Pokhara University Affiliate

LA GRANDEE INTERNATIONAL COLLEGE

Simalchaur, Pokhara Nepal

Mid-Term Progress Report On

"BakeWise"

Submitted to:

Bachelor of Computer Application (BCA) Program

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Submitted by:

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1. Introduction

A Bakery System Management ecommerce platform is a valuable tool for bakery businesses looking to improve efficiency, enhance customer satisfaction and drive growth. **Bakery System Management** is the way of reducing the workload environment and enhancing the working system. By addressing the challenges faced by traditional bakery operations, these platforms can help bakeries stay competitive in today's fast placed market.

The bakery management system is designed to streamline and automate the daily operations of a small bakery. The system is especially suited for small bakeries with a limited number of employees, helping to ensure that all operations run smoothly and efficiently.

The system allows the customer to shop online and browse the available products. Through this system, bakery owners can track customer orders and manage inventory levels effectively, and ensure better customer experience. The user-friendly interface allows bakery owners to manage their business operation from any location, providing greater flexibility and control.

The primary goal of this project is to provide a comprehensive bakery management system through this platform, built with php, html and css. Built using php, this system provides bakery owners with an efficient way to manage key aspects of their business, including customers, orders, products and inventory. This solution not only simplifies the operational management of a bakery but also enhances the overall customer experience by offering secure, efficient order fulfillment.

The system allows the admin to manage products, orders and view reports efficiently, whereas the customers can view the product create the wish-list and

can purchase the item. The system will not only modernize the bakery's operations but also help the business scale by reaching a wider audience through the internet.

A local bakery wants to digitize its operations by creating an e-commerce platform that allows customers to browse and orders, which limits its growth and reach. With increasing demand and competition, the bakery needs an efficient system that allows customers to order products at their convince. As well local bakeries struggle to reach a large audience and handle online audience and handle online orders efficiently. Customers prefer the convenience of ordering products online, but many bakeries don't have the technology to offer this service. Therefore, Bakery System Management is built.

2. Problem Statement

There has been a significant change and shift towards online shopping, including food-related purchases. Small bakeries need to adapt to this trend to stay competitive. Various existing platforms provide e-commerce services, but this project aims to cater specifically to bakery needs.

- Customers Service Challenges: Difficulty in managing customer orders, providing timely customer support and maintaining customer satisfaction.
- Poor interface: The websites that exits are difficult to use by the customer due to its poor interface and features.

3. Objectives

The objective of this project is to develop a bakery e-commerce platform using php, css, html that will allow customers to easily browse, order, and see the availability for bakery products online. To improve business flexibility with a user friendly interface that allows bakery owners to manage operation remotely. Enchance customer experience. The main objective of this project:

- Built a user-friendly bakery e-commerce website.
- Allow customers to view and purchase bakery items online.

4. Methodology

Spiral model is a risk driven software development process model. It provides a framework for designing processes including the risk levels associated with them. A spiral model is a cyclic model. It allows the rapid generation of subsequent phases during the software development phases. It also allows checking the robustness and correctness of the phases. After each cycle a prototype is developed and checked for its robustness and to meet the requirements.

Phases of the spiral model:

- Objectives Defined: In first phase of the spiral model clarify what the project aims to achieve, including functional and non-functional requirements.
- Planning Phase: All the required information about the project will be gathered in this phase. Requirements such as system requirement specifications, design alteration, etc. will be done in this phase
- Risk Analysis: Requirements of the project is studied and brainstorm sessions are conducted to figure out potential risks involved. In the risk analysis phase, the risks associated with the project are identified and evaluated at the beginning of each iteration, and appropriate actions are taken to mitigate them.
- Engineering: In the engineering phase, the software is developed based on the requirements gathered in the previous iteration.
- Testing Phase: Testing alongside developmental changes will be done in this phase. Coding, test case development, test execution, test summary report, defect report generation, etc. happens in this phase.
- Evaluation: In the evaluation phase, the software is evaluated to determine if it meets the customer's requirements and if it is of high quality. Feedback is gathered and used to refine the requirements for the next iteration.

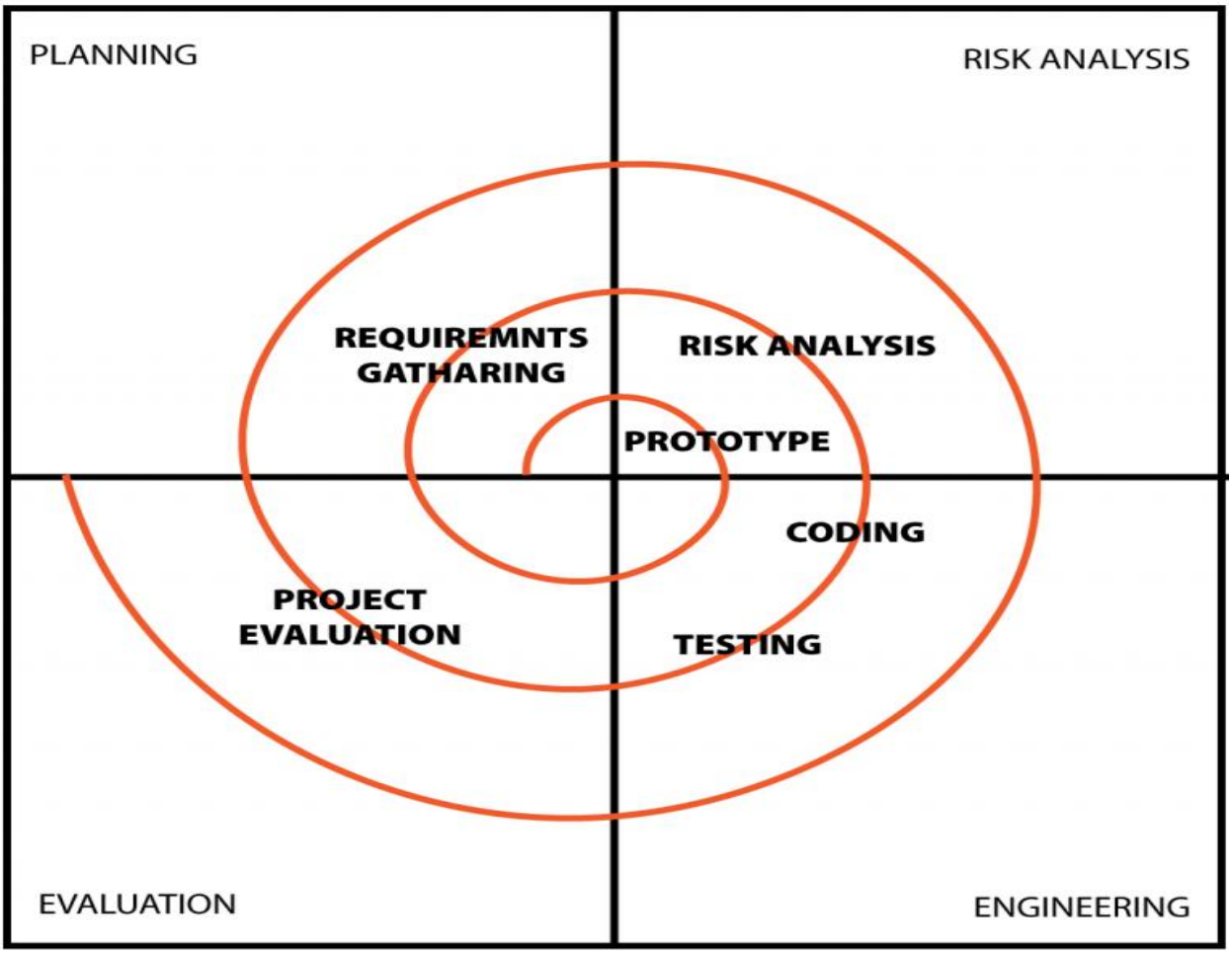

Figure 4.1 Spiral Model

(testbytes, 2019)

- Each spiral that can be seen in the diagram above acts as a loop for a separate process in testing. The four main activities, planning risk analysis, testing, coding and project evaluation will be repeated again for the required number of phases for any project.

How it Works in Practice:

1. **Start with a small, initial release:** This could be a prototype or a minimal viable product (MVP).
2. **Gather feedback:** Collect feedback from users and stakeholders.
3. **Analyze risks:** Identify and address any potential issues or challenges.
4. **Iterate and refine:** Based on feedback and risk analysis, refine the software and develop the next iteration.
5. **Repeat the process:** Continue iterating through the spiral, gradually adding features and improving the software based on feedback and risk assessments.

5. ER Diagram

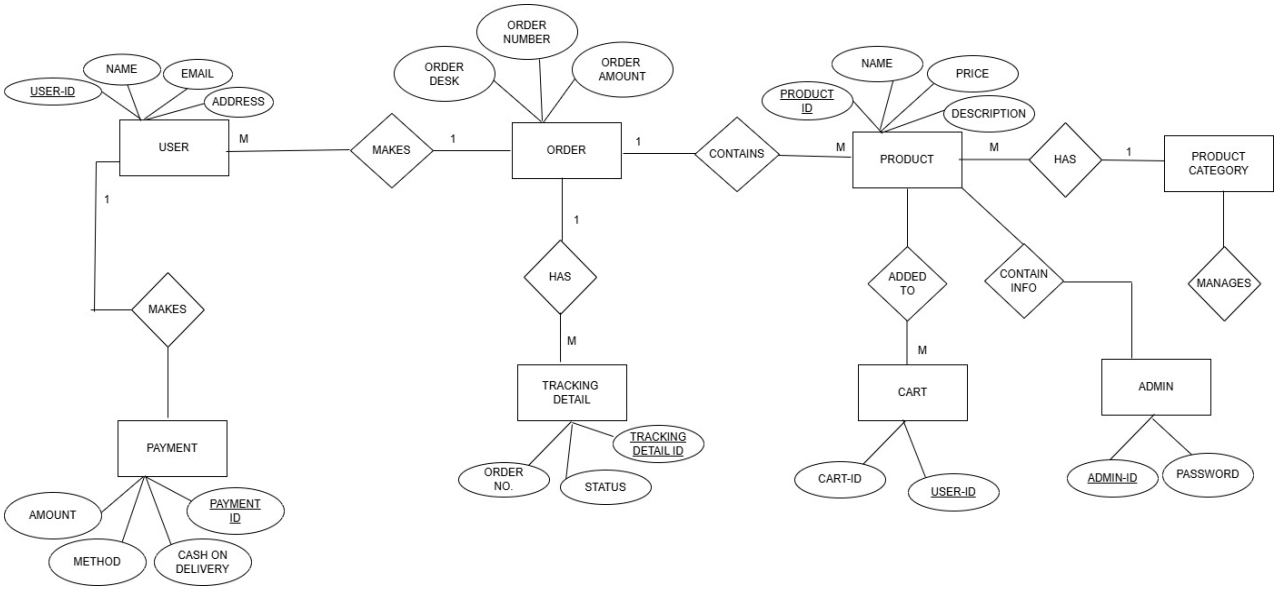

Figure 5.1 ER Diagram

6. Use Case

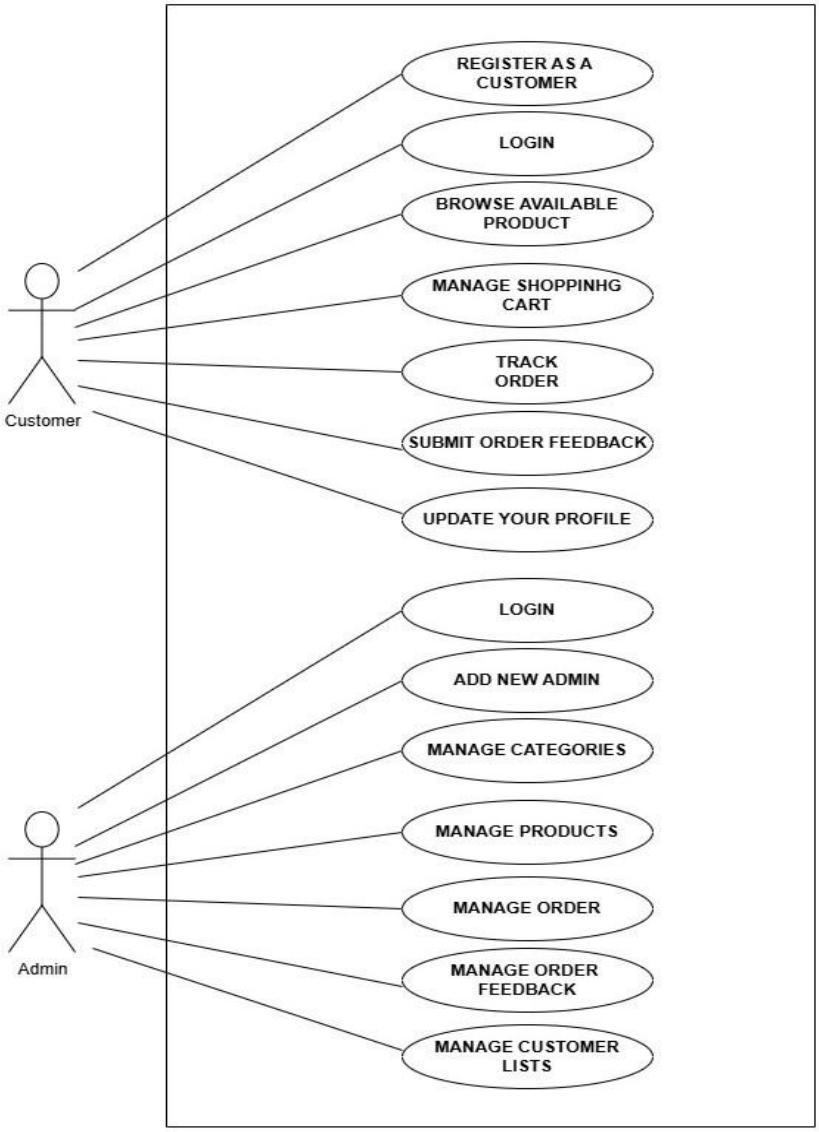

Figure 6.1 Use Case Diagram

7. DFD

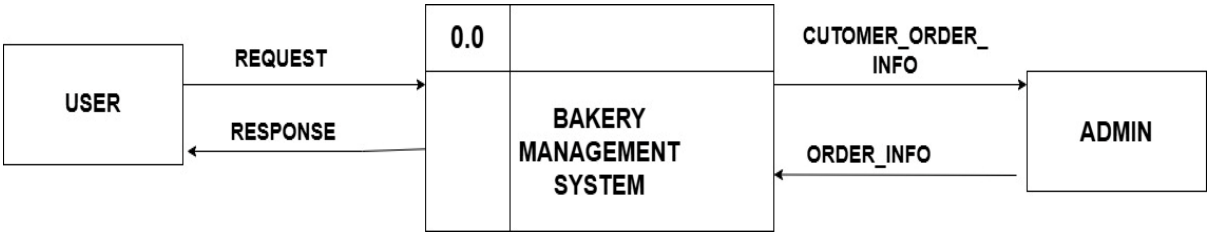

Figure 7.1 Level 0 DFD

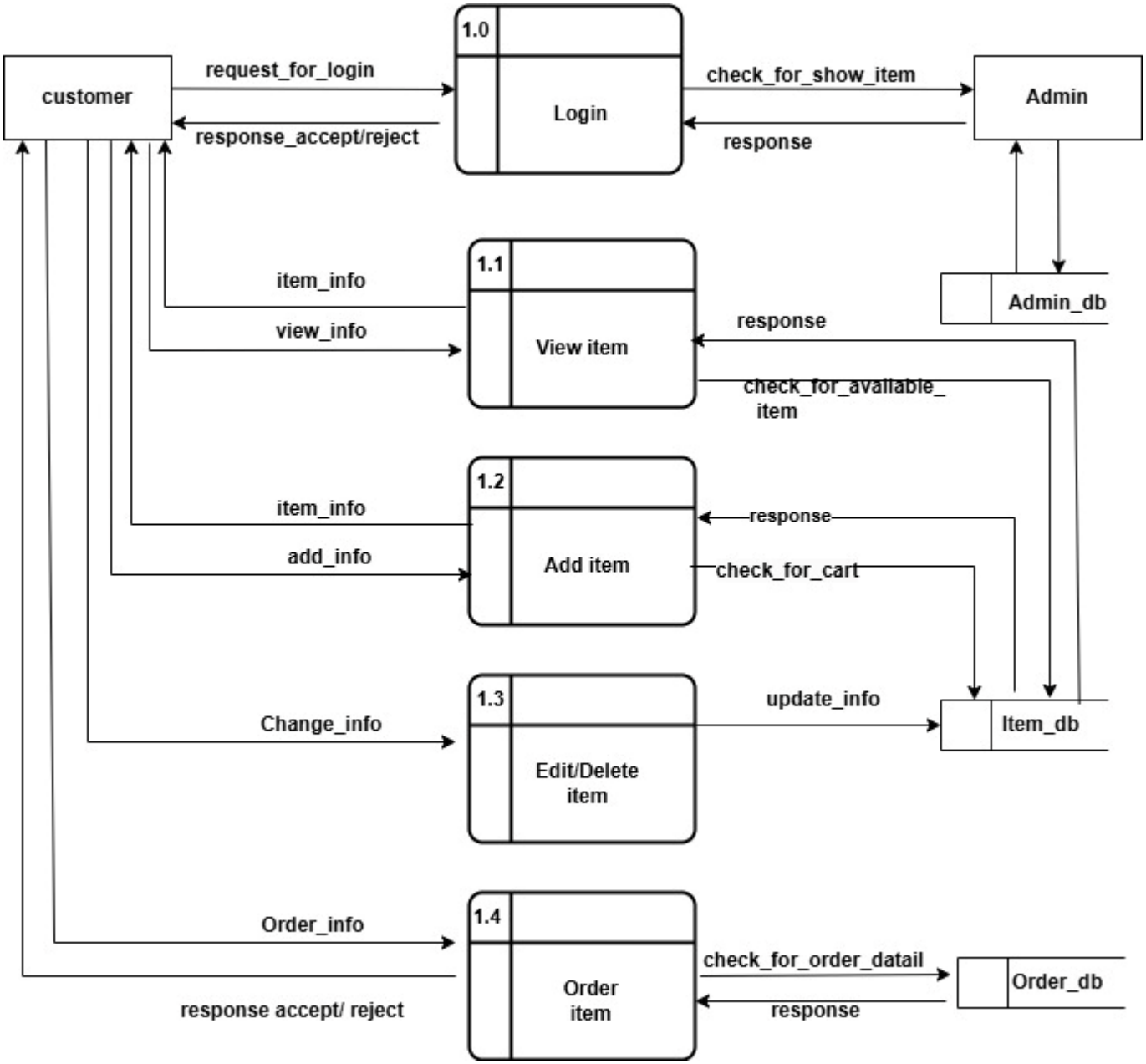

Figure 7.2 Level 1 DFD

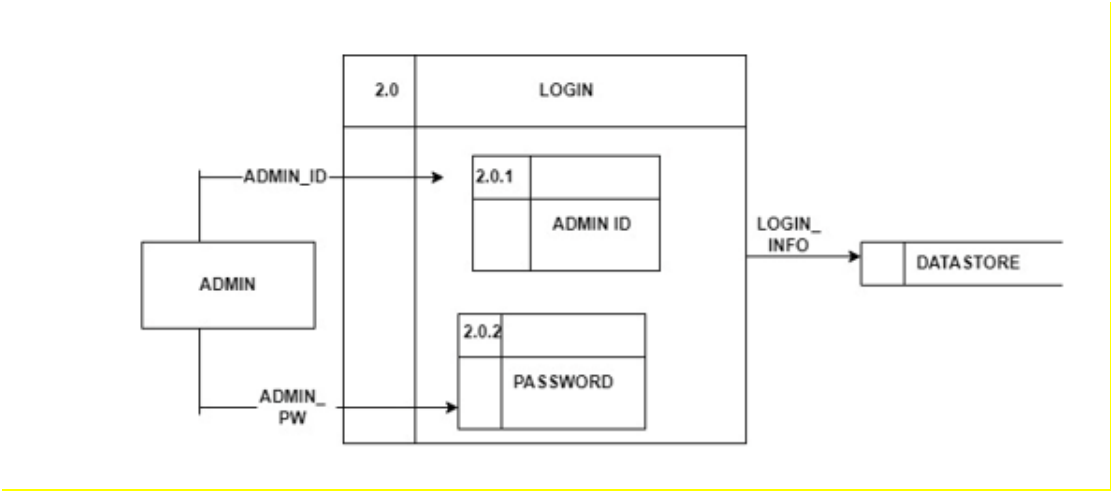

Figure 7.3 Level 2 DFD

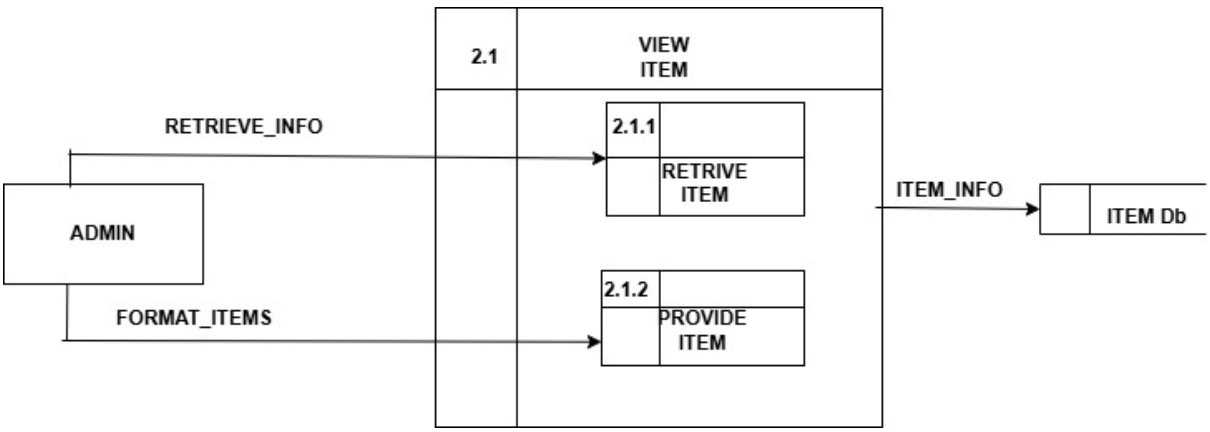

Figure 7.4 Level 2 DFD

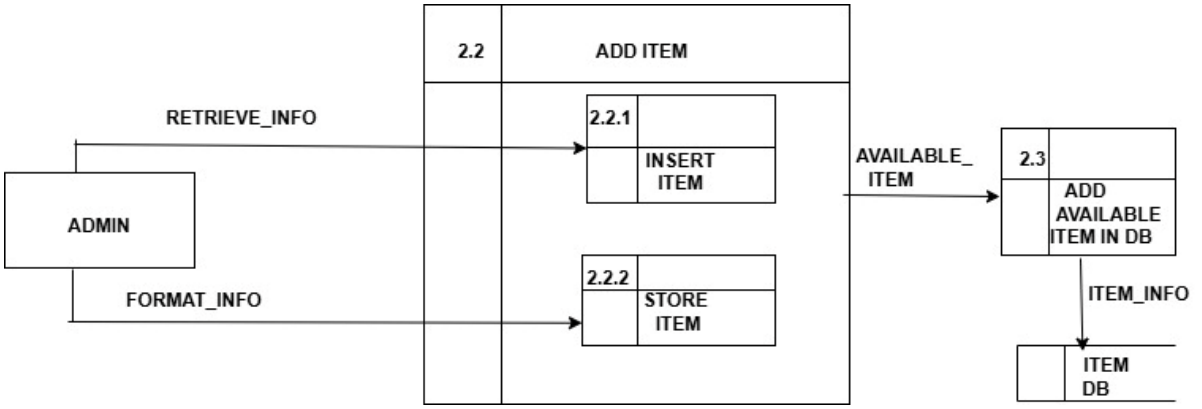

Figure 7.5 Level 2 DFD

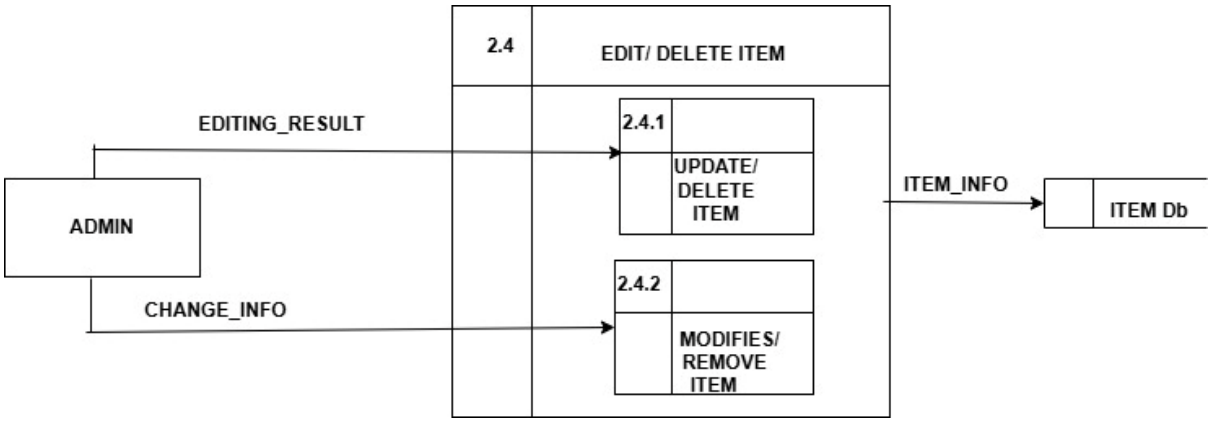

Figure 7.6 Level 2 DFD

8. Project Gantt Chart

The Gantt chart below shows the schedule planned for developing the “Bakery Management system”. This project would be carried out in steps with proper planning in each step, best effort would be applied to finish this project before deadline.

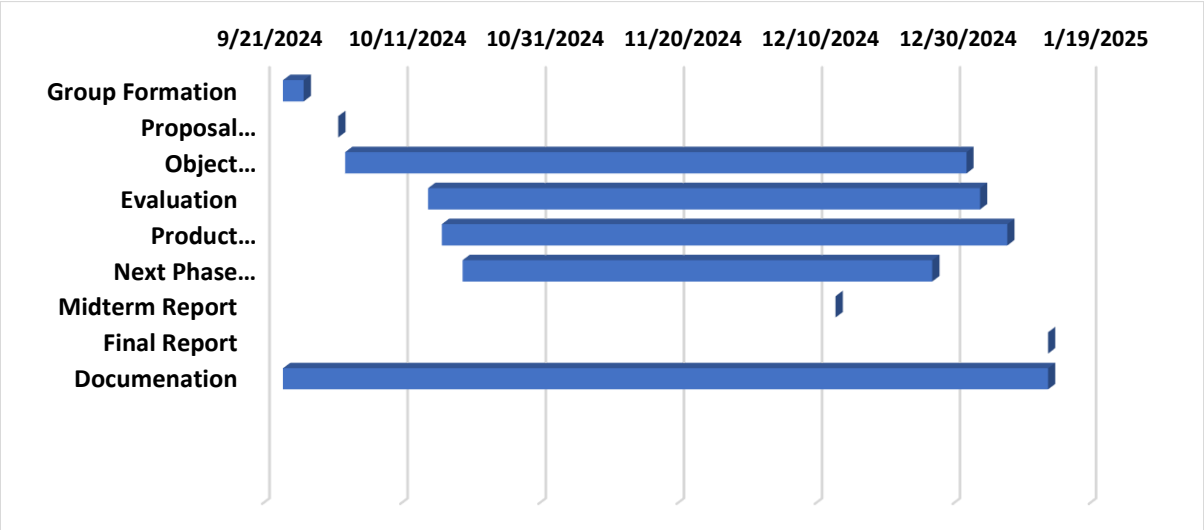

Figure 8.1 Gantt Chart

9. Deliverables

Admin

The system will help the bakery owner/admin manage the business more effectively by providing tools to:

- Add and update product listings.
- View and manage products and customer orders.
- Track sales data and generate reports.
- Managing inventory and updating product availability.
- Integrating a user-friendly interface for customers to place orders.

Customer

- Users can login.
- Offers a wide range of products (cakes, bread, cookies, pastries, etc.) online.
- Provide a seamless and intuitive shopping experience.
- Ensure secure user authentication.
- Simplify the ordering process for customers.
- Customer can view, browse, add product for purchase.

10. Progress Report

- User interface design (Homepage) using Html, CSS and js portion 60% have finished.
- Login, sign in page has been created using html, js, php and css.
- Register portion 90% has completed.
- Database portion is 40% completed.
- Admin page 30% completed

11. What needs to be done?

In the project, we have almost completed the user interface design for the Bakery System Management. We have completed database design for login register portion.
The next steps include developing the backend functionality for user authentication, conducting user testing, and writing the user manual. And database design for products, orders, must be made. We will also conduct thorough testing of the order fulfillment process, including order placement, payment processing, and order delivery.

12. Problem Encountered

While making this project some problems are encountered.

- Improperly designed database tables lead to, inconsistencies, and performance problems.
- And also, data redundancy due to improper database.
- Bugs and logic errors in the code lead to unexpected behavior and data loss.
- Debugging and troubleshooting those error was time-consuming and loss of data.
- Data Integrity**,** ensuring data accuracy and consistency in the process of project making to the system is crucial.

13. References

Kumar, A. (2015). *online cake bakery management system in PHP*. Retrieved from PHPGurukul.com: https://phpgurukul.com/

testbytes. (2019). Retrieved from testbytes: https://images.app.goo.gl/T7B1Bmu13N2iwGjc7