



## INTRODUCTION

The Cookie Box is a home-based cookie business operated in Wentzville, Missouri. Today the Cookie Box offers a variety of homemade cookie options for local and online ordering.

To further the service offerings of The Cookie Box, a proof of concept (POC) monthly subscription service was created. The subscription service will allow two sets of households to create a new tradition by sending homemade baked goods each month.



## PROBLEM STATEMENT

With the Cookie Box looking to expand their service offerings to more than local farmers markets and Facebook marketplace they requested a POC monthly subscription service.

An order management system (OMS) was developed to create the POC monthly subscription service.

Due to this expansion, the OMS is a digital way to manage the life cycle of an order. The OMS tracks all information and processes of the order which includes entry, fulfillment, and after sale-services to The Cookie Box. This is primarily business facing so the organization can gather real time insights about what happens next with each order and manage the order as The Cookie Box desires.

## CUSTOMER NEEDS/SPEC

With The Cookie Box looking to expand its service offerings to more than just the local community The Cookie Box identified the following needs:

- Develop a lightweight website form which allows for primary (A) and secondary (B) address submission with the following fields for both A and B addresses:
- Lightweight order management UI listed by customer (primary A) and pertinent tracking information.
- Calculate gross margin and customer satisfaction
  - Analyze the average cost of shipping packages between both 'A-to-B' and 'B-to-A' destinations for all customers within the initial POC
  - Analyze the cost of packaging (ingredient bags, packaging, recipe instructions, etc.)

## DESIGN CONCEPTS

For the design concept of the database, a lightweight website form was developed to allow primary (A) and secondary (B) address submission. The submission includes the following fields

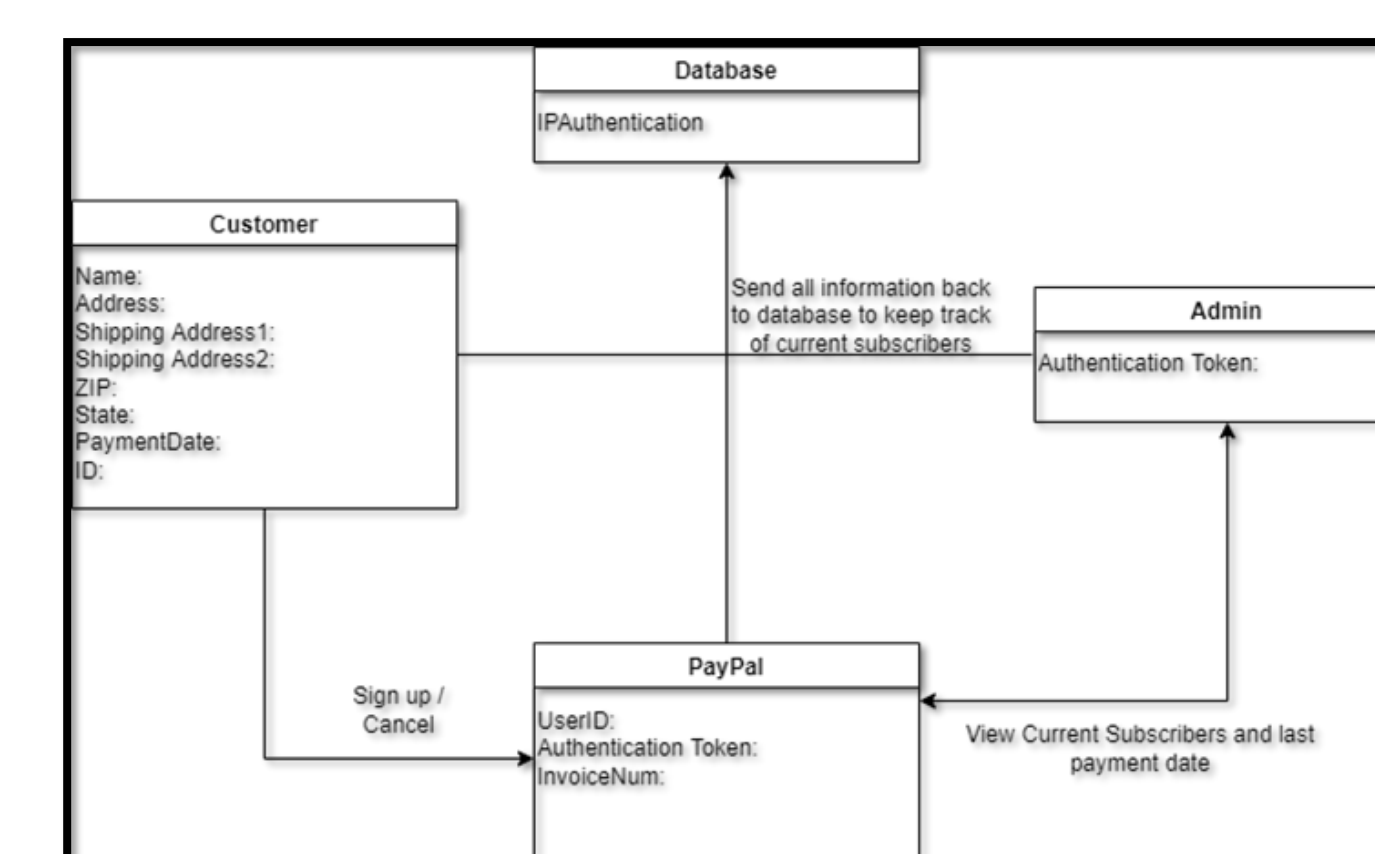
- First and last name
- Street 1 and 2
- City, State, Zip
- Phone Number
- Email Address

## FINAL DESIGN

The final design of The Cookie Box OMS includes the website form which collects user information needed to track and manage all orders. The OMS also includes information such as:

- Next Payment Date
- Next Shipping Address
- Next Shipping Date

The OMS also features flags within the database to mark whether an account for the subscription service is active vs inactive.



## FUTURE WORK

After implementation of this solution, the group will plan on staying in contact with the client to ensure that there are no issues. If issues arise or a change is needed it can be done externally since the project has automatic deployment using CI/CD pipelines.

## CONCLUSION

In conclusion, creating the OMS for The Cookie Box was a challenging but unique project. The group was able to learn a lot about working with different apps and working with a real client.

## LESSONS LEARNED

Over the duration of developing this project the following lessons were learned

- Development of apps through Microsoft Azure .
- Working with tables and bootstrap in ReactUs
- Working with the PayPal Rest API and authentication tokens.
- Developing a realistic timeline and working on time management for the project.

## ACKNOWLEDGEMENTS

**Dr. William Barge**, Associate Professor , CSIT  
**Jackie Sawyer & Brian Sawyer** Owners of The Cookie Box

## Figures

Figure 1:  
Subscription  
Flow Chart

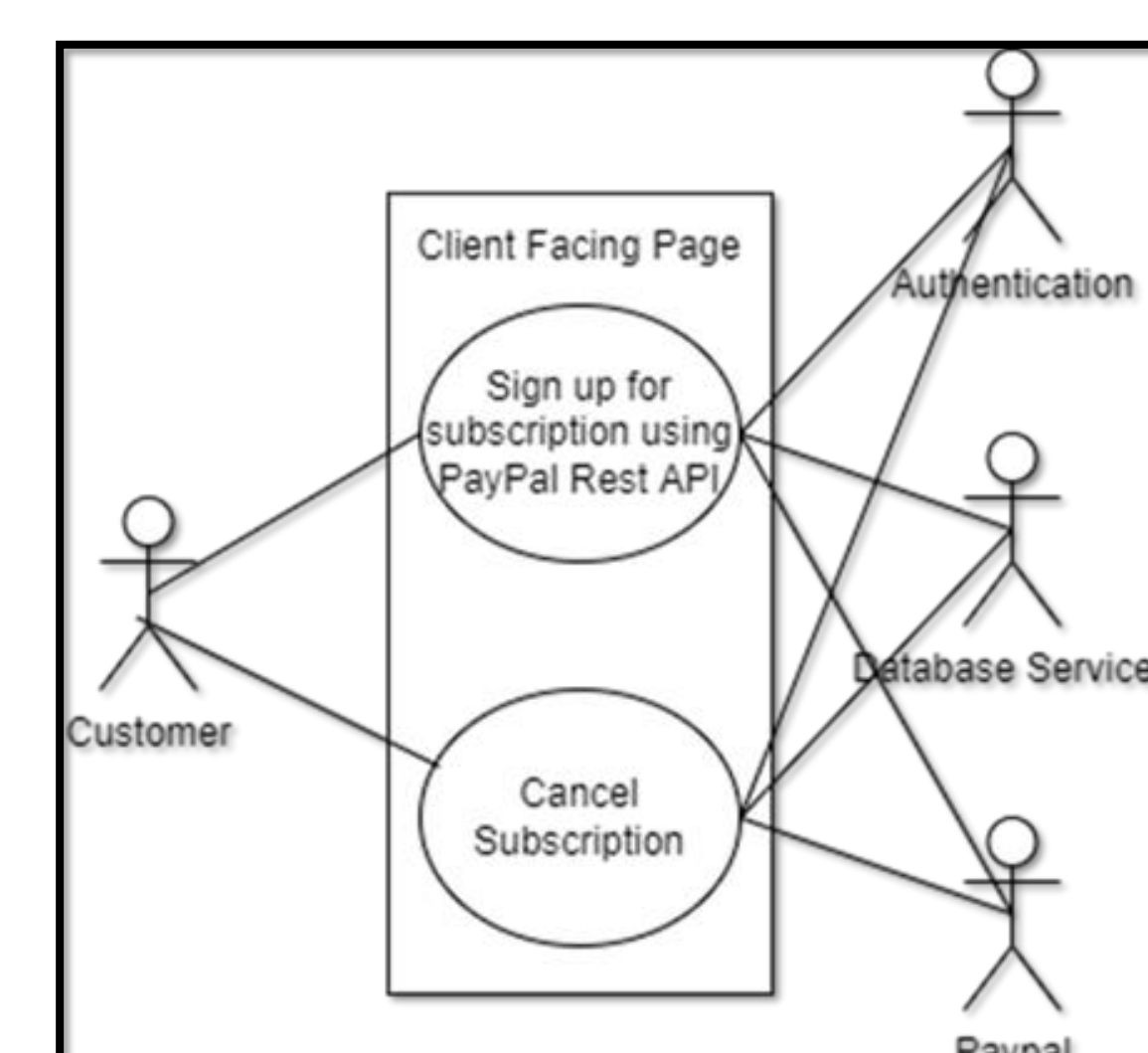
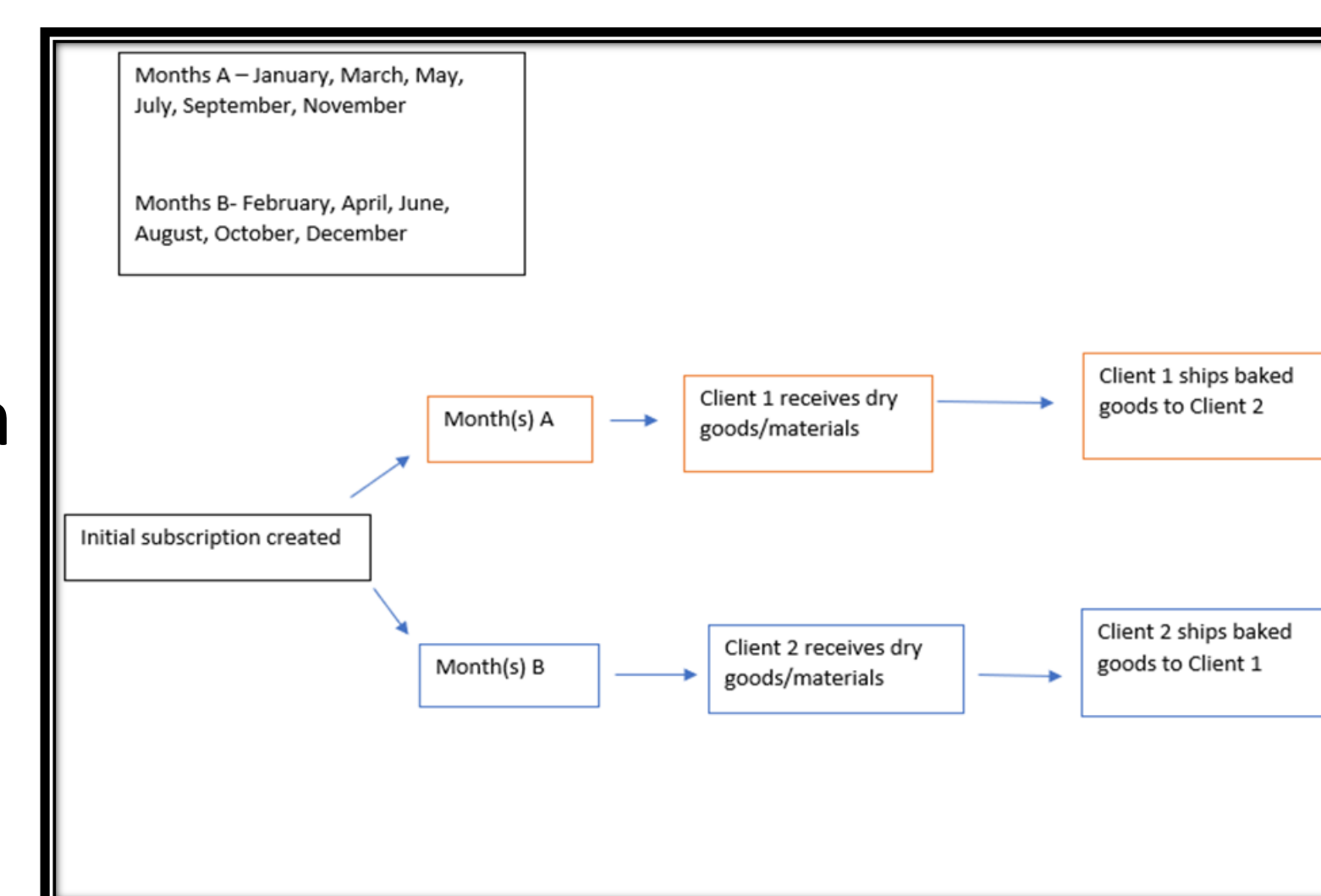


Figure 2:  
Case Diagram