietary preferences
- Edit the order summary
- Track order status
- Book a table via chatbot

System Architecture and Design

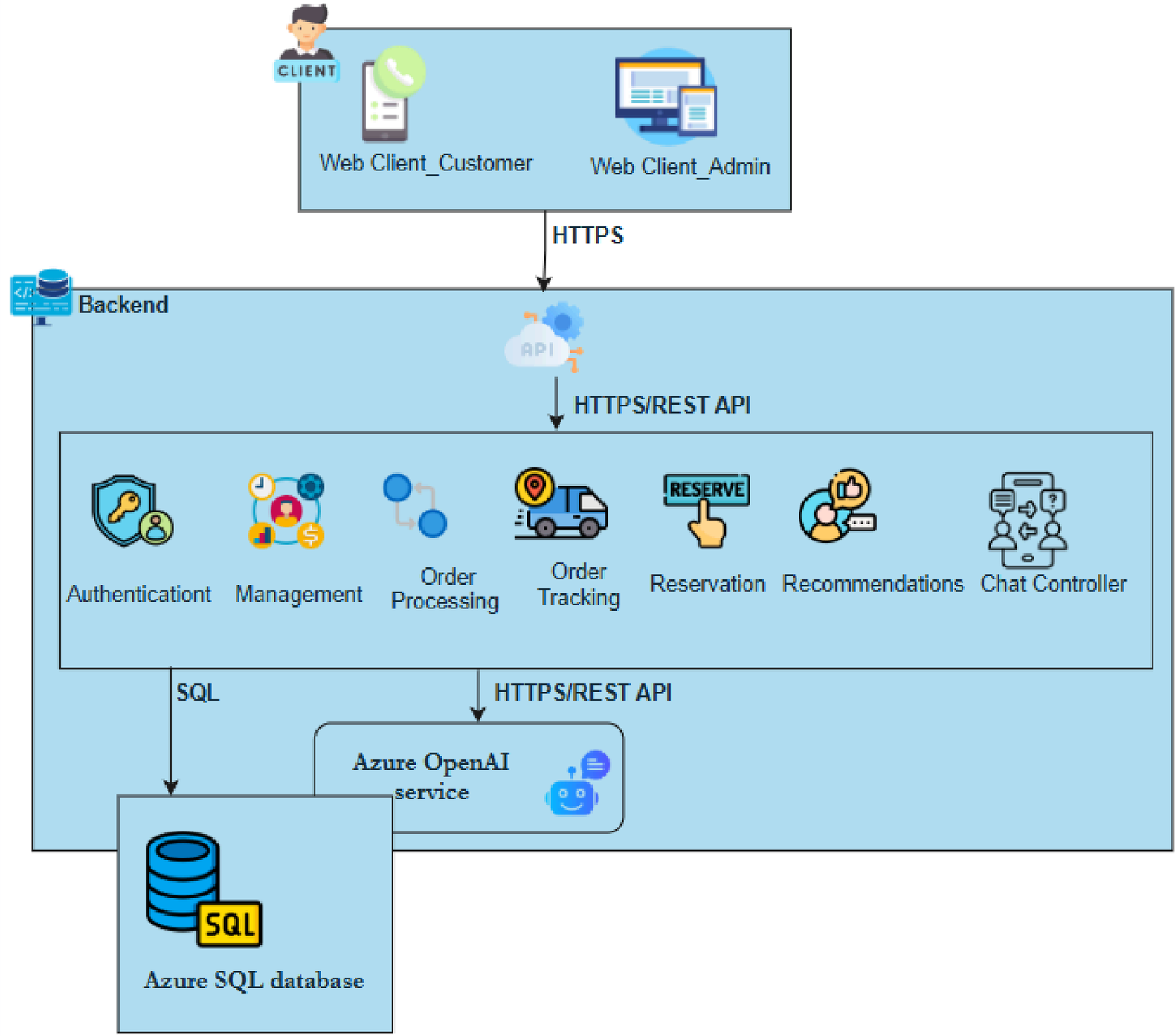
Software Architecture

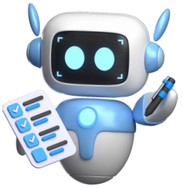
Layers

- Client
- Backend
- Azure AI
- Storage

Protocols

- HTTPS
- SQL

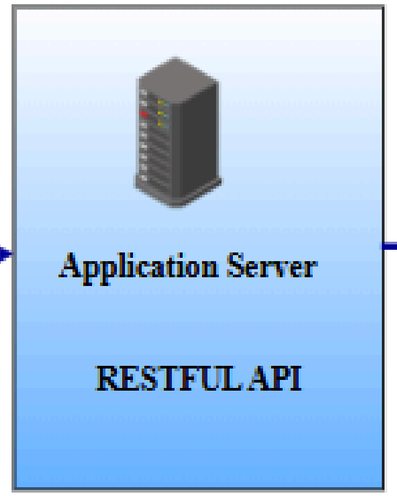


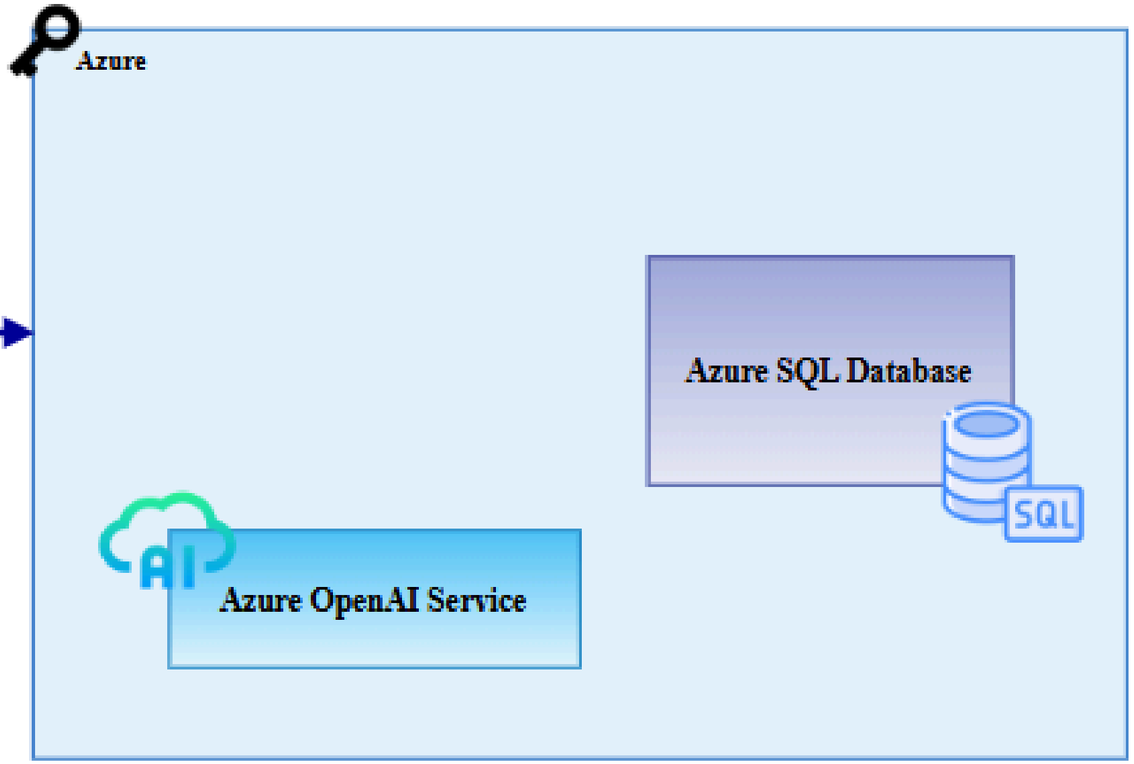


Physical Architecture

Customer

Internet (HTTPS)

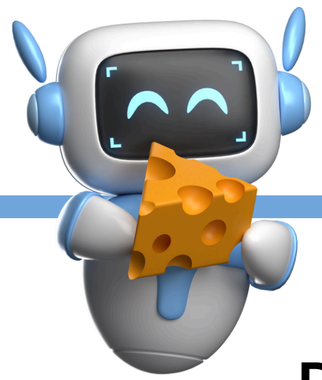




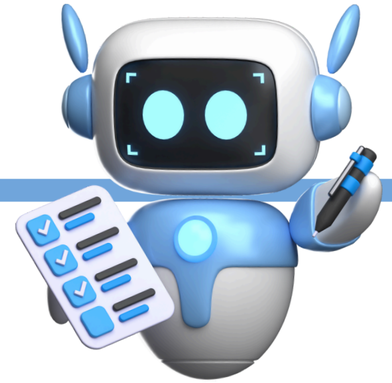
Admin

- Our web app is deployed on Azure

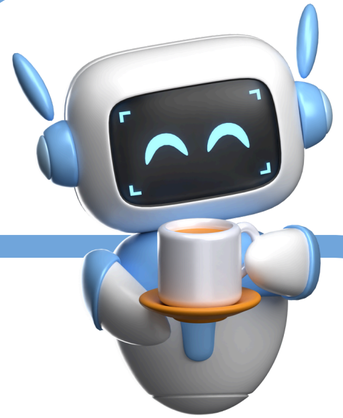
Project Areas



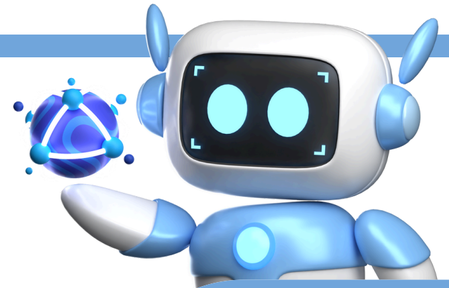
Backend Development



DataBase



Frontend Development



AI Services

Technology Stack

1 Backend and Frontend

ASP .NET Core powers the backend.
HTML, CSS, JavaScript, and Bootstrap 5 for a responsive frontend.

2 AI Services

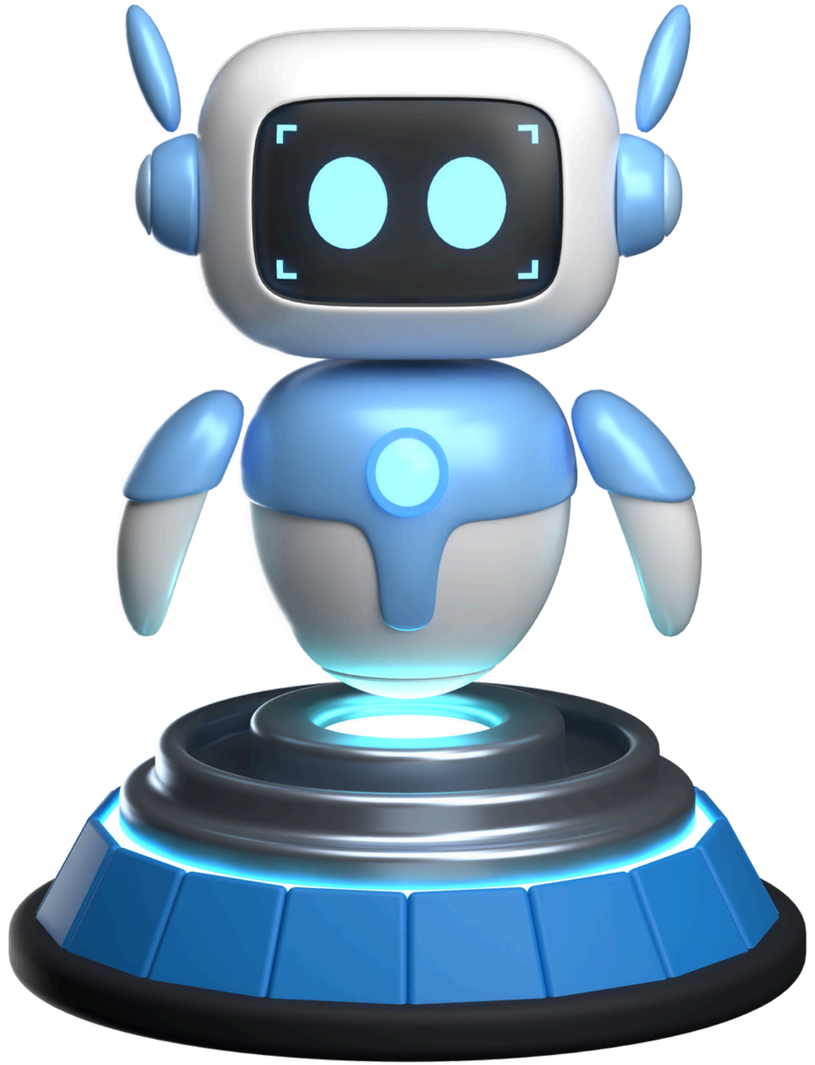
Azure & AI Foundry services for conversational intelligence & model deployment.

3 Database Management

Azure SQL Database offers robust and scalable data storage for managing application data efficiently.

4 DevOps and Collaboration

Azure DevOps facilitates version control, sprint planning, tasktracking, and automated builds and deployments.



Azure Services

Azure OpenAI Service

GPT-3.5 Turbo via Azure AI Foundry

We used GPT-3.5 Turbo to build a smart chatbot that understands Arabic and helps users order easily.

Azure SQL Server databases

We used this to store user data, menus, and orders in a secure and organized way.

Azure App Service

We used this to host our web app and make sure it runs smoothly and is always available.

API Documentation

ChatController

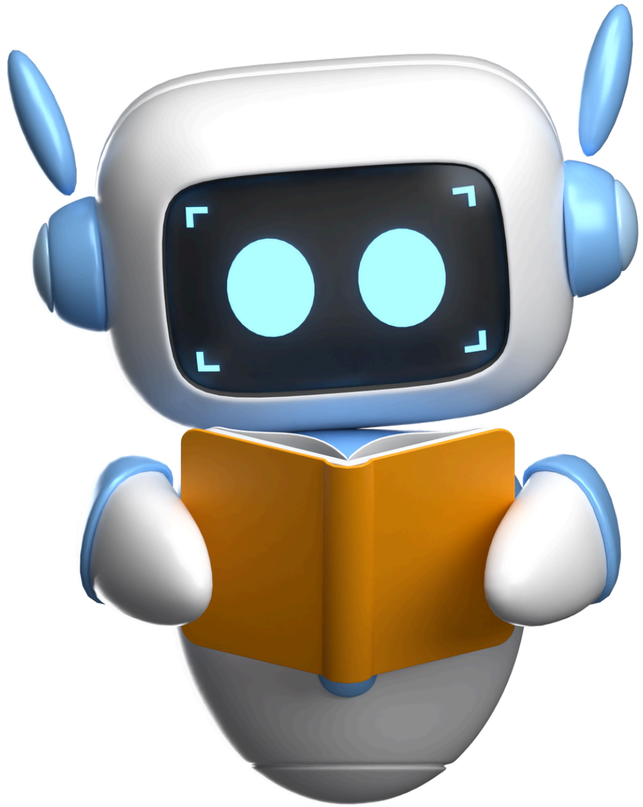
GET	/api/chat	Chat view
POST	/api/chat	Send message
POST	/api/chat/start-session	Start chat
POST	/api/chat/end-session	End chat

OrderApiController

GET	/api/orders	List orders
GET	/api/orders/{id}	Order details
PUT	/api/orders/{id}/status	Update status
GET	/api/orders/my/latest	Latest order

AuthApiController

POST	/api/auth/login	User login
POST	/api/auth/register	User signup



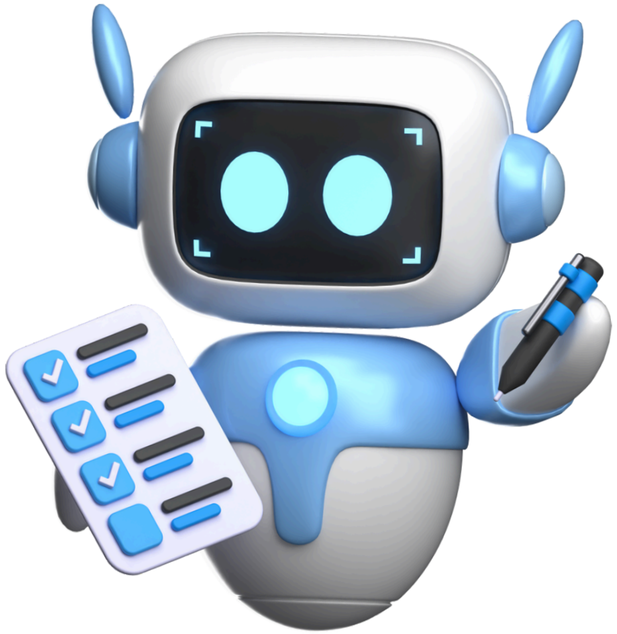
API Documentation

UserOrderController

GET	/api/order/my	My orders
POST	/api/order	New order
DELETE	/api/order/{orderId}	Cancel order
POST	/api/order/add-item	Add item
GET	/api/order/delivery-fee	Delivery fee

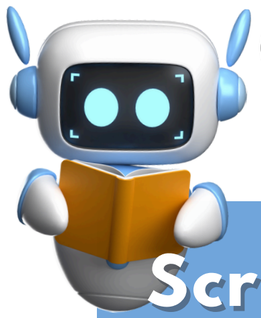
MenuApiController

GET	/api/menu	All items
GET	/api/menu/{id}	Item details
POST	/api/menu	Add item
PUT	/api/menu/{id}	Edit item
DELETE	/api/menu/{id}	Delete item



Development Process and Team

Process &Methodology

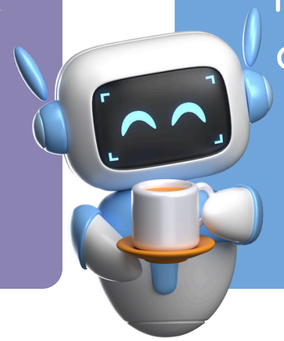


Scrum Agile Framework

The team used Scrum Agile methodology with iterative sprints to adapt and deliver incremental value effectively.

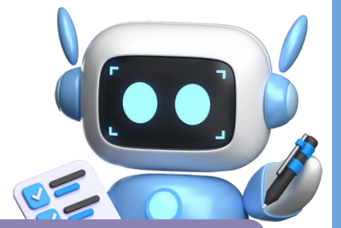
Task Tracking with Kanban

Azure DevOps Boards were utilized as a Kanban board to manage the product backlog and track sprint tasks.



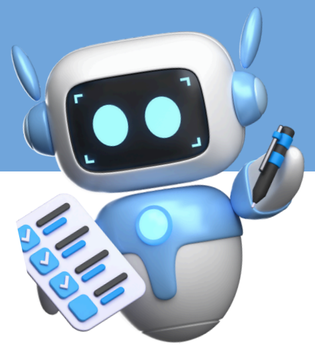
Version Control with Git

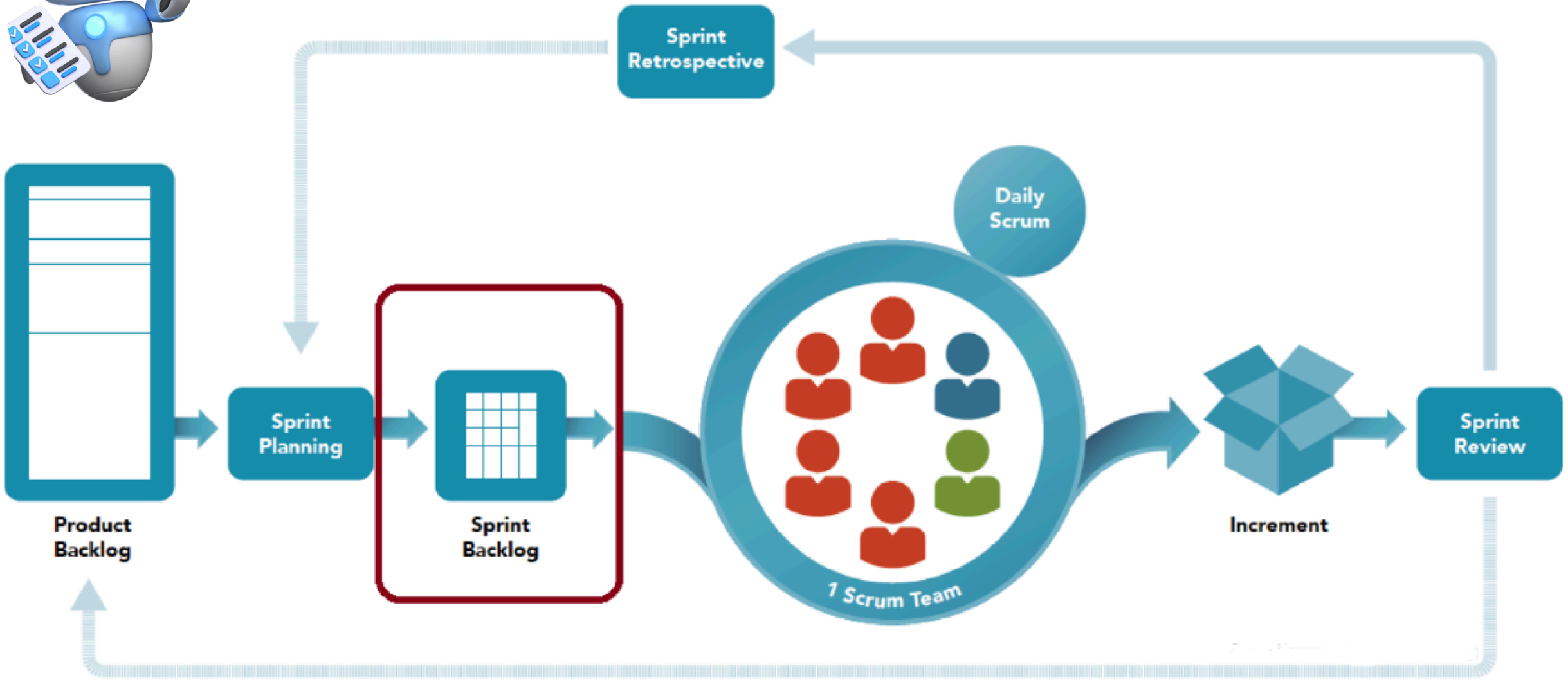
Git repositories hosted on Azure DevOps Repos ensured codeintegrity and fostered team collaboration.



Automated Pipelines

pipelines automated builds and deployments, streamlining development and maintaining release quality.




Sprint Retrospective
Daily Scrum
Product Backlog
Sprint Planning
Sprint Backlog
1 Scrum Team
Increment
Sprint Review

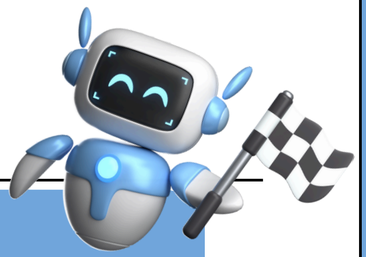
Calendar

July 2025

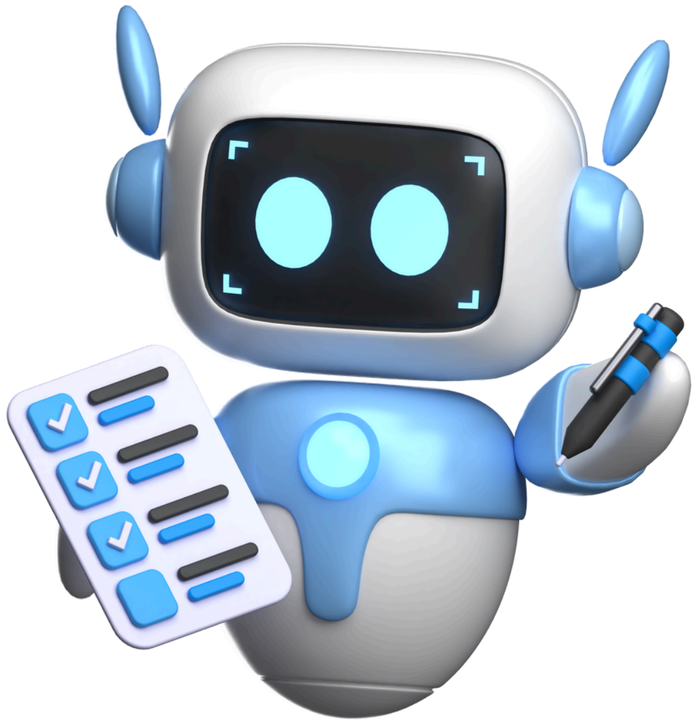
Tuesday 29	Wednesday 30	Thursday 31	Sunday 3	Monday 4	
Sprint Planning Meeting	Daily Scrum Meeting	Daily Scrum Meeting	Daily Scrum Meeting	Sprint Retrospective	Daily Scrum Meeting

September 2025

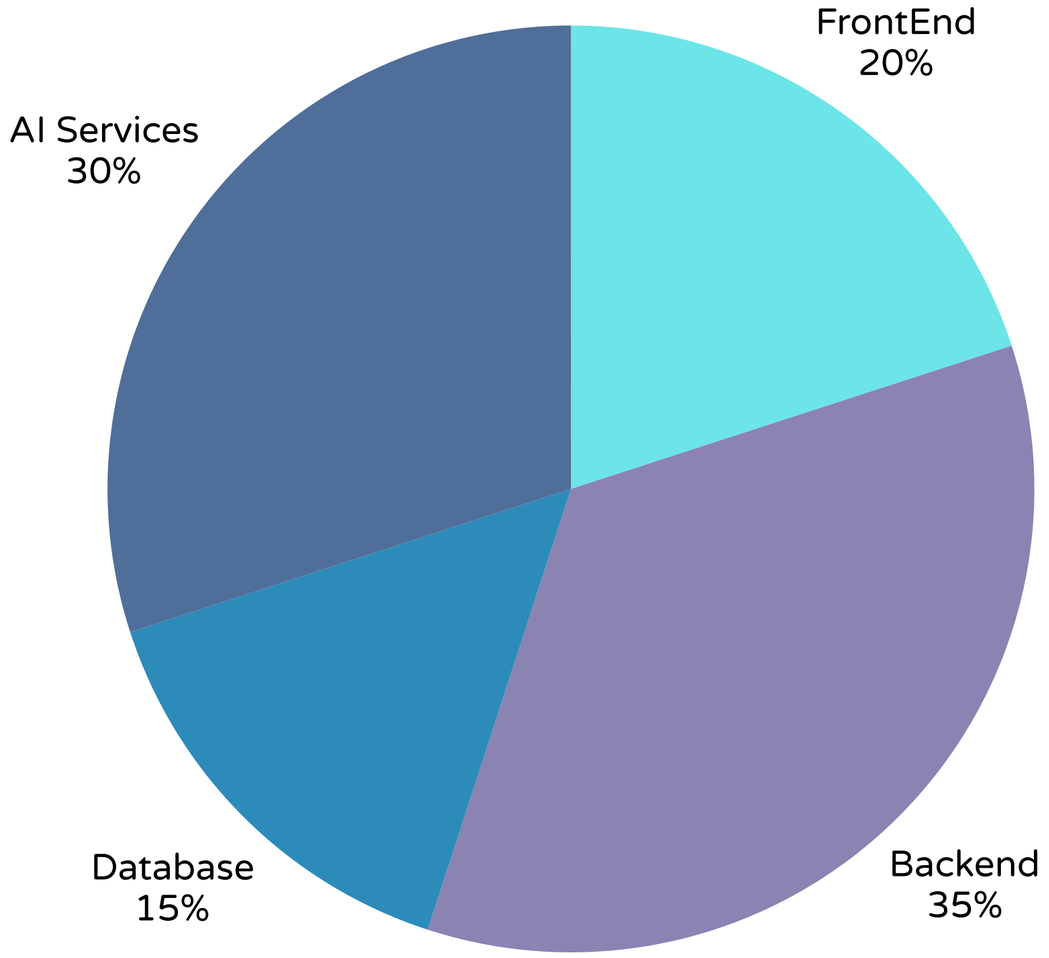
Tuesday 2	Wednesday 3	Thursday 4	Sunday 7	Monday 8	
Sprint Planning Meeting	Daily Scrum Meeting	Daily Scrum Meeting	Daily Scrum Meeting	Sprint Retrospective	Daily Scrum Meeting



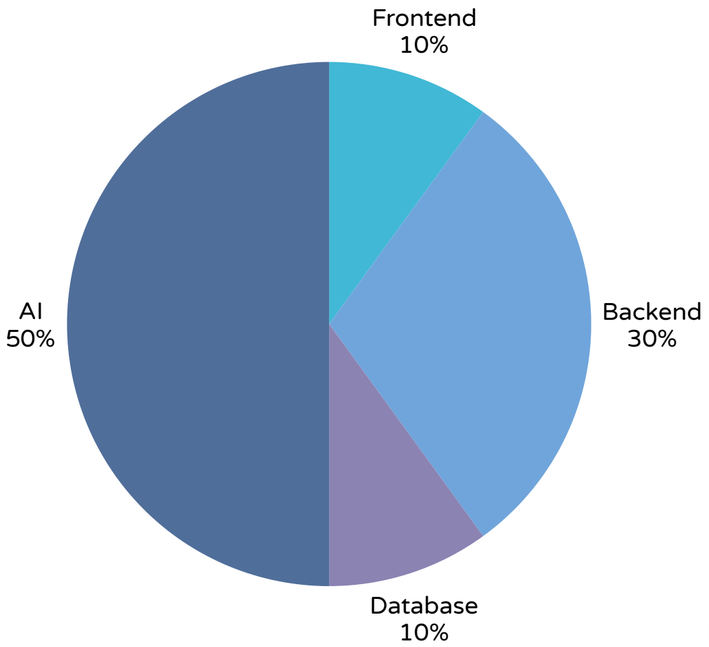
Team distribution & assignments (Who)



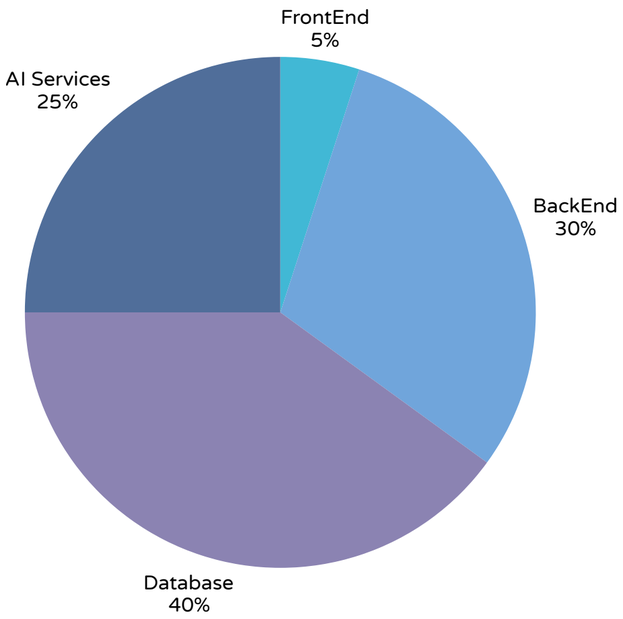
Team distribution and assignments



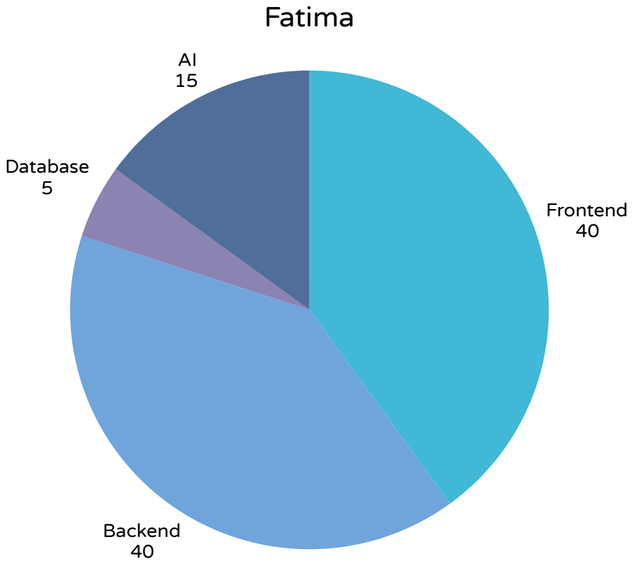
Fadi



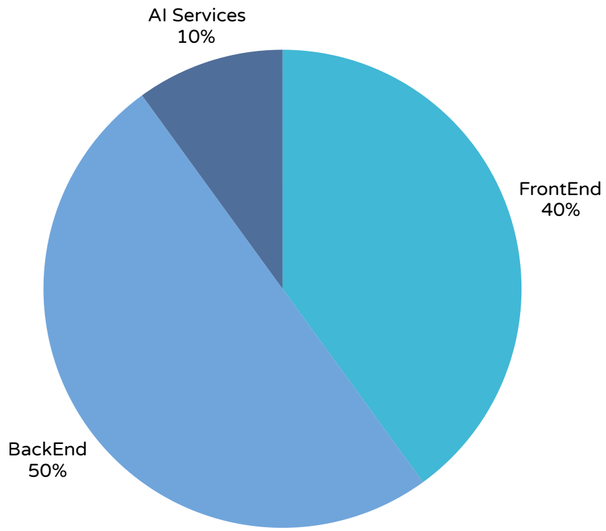
Yahya



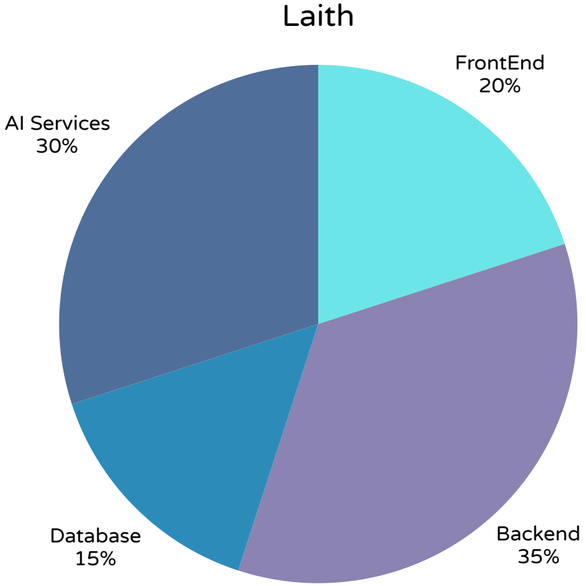
Fatima



Lina



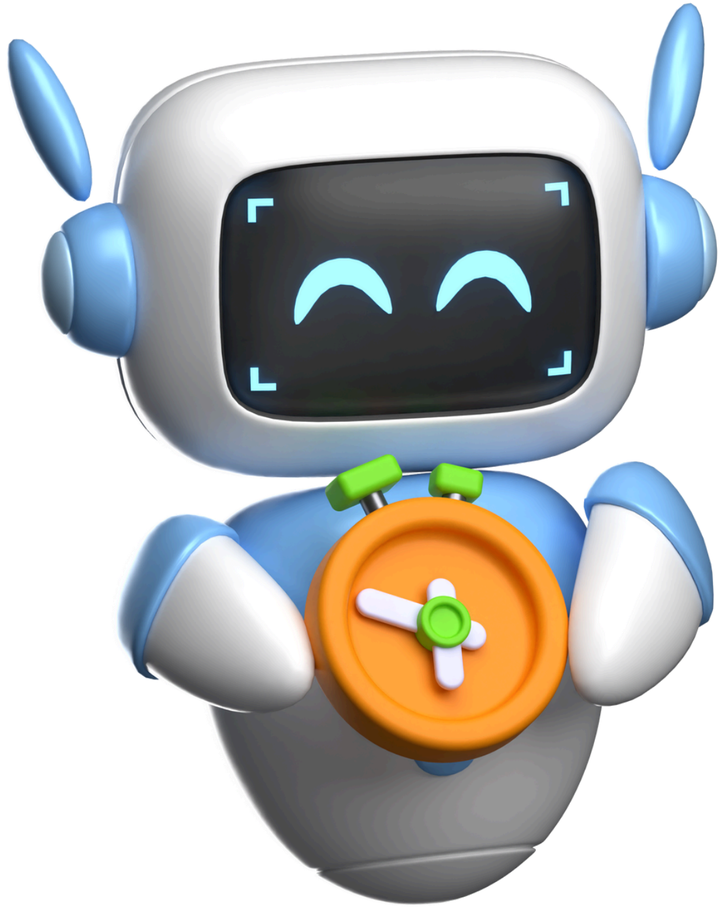
Laith



Demo

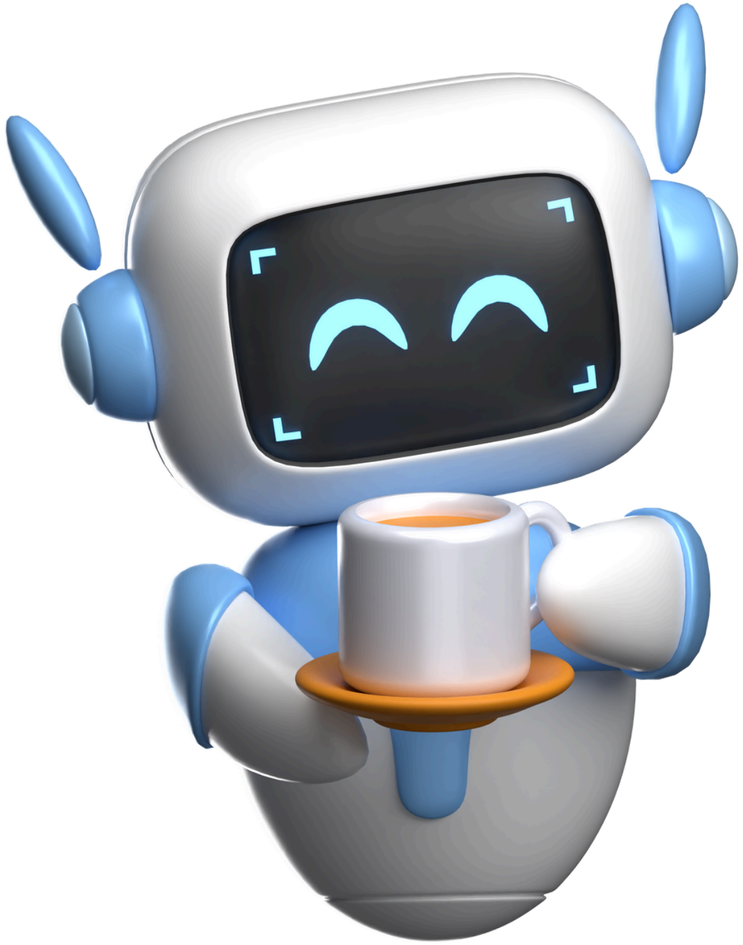
Enjoy exploring our chatbot restaurant system!

Status
&
Future Work

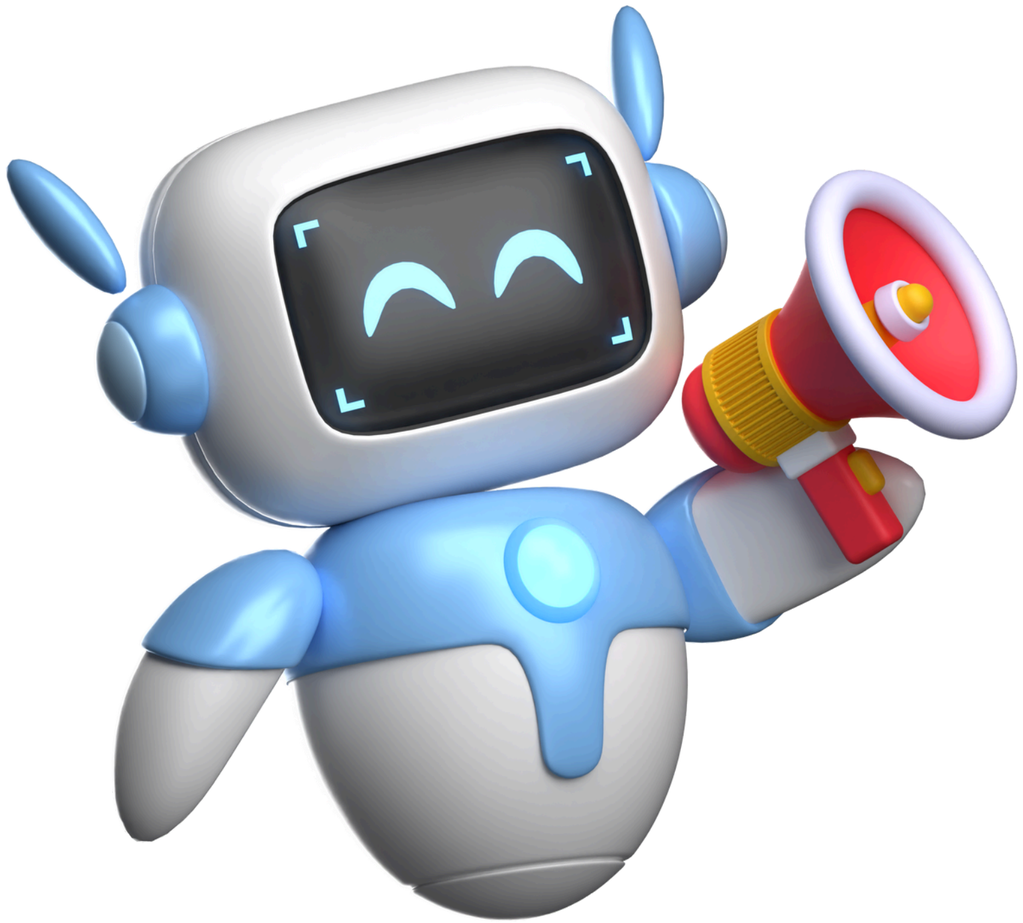


Current Status

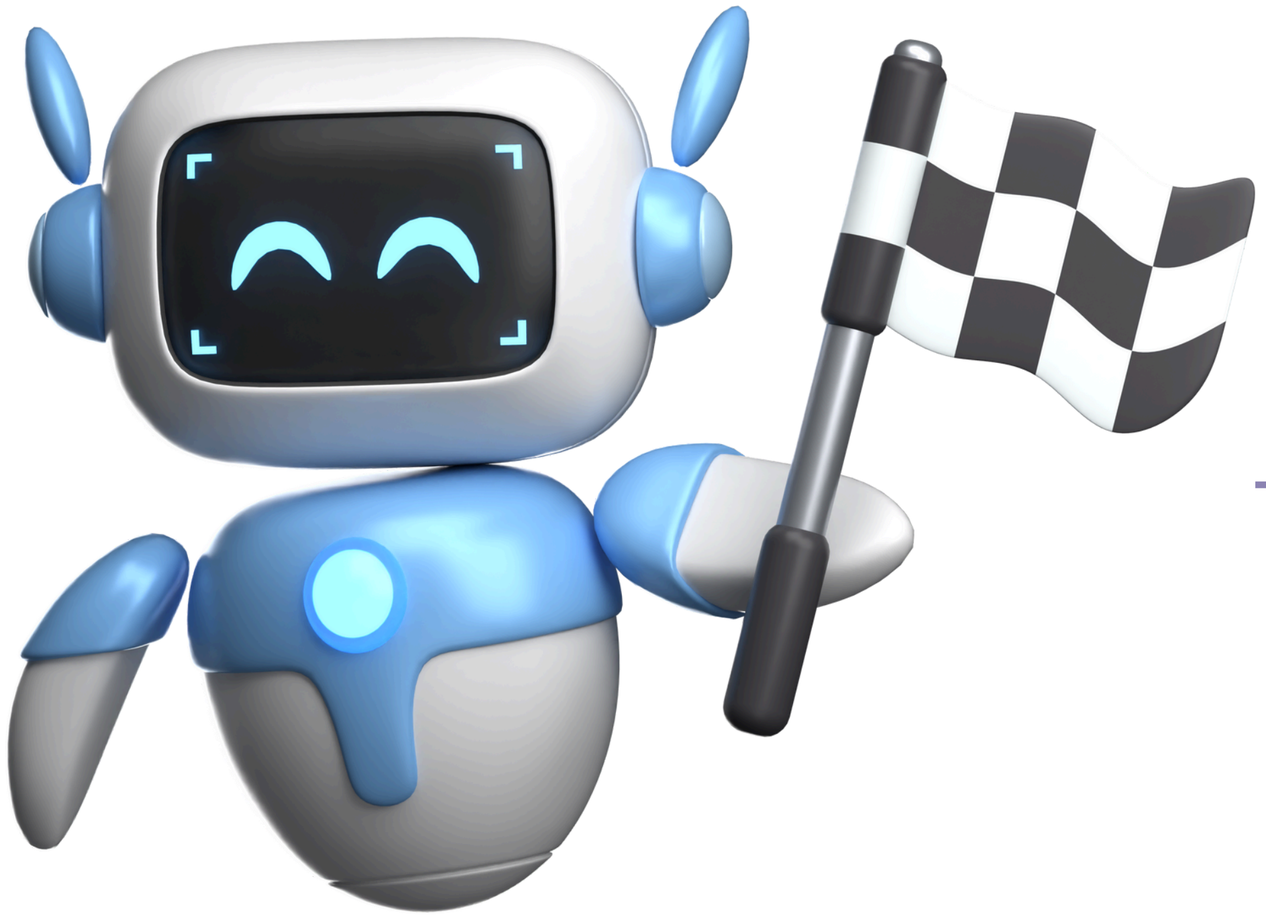
1. MVP features delivered
2. Extra features implemented
3. Tested with core scenarios



Future Work



1. Support multiple restaurants
2. Add online payment integration
3. Enable voice-based ordering



Thank You

Q\A