INTRODUCTION

PURPOSE

The purpose of this document is to provide a clear description of the UB pizzeria software. This document will thoroughly explain the features, constraints, versions, and conventions that are to be used to develop this software. This document is intended for various stakeholders that play a part.

DOCUMENT CONVENTIONS

This document is based on the IEEE standards and it has two different versions.

SCOPE

UB pizzeria is a web application that people can use to order their own pizza at the comfort of their location. This web application allows users to alter the pizza available , customize their own pizza and allows uses to pick a pizzeria that will finish their order first according to the amount of orders at each pizzerias closest to them for deliveries.

SYSTEM REQUIREMENTS

USER REQUIREMENTS

This section of the document specifies how the user will interact with the UB pizzeria system and covers the expectations of the user. Users could be customers, developers, or managers. This system has two different versions and the interaction of the stakeholders on each version will vary. Version one is just a simple ordering and retrieval system.

- CUSTOMER INTERACTION

  The goal of this system is to collect as much information from the customers as possible to be of better assistance. Typically, before a customer can place their order, the system prompts the customers to login, create an account or continue as a guest. After the customer chooses one of these options which solely depends on whether the customer is a first-timer user or is returning, they are to input their personal information that is their name, address, telephone number and commonly used payment type. After collection of these details the system updates its databases, and the customer can start filling out their order form, they can select the menu or specials sections to help with the decisionmaking process. The application interface will allow the customer to navigate and maneuver with ease if not there is a chatbot to help. The order is received and saved by the admin. The payment section of the ordering process comes up and the bill is calculated by the system, and the customer must fill in their payment and delivery details. Once the payment is approved the transaction will be sent to the main server of the pizzeria. For delivery, the system can access the user location to suggest a pizzeria nearby that will take the shortest amount of time to get the pizza ready. Once the delivery is made the customer will receive a physical receipt.

- EMPLOYEE / MANAGEMENT INTERACTION

Depending on how the pizza is ordered will determine the way the program will interact with the server. If the customer places an order, the order will be automatically sent to the pizza restaurants screen, which will be highlighted bright red. The screen will be split into two, showing types of orders being delivery and takeout. All the ordering information in the database will be sorted in a queue by time so that the orders can be made from earliest order to latest order. The electronic orders will have the capability of being overridden and edited by any employee. The program will have an edit button on the screen so that they can edit orders. The edit function gives the employee the option of deleting or adding items, changing payment type and information, changing addresses, and canceling the order all together. The employees will also be able to make comments to the customer’s stored information such as, how to locate the customers address easier using landmark indications. The system will also have a GPS address tracker which will be a tab that can be clicked on which will bring the employee out of the split screen to the tracker screen that will facilitate in clustering orders by addresses closeness in groups. Providing this will allow the delivery drivers to be more efficient in delivering pizzas to all the same area instead of going back and forth. If the employee must add the customer’s order in the screen will be the same setup as the customers mentioned above. The only difference is the option to edit. and add landmark information to the customer’s file. In addition, the adding function of a cash register that the employee must manually input the data of cash in, and the system will calculate cash out. The management will have a special database to access and to customize the menu anytime. Once the manager enters the editing area, they will be able to easily update menu with words and images. Also, change any information. The changes will become effective immediately once the submission occurs.

SYSTEM REQUIREMENTS

These are the configurations a system should have for the software application to run smoothly and efficiently. Failures to meet these requirements results in performance problems.

- Security must be high priority to ensure non-users cannot access restaurant or customer sensitive information.
- The server should have a backup in case of failures to avoid data loss.

- The program should have a low mean time between failures.
- The system must work on any type of device.
- The LCD monitors should be an efficient size to ensure full maximization of tabs.
- The system should work on any PC, IOS, Android, or IOS device.
- The system should be easy to use for all technical levels.
- The system should be easy to troubleshoot.
- The system should work on any PC, IOS, Android, or IOS device.
- The system should work on any PC, IOS, Android, or IOS device • There should be an orientation class on proper use of the software.

MAJOR CONSTRAINTS

- PRODUCT CONSTRAINTS

  The product is to be developed and designed in a user-friendly manner to accommodate a wide range of people.

- BUSINESS CONSTRAINTS

  The software application will require a good connection to the internet in order to function.

USE CASE SCENARIO

PRIMARY ACTORS

- Pizzeria Admin
- Customer

SCENARIOS

- Login if returning customer.
- Register account if new customer.
- Continue with a guest account if temporary customer.
- Customer fills in personal information.
- Customer fills in order form.
- Customer submits the order form.
- Submit the order form.
- Admin bills the customer’s order.
- Customer approves the billing.
- Customer enters payment.
- Admin sends a receipt to customer’s email.

- Admin places order in a preparation queue.
- Admin dispatches delivery of the pizza.
- Customer receives pizza.
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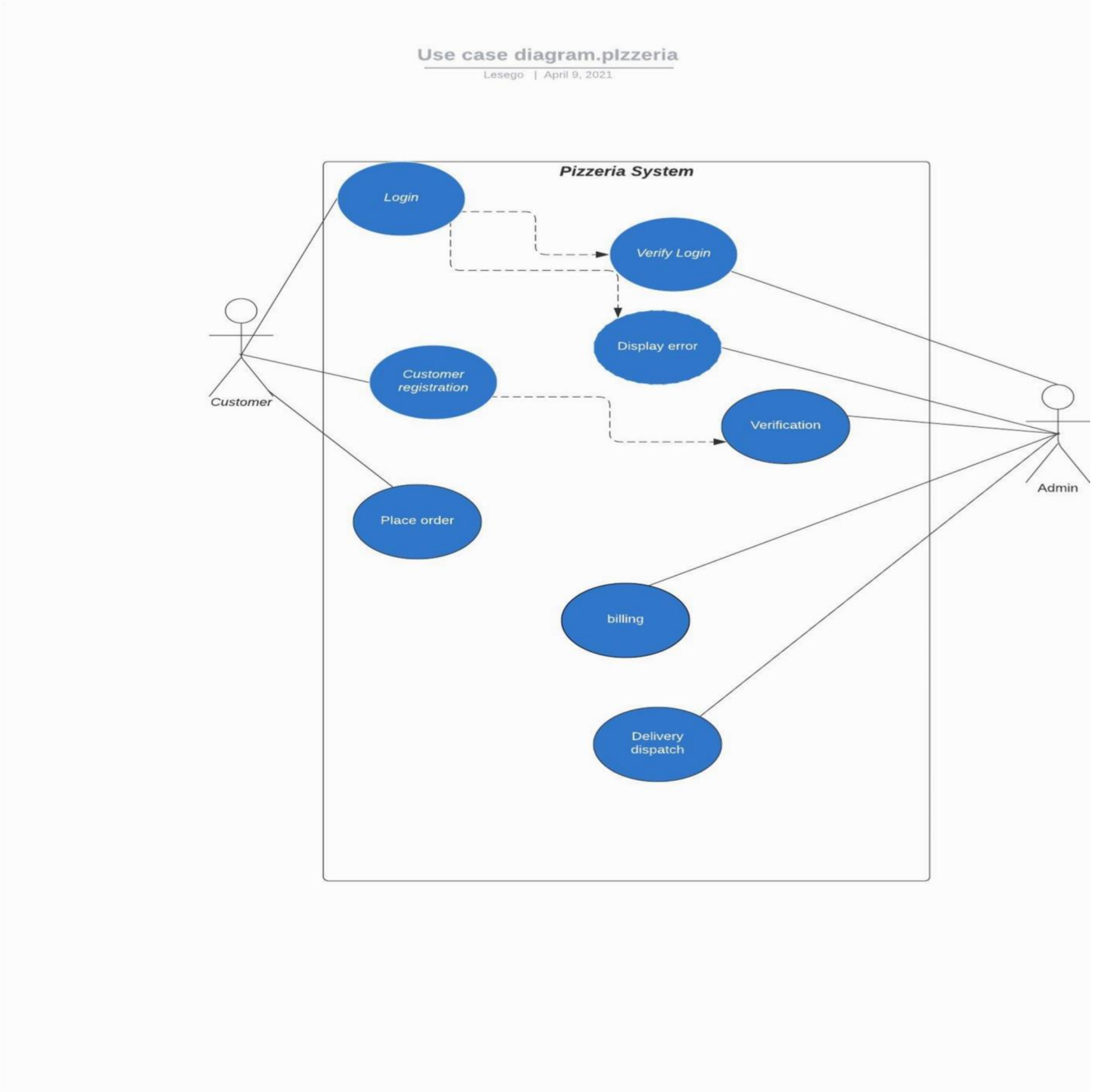
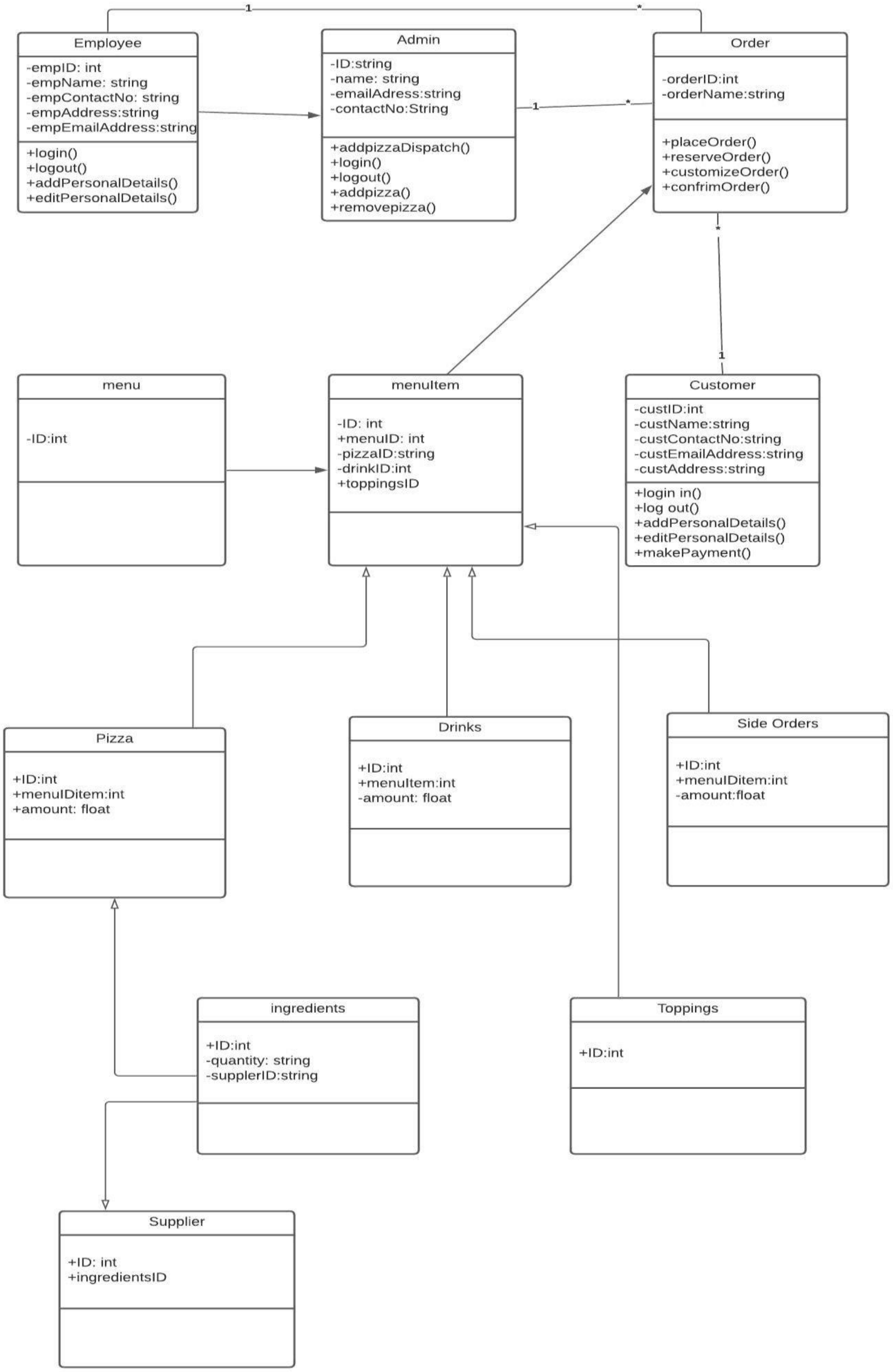
USE CASE DIAGRAM- FOR THE SYSTEM

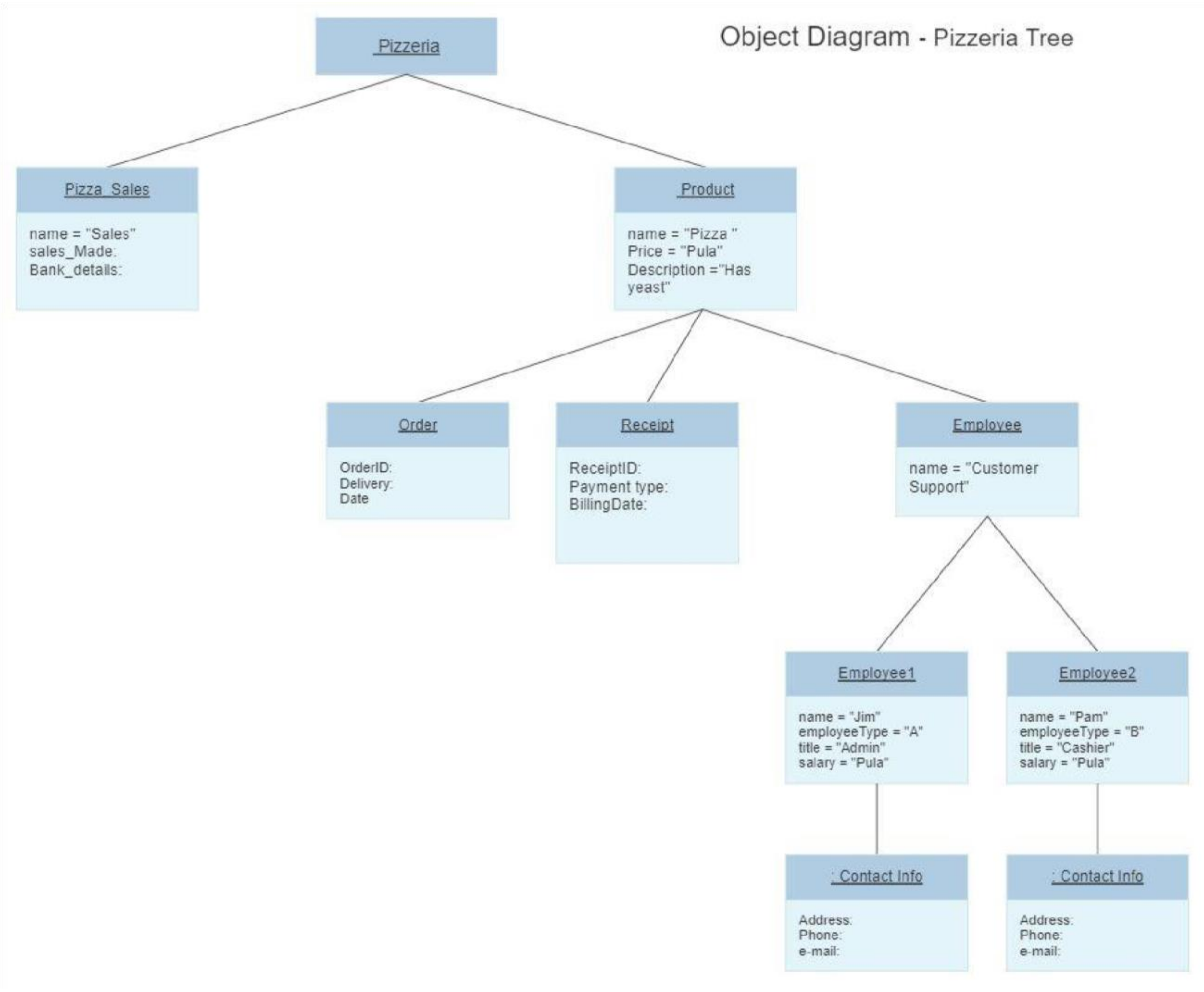

Use case diagram.plzzeria
Lesego | April 9, 2021
Pizzeria System
Login
Verify Login
Display error
Customer registration
Verification
Place order
billing
Delivery dispatch
Customer
Admin

STATIC SYSTEM MODELS

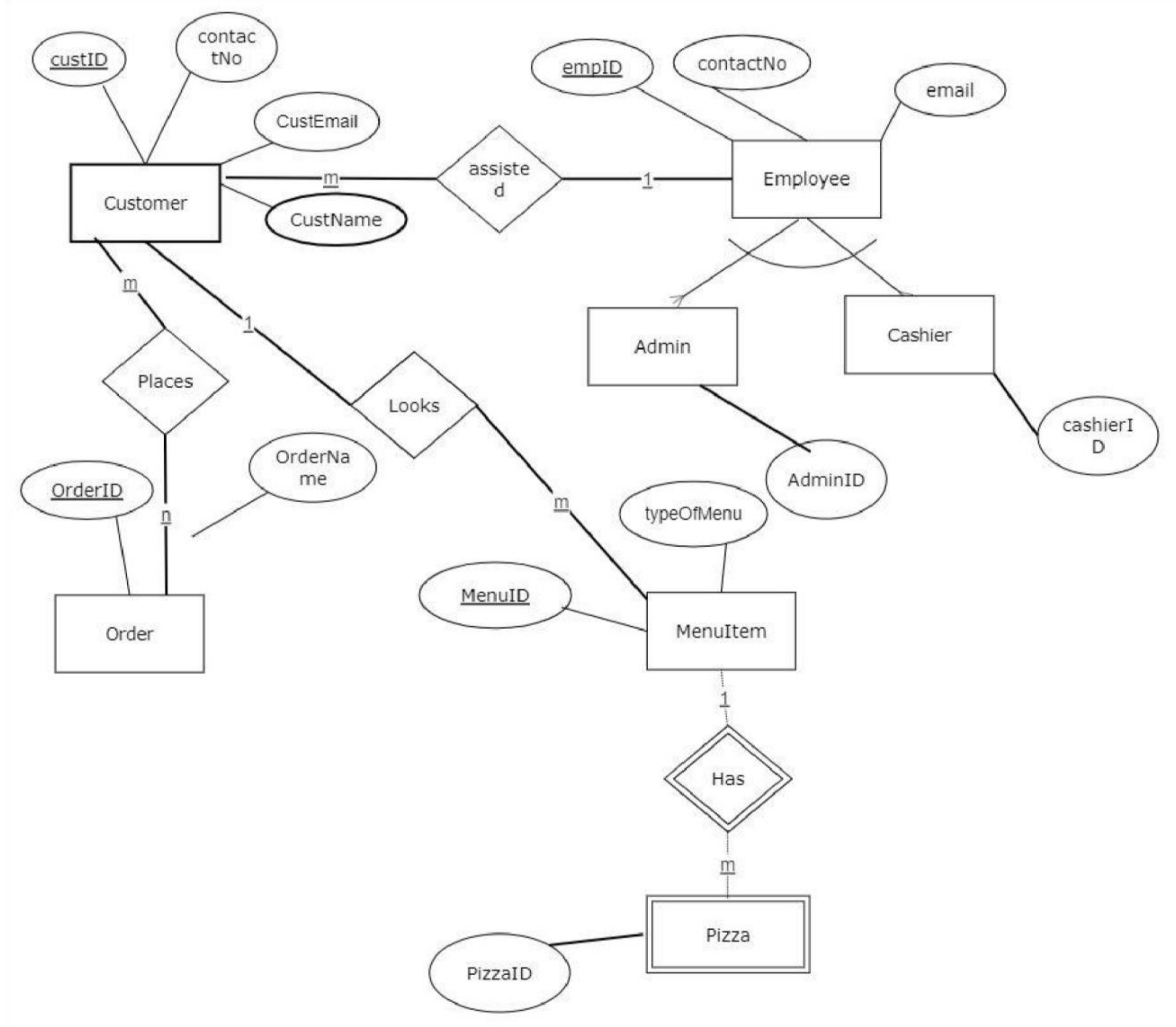
CLASS DIAGRAM



OBJECT DIAGRAM



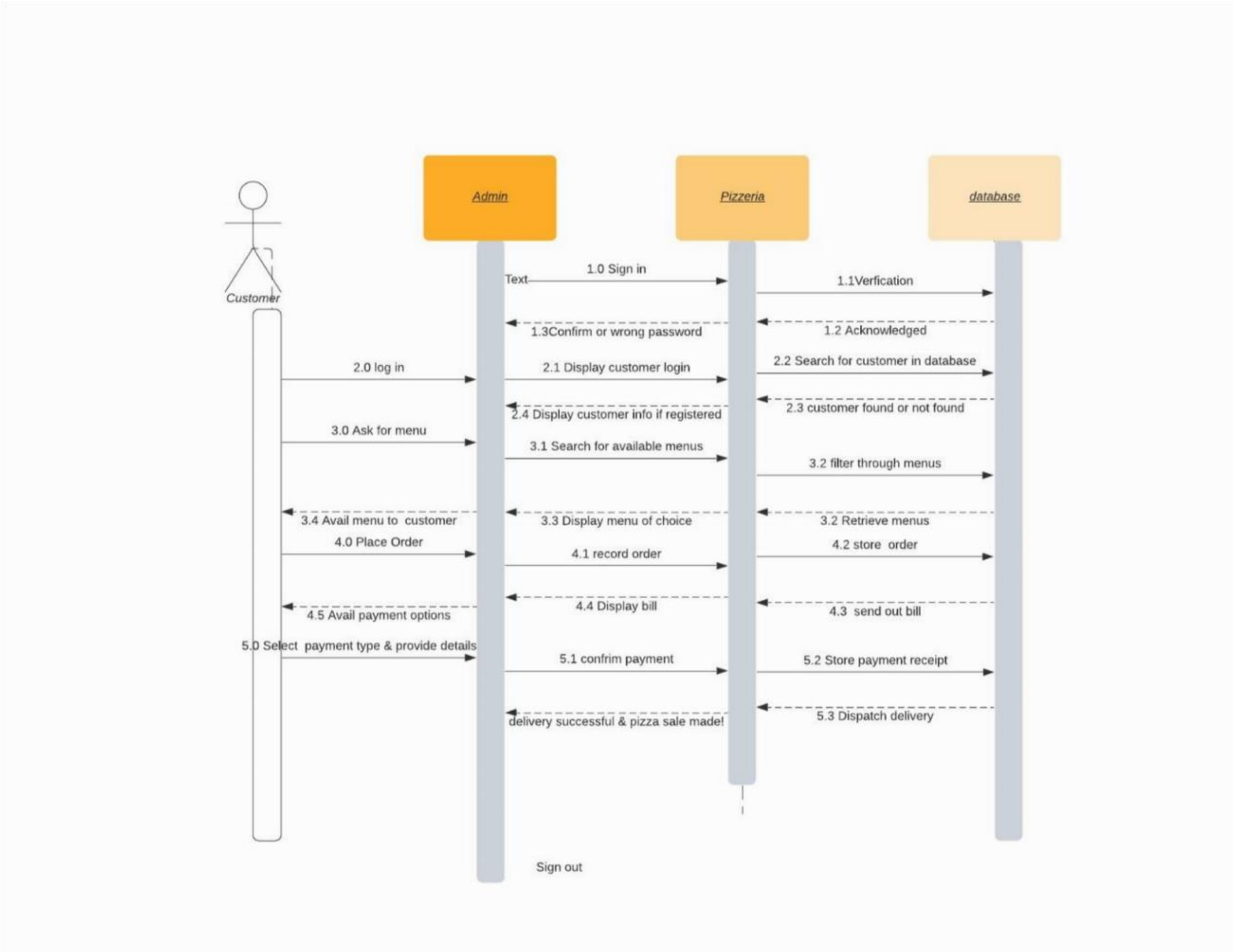
ENTITY RELATIONAL DIAGRAM



DYNAMIC SYSTEM MODELS

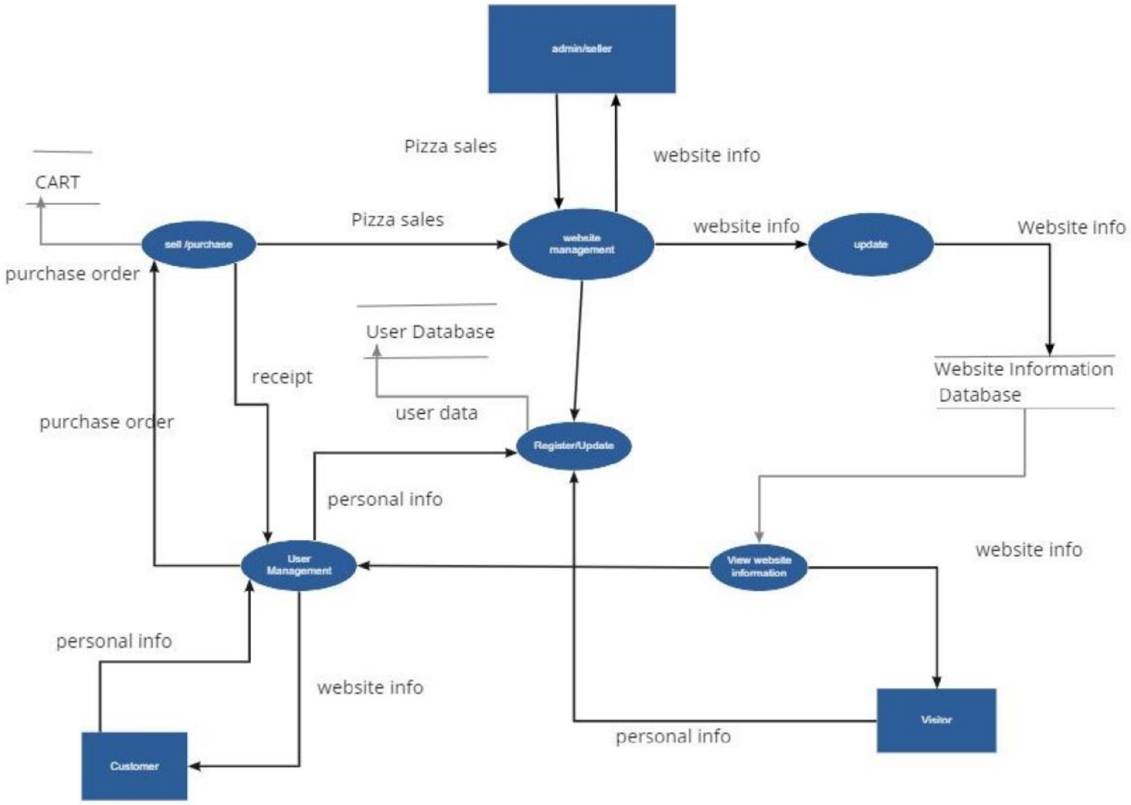
SEQUENCE DIAGRAM

A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario. In this when a customer wants to place an order, they have to ask for available menus, which will be extract from the database through the admin. After selection of the order, the customer must make a payment and later receive confirmation and delivery details.


Customer
Admin
Pizzeria
database
Text
1.0 Sign in
1.1Verfication
1.3Confirm or wrong password
1.2 Acknowledged
2.0 log in
2.1 Display customer login
2.2 Search for customer in database
2.4 Display customer info if registered
2.3 customer found or not found
3.0 Ask for menu
3.1 Search for available menus
3.2 filter through menus
3.4 Avail menu to customer
3.3 Display menu of choice
3.2 Retrieve menus
4.0 Place Order
4.1 record order
4.2 store order
4.5 Avail payment options
4.4 Display bill
4.3 send out bill
5.0 Select payment type & provide details
5.1 confrim payment
5.2 Store payment receipt
delivery successful & pizza sale made!
5.3 Dispatch delivery
Sign out

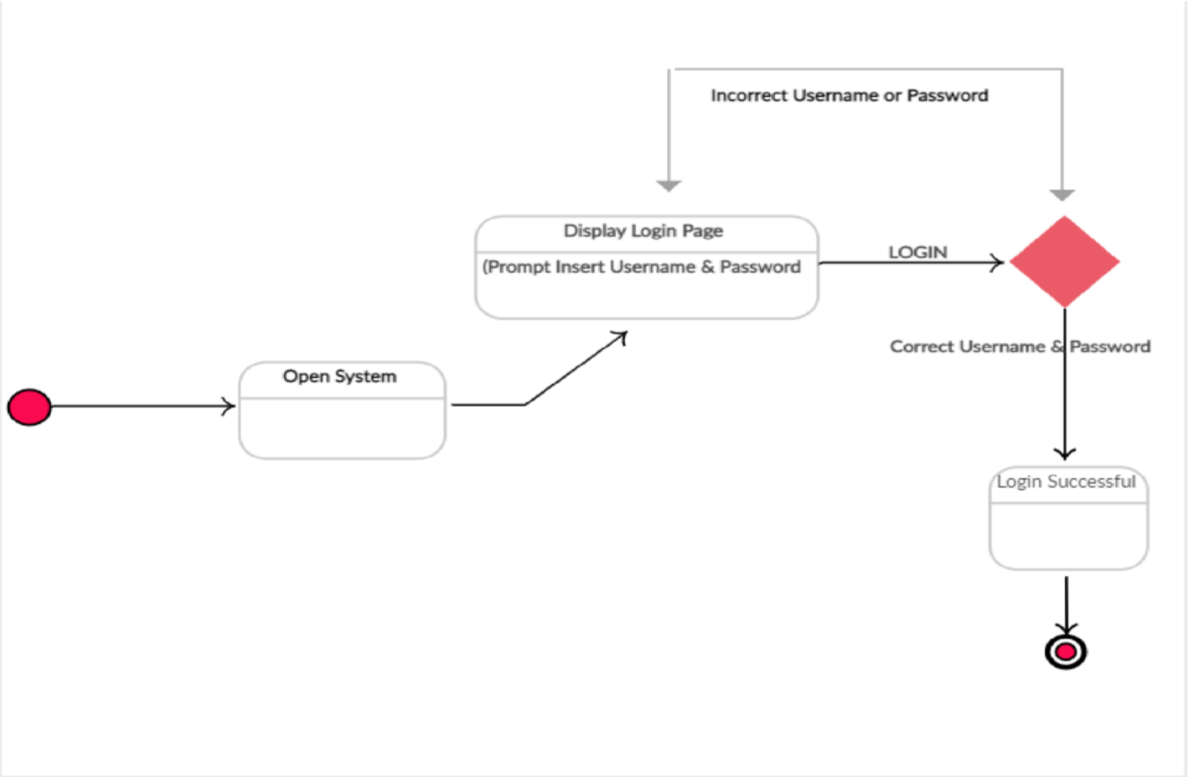
DATA FLOW DIAGRAM

This diagram depicts a simple internal flow of the events happening in the online pizzeria platform.



STATE TRANSITION DIAGRAMS

LOGIN


Incorrect Username or Password
Display Login Page
(Prompt Insert Username & Password
LOGIN
Correct Username & Password
Open System
Login Successful

CONTRIBUTION

All the team members contributed equally