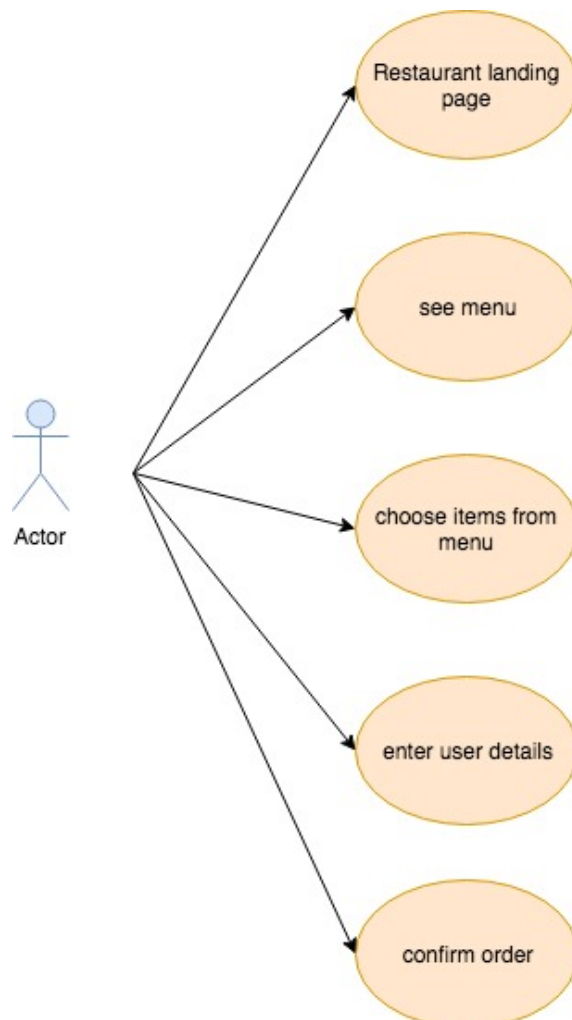


Project Report

Business Requirements

Requirement Scope

- Create an application for restaurant, so users can order food online
- Support only pickup orders
- User pays during pickup
- Restaurant should be able to have a menu and also add more menu's in future
- Each menu has multiple menu-items
- User should be able to view menu items in the application
- User should be able to pick and choose the menu items
- User should be able to review the order and provide user details
- User details should include name, email and/or phone number
- At the end user should be shown a confirmation page where the order details should be shown along with the estimated finish time and a confirmation number



Technical Requirements

- Design a restaurant food ordering micro service
- Use python as the programming language
- Use python flask, sqlalchemy, marshmallow dependencies
- Use SqlLite as the database
- Use swagger to design API spec
- Postman to test the API
- Docker as the containerization tool

Python Libraries

- Flask
- SQLAlchemy
- Marshmallow

Setup code

- migrations.py
 - Used to setup DB
- run.py
 - Where the app begins
- app module
 - Has all the application code

Architecture

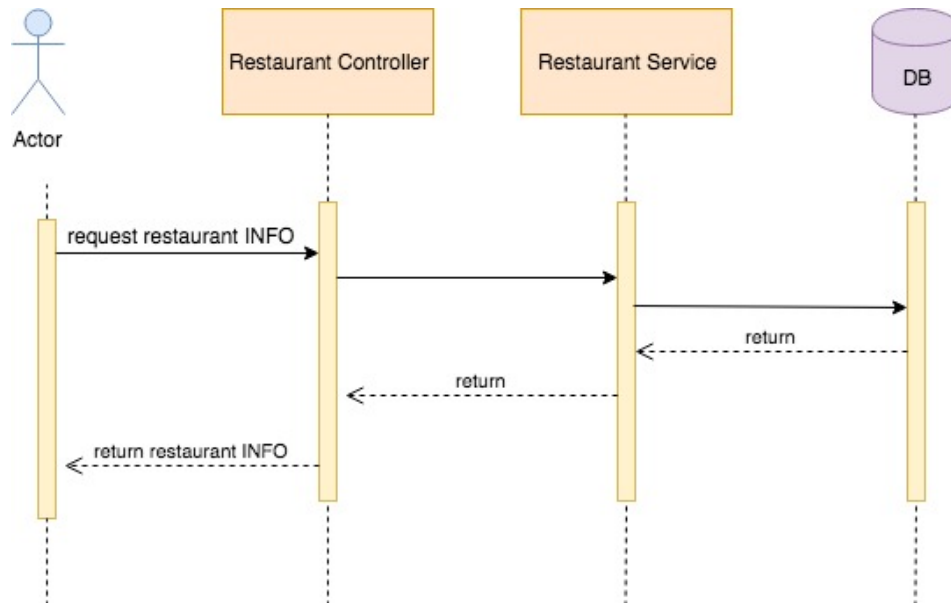
High Level API

URL	Request Object	Response	Description
GET /restaurents		ListOfRestaurants	Used for future when we want to use this same application for multiple orders
GET /restaurants/{restaurantId}		RestaurantInfo	Return restaurant information for a single restaurant
GET /restaurants/{restaurantId}/photos		RestaurantPhotosInfo	Returns all the photos associated to the restaurant, which doesn't include specific menu item photos

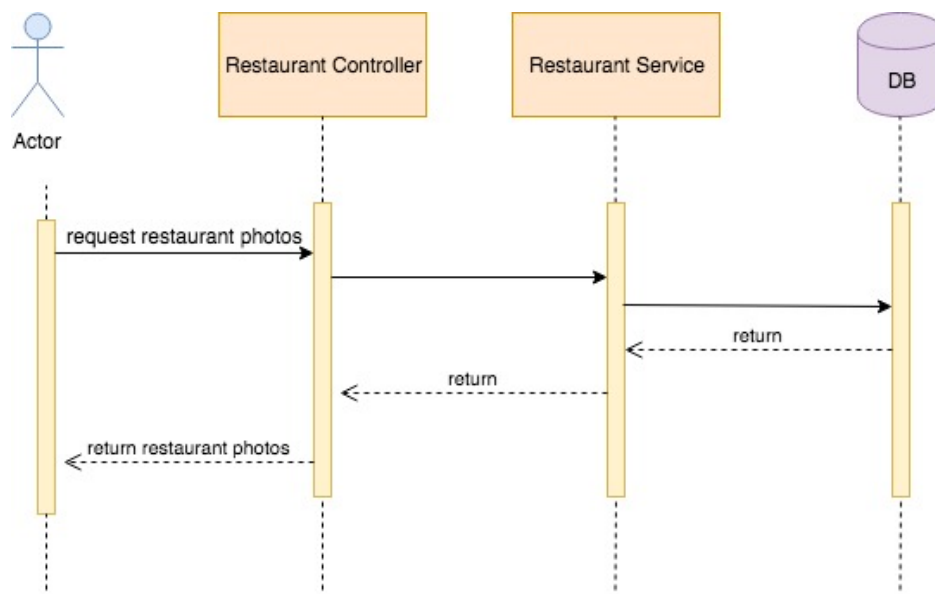
URL	Request Object	Response	Description
GET /restaurants/{restaurantId}/menu		RestaurantMenu	Return restaurant menu
POST /restaurants/{restaurantId}/orders	OrderRequest	OrderInfo	Place an order and return order information back which includes confirmation number and estimated time

Sequence Diagrams

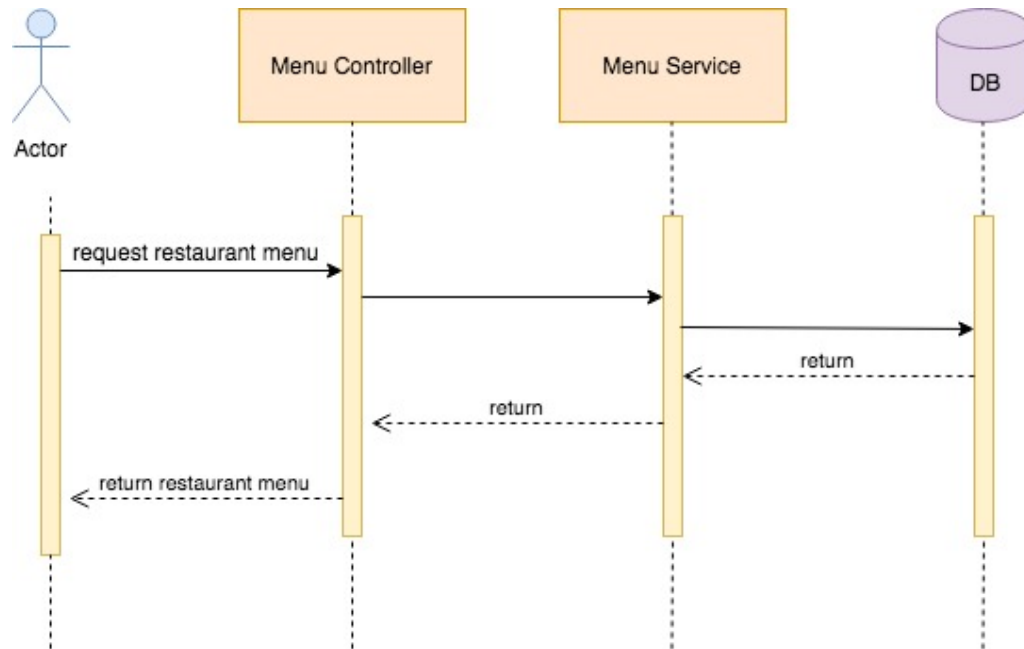
Get Restaurant Info



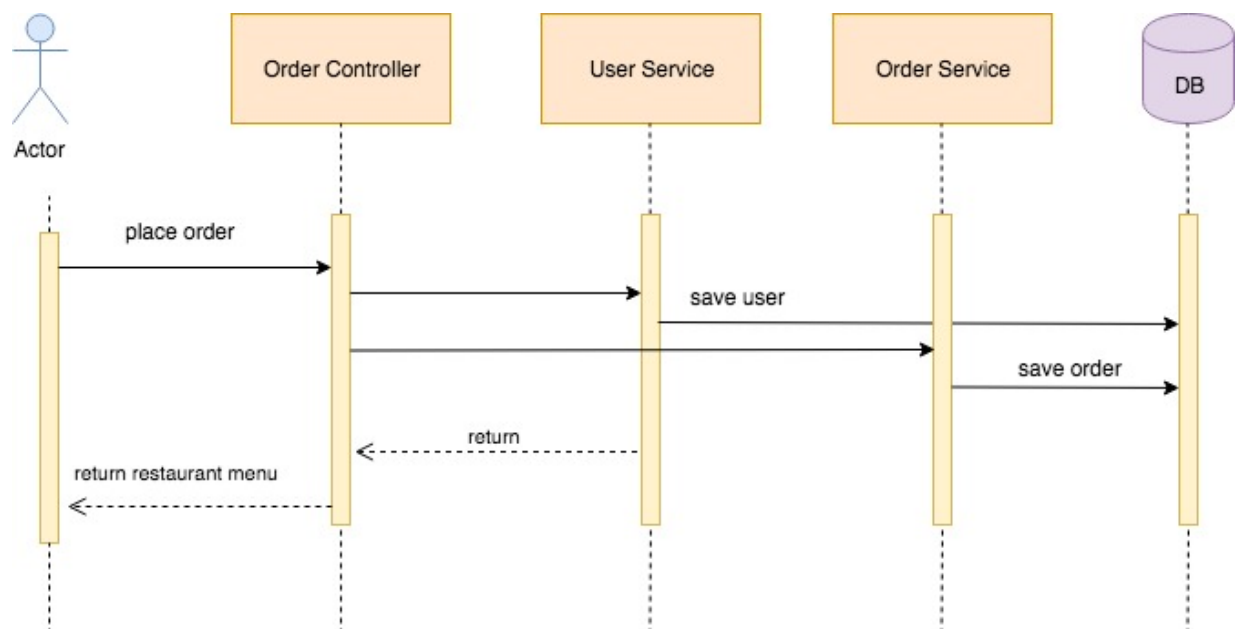
Get Restaurant Photos



Get Restaurant Menu



Place Order



Conclusions

- Expandable
 - The API is designed to extend and add additional features like
 - Add multiple restaurants
 - Add multiple menu's per restaurant
 - Text reminder regarding the order
- What we learnt
 - We learnt to build an application end-to-end application using python flask, jquery and bootstrap.