

## **A Training Report**

*Submitted to partial fulfilment of the requirements  
for the award of the degree of*

# **Bachelor of Technology**

In

## **INFORMATION TECHNOLOGY**

by

**LATIYA NEMISH GHANSHYAMBHAI  
20SE02CE032**

Under the supervision of

**Mrs. Priyanka Vashi**



**APRIL 2024**

**P P SAVANI SCHOOL OF ENGINEERING**

**P P SAVANI UNIVERSITY**

**NH NO.: 8, VILLAGE: DHAMDOD, TA. MANGROL, NEAR KOSAMBA, SURAT - 394 125. (GUJARAT).**

## ***CERTIFICATE***

---

This is to certify that the Project/Training Report submitted by **LATHIYA NEMISH GHANSHYAMBHAI (20SE02CE032)** to the **P P SAVANI UNIVERSITY** for the partial fulfilment of the Degree of Bachelor of Technology in Information Technology. This is to further certify that I have been supervising the Project/Training of **LATHIYA NEMISH GHANSHYAMBHAI (20SE02CE032)**.

The contents of this report, in full or in parts, have not been submitted to any other Institute or University for award of any degree, diploma or titles.

Sign of Faculty Mentor :

Name of Faculty Mentor: Mrs. Bhavisha shah

Date: April 10, 2024

# INTERNSHIP CERTIFICATE

**JASHN  
TECHNOLOGY**

## INTERNSHIP COMPLETION LETTER

**Date:**

March 30, 2024

**To Whom It May Concern:**

This is to certify that Mr/Ms/Mrs Nemish Lathiya has successfully completed internship program from 15th December 2023 to 30 March 2024 in "Application Development" at JASHN TECHNOLOGY . During their internship programme with us, they demonstrated exceptional skills with a self-motivated attitude to learn new things and implement them end to end with all of our mentioned industrial standards. Their performance was excellent and was able to complete the project successfully on time.

We wish them all the best for future endeavors.

Best Regards,

**Mr. Dhruvil Lathiya**  
(HR Manager)

**FOR JASHN TECHNOLOGY**

**Mrs. Meera Patel**  
(Founder & PROPRIETOR)



+91 6353602874



dhruvil5011@gmail.com



1018, Silver Business  
Point, VIP circle, Utran,  
Surat – 394105

## ACKNOWLEDGEMENT

---

This report would not have been possible without my teachers who were always there when I needed them the most. I take this chance to acknowledge them and extend my sincere gratitude for helping me make this Report a possible.

I wish to thank my faculty mentor **Mrs. Bhavisha shah**, Assistant Professor, School of Engineering mentor, **Mr. DHRUVIL LATHIYA**, Technocolabs Software's Pvt. Ltd. It has been an honor to learn under their mentorship.

As my supervisor, they have constantly motivated me to remain focused on achieving my goal. Their observations and guidance helped me to establish the overall direction of the report and to move forward with learning in depth. Their vital support at each juncture, which culminated in successful completion of my project work. I express my sincere gratitude to them for constant support during the project/training work.

I am also thankful to faculty members of the department for constant support and guidance.

I am thankful to Dean, School of Engineering for his initiative of imparting Project/Industrial Trailing during 8<sup>th</sup> Semester.

Name of Student : **LATHIYA NEMISH GHANSYAMBHAI**

Enrollment No : **20SE02CE032**

## ABSTRACT

---

The Flutter mobile application for financial transaction management offers a comprehensive solution for efficiently monitoring and managing financial transactions. This application is developed with a strong emphasis on code quality and follows Object-Oriented Programming (OOP) principles, ensuring a clean and organized codebase. One of the core features of the application is user account management, allowing users to create accounts using either email and password or Google credentials. This ensures a secure and convenient login process, setting the stage for a user-friendly experience.

The home page serves as the central hub for users, offering a quick overview of their financial status. Here, users can access their account balance and explore various transaction books that represent different individuals or entities. These books are a key component for organizing and categorizing financial transactions. Upon selecting a specific book, users can delve into the financial transactions associated with a particular person or entity. They can not only view existing transactions but also add new ones, classifying them as either income or expenses. This feature streamlines financial record-keeping and enhances the ability to track financial activities accurately.

In summary, this Flutter application for financial transaction management is designed to provide a powerful and user-friendly tool for tracking financial activities. It combines well-structured code with OOP principles and efficient state management to ensure a smooth and reliable user experience. With features like account management, transaction tracking, and customizable reports, it aims to empower users in achieving transparent and effective financial manag

# CONTENTS

---

I.	Certificate	ii
II.	Internship Certificate	iii
III.	Acknowledgement	iv
IV.	Abstract	v
V.	Contents	vi
VI.	List of Figures	viii
VII.	List of Tables	ix
<b>1.0</b>	<b>Overview of Company</b>	<b>1</b>
1.1	Company Details	
1.2	Organization Chart	
1.3	Company Personal Contact Details	
1.4	Core Work Area & Related Details	
1.5	Skill requirements for employment in the company	
<b>2.0</b>	<b>Introduction of Training</b>	<b>5</b>
2.1	Project Details	
2.2	Problem Statement	
2.3	Objective of Project	
2.4	Technologies & Modules Used	

<b>3.0</b>	<b>Implementation &amp; Diagrams</b>	<b>9</b>
3.1	Methodology	
3.2	Data Collection	
3.3	Deployment	
3.4	Snapshot of Output	
<b>4.0</b>	<b>Learning Outcomes &amp; Discussion</b>	<b>16</b>
4.1	Learning Outcomes	
4.2	Details of Reporting Schedule	
4.3	Future Scope	
<b>5.0</b>	<b>Conclusion</b>	<b>20</b>

## LIST OF FIGURES

---

FIGURE NO.	DESCRIPTION	PAGE NO.
01	Organization Chart	2
02	System Flow Diagram	9
03	Deployment	13
04	OutputScreenshot	14
05	Learning Outcomes	16
06	Reporting Schedule	18
07	Conclusion	20

## CHAPTER 1: OVERVIEW OF COMPANY

---

### **1.1 Company Details**

Jashn Technology was founded in 2018 by a team of engineers in Surat, who brought years of experience in FLUTTER App development to a new venture to make it a success.

We are a team of talented developers making Apps with great minds. Being a leading Software Development company, we help our clients extract valuable business insights from their data to better understand their audience, forecast demand, reduce risks, prevent cost overruns, and much more.

## 1.2 Organization Chart

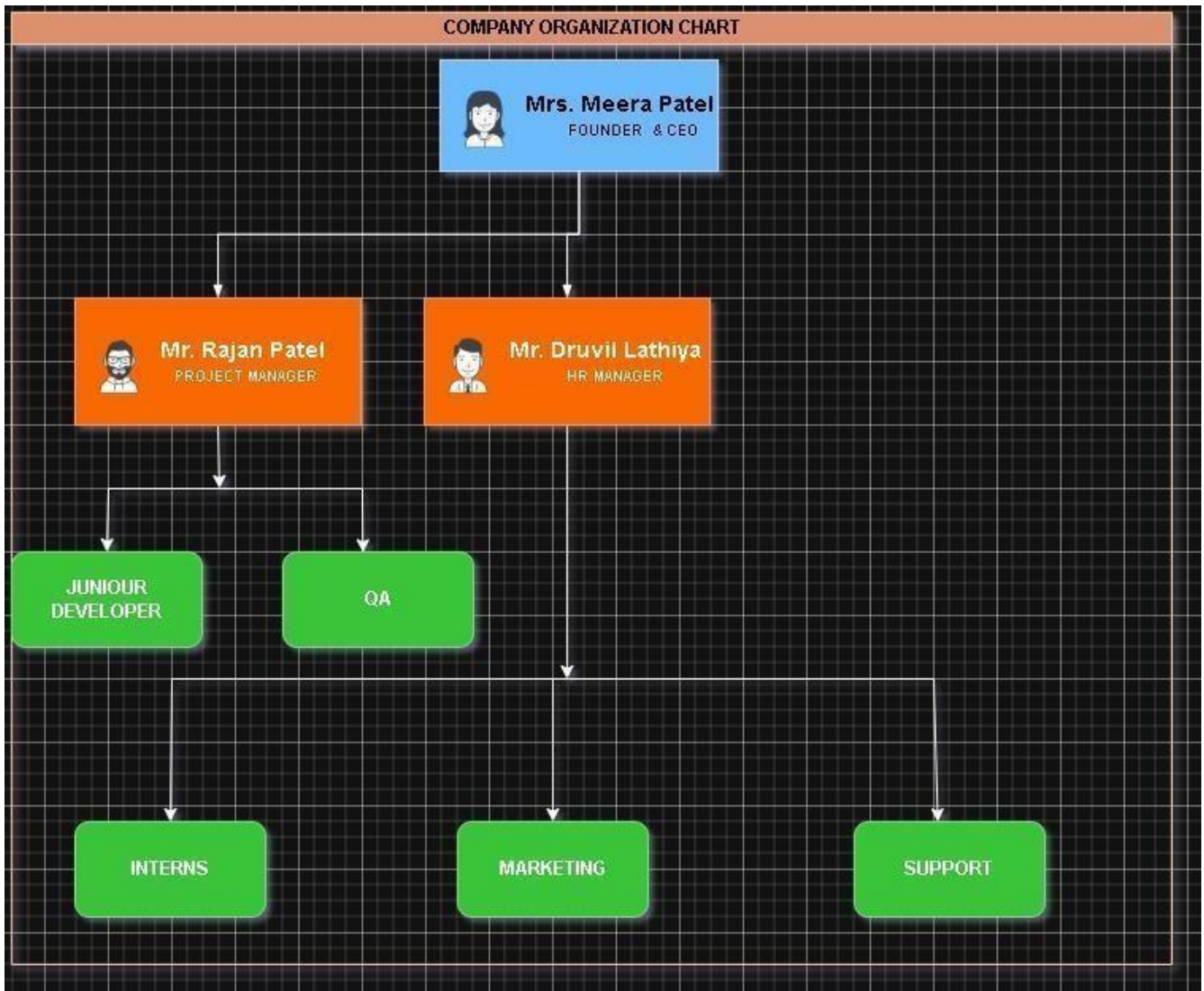


Figure 1. Organization Chart

### **1.3 Company Personal Contact Details**

Company Name : Jashn Technology  
Contact Person : Ms. Meera patel  
Designation : Co-Founder And Director  
Email ID : dhruvil5011@gmail.com  
Contact Number : +91-6353602874  
Address : 1018, Silver business point, VIP circle,  
utran,Surat-394105

### **1.4 Core Work Area & Related Details**

Jashn Technology is a App Development Services Company that Provide Services in Application Development, API Management, Cloud Application Development, Product Development Services, Android Application Development Services etc.

By offering a full-cycle development process, we ensure the delivery of ready-to- use, competitive, maintainable App solutions aimed at enhancing the businesses of our clients and increasing their ROI. By getting to know your needs and creating a plan to help you deploy fast,we let you focus on your key business objectives.

We are mainly focused on industry driven ideas and technology to meetthe requirements and to solve business problems.

We provide full-fledged custom App development services. Being a leading App development company in Central India Region, we combine expert knowledge, cutting-edge technologies, a passion for innovation, and finely-tuned business workflows to bring our clients' boldest business ideas to life. Whatever your company's challenge is,

## **1.5 Skill Requirements for Employment in the Company**

Requirements:

1. A candidate should be enthusiast for learning new skills and developing industry driven solutions.
2. Flexibility with Swift and basic libraries for Flutter development such as UI kit and swift UI
3. Expertise in visualizing and manipulating big datasets.
  1. Knowledge of math, probability, statistics, and algorithms.

Data Analysis/ Data Science Interns Responsibilities:

1. Internships are often learning opportunities, so you'll be expected to learn new concepts, tools, and technologies related to Flutter development.
2. Effective communication and collaboration skills are essential for understanding project requirements and contributing effectively.
3. This may involve using debugging tools, analyzing crash reports, and troubleshooting compatibility issues on different Flutter devices.
4. You may be responsible for conducting testing procedures to ensure the functionality, usability, and performance of Flutter applications
5. Keeping track of your work, documenting code changes, and reporting progress to supervisors or project managers is often part of the internship role.
6. Flutter development is a dynamic field, with new tools, technologies, and best practices emerging regularly.
7. Your insights and feedback as an intern can be valuable for process improvement within the development team.

## CHAPTER 2: INTRODUCTION OF TRAINING

---

### 2.1 INTRODUCTION OF PROJECT:

The Finance Tracking Application is a versatile and innovative software solution designed to empower individuals and entities in efficiently managing their financial transactions. This project is characterized by its clean, well-organized codebase, adhering to Object-Oriented Programming (OOP) principles and robust state management, ensuring a seamless user experience. In this comprehensive report, we delve into the core features, objectives, and technologies that drive this finance management application.

### OBJECTIVE OF PROJECT:

The Finance Tracking Application project is rooted in several fundamental objectives:

- 1. User-Centric Financial Management:** At its core, this application aims to provide users with a user-friendly and effective tool for managing their financial activities. It accomplishes this by offering a range of features that facilitate transparent and efficient financial record-keeping.
- 2. Diverse Account Management:** The project offers diverse account creation options, enabling users to register using email and password or their Google credentials. This ensures secure and convenient access to the application, catering to user preferences.
- 3. Comprehensive Financial Overview:** The home page of the application serves as the central hub, offering users a comprehensive view of their financial landscape. Here, users can access their account balance and explore various transaction books representing different individuals or entities.
- 4. Detailed Transaction Management:** Upon selecting a specific book, users can dive into the financial transactions associated with particular individuals or entities. This feature not only allows users to view existing transactions but also add new ones, categorizing them as income or expenses, thereby enhancing financial tracking.
- 5. PDF Transaction Reports:** An outstanding feature is the ability to generate detailed PDF reports of transactions. Users can personalize these reports by associating transactions with specific company names, adding a professional

touch to financial management and reporting.

- 6. Custom Categories:** To cater to diverse user needs, the application allows for the creation of custom income and expense categories. Users can define categories tailored to their unique financial requirements, making the application highly adaptable.

## 2.2 Problem Statement

The Finance Tracking Application project is dedicated to providing a powerful and user-friendly tool for tracking financial activities. With its well-structured code, adherence to OOP principles, and efficient state management, it ensures a smooth and reliable user experience. This project enables individuals and entities to manage their financial affairs with precision and transparency, offering features such as account management, transaction tracking, and customizable reports. Ultimately, the project aims to enhance financial management, allowing users to maintain control over their finances while maintaining data security and privacy.

## 2.3 Objective of Project

### **TOOLS AND TECHNOLOGY:**

#### **TOOLS:**

- Visual Studio as a Code Editor.
- Firebase as a Backend Technology

#### **TECHNOLOGY:**

- **Frontend Technology:**
  1. Flutter
  2. Dart
- **Backend Technology:**
  1. Dart
- **Database:**
  1. Firebase

## 2.4 Technologies & Modules Used

Technology and Modules Used in a Shopping App Developed in Swift:

1. **Swift Programming Language:** Swift is the primary programming language used for developing applications. It offers a modern syntax, strong type inference, and memory safety, making it ideal for building robust and efficient mobile apps.
2. **UIKit or SwiftUI:** UIKit is a framework used for building user interfaces in applications, offering a comprehensive set of components and tools for creating visually appealing and interactive UIs. SwiftUI, introduced in recent versions, provides a declarative approach to UI development, simplifying the process of building dynamic and responsive interfaces.
3. **Core Data:** Core Data is a framework provided by Apple for managing the model layer objects in an application. It facilitates data storage, retrieval, and persistence, making it suitable for implementing features such as product catalogs, user profiles, and order histories in a shopping app.
4. **Firebase:** Firebase provides a suite of backend services, including authentication, real-time database, and cloud messaging, which can be integrated into the app to handle user authentication, data synchronization, and push notifications.
5. **Push Notifications:** Push notification services like Firebase Cloud Messaging (FCM) or Apple Push Notification Service (APNS) are utilized to send timely updates, promotional offers, and order status notifications to users, enhancing user engagement and retention.
6. **Third-party APIs:** Integration with third-party APIs for features such as location-based services (e.g., Google Maps API for store locator), product recommendations (e.g., Amazon Product Advertising API), and analytics (e.g., Google Analytics) can enhance the functionality and user experience of the app.
7. **App Store Connect:** App Store Connect is used for managing app submissions, updates, and distribution on the Apple App Store, enabling developers to reach a wider audience of Flutter users.

## CHAPTER 3: IMPLEMENTATION & DIAGRAMS

---

### 3.1 Methodology

The development methodology for the shopping app in Swift follows an agile approach, iterating through key stages including requirement analysis, design, development, testing, and deployment. Beginning with a thorough analysis of user needs and business objectives, the project progresses with iterative development cycles, each focusing on implementing specific features and functionalities using Swift programming language and UIKit or SwiftUI frameworks. Continuous integration and testing ensure the app's reliability, performance, and compatibility across various Flutter devices. User feedback drives iterative refinements to the app's design and functionality, while security measures are integrated throughout the development process to safeguard user data and transactions. Finally, the app is deployed to the Apple App Store, leveraging App Store Connect for distribution and updates, ultimately delivering a seamless and satisfying shopping experience to Flutter users.

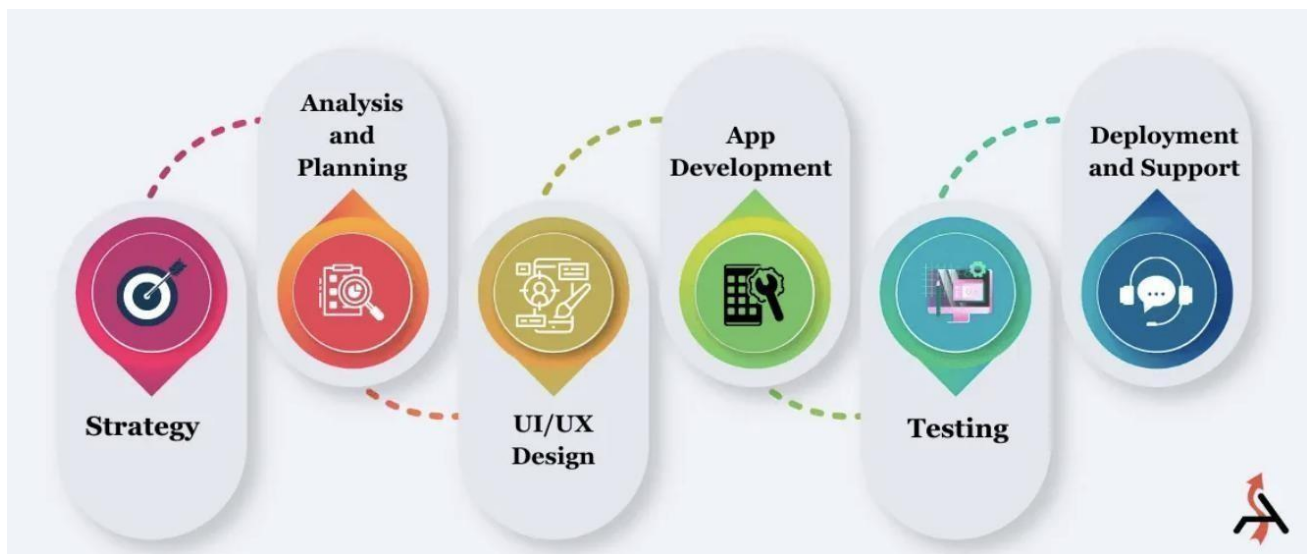


Figure 2. System Flow Diagram

1. **Requirement Gathering:** Begin by understanding the project requirements, including features, target audience, and business objectives.
2. **Design Planning:** Create wireframes and UI/UX designs to visualize the app's layout, navigation, and user interactions.
3. **Environment Setup:** Set up the development environment by installing Xcode, Apple's integrated development environment (IDE), and any necessary SDKs or frameworks.
4. **Project Setup:** Create a new project in Xcode, selecting the appropriate project template (e.g., Single View App, SwiftUI App).
5. **Coding: Write:** code in Swift to implement the app's features and functionality according to the design specifications and project requirements.
6. **User Interface Development:** Develop the app's user interface using Interface Builder or SwiftUI, adding views, buttons, labels, and other UI elements.
7. **Backend Integration:** Integrate with backend services and APIs to fetch and store data, handle user authentication, and perform other server-side tasks.
8. **Testing:** Conduct testing at various stages, including unit testing for individual components, integration testing for combined functionalities, and UI testing for user interface interactions.
9. **User Feedback:** Gather feedback from users, beta testers, and stakeholders to identify areas for improvement and iterate on the app's design and functionality.

## 3.2 Data Collection

**Product Information:** Collect and manage data related to product listings, including product names, descriptions, images, prices, categories, and availability status. This data can be stored in a database or retrieved from an external API provided by the e-commerce platform or third-party suppliers.

**User Accounts and Profiles:** Gather user data for account creation and profile management, including usernames, passwords, email addresses, shipping addresses, payment methods, and order history. Implement secure authentication mechanisms to protect user privacy and prevent unauthorized access.

**Shopping Cart and Order Management:** Capture and store data for users' shopping carts, including the items added, quantities, prices, and total order value. Manage order information, such as order IDs, statuses, shipping details, and payment transactions, to facilitate order processing and fulfillment.

**Reviews and Ratings:** Enable users to submit reviews and ratings for products they have purchased, collecting data such as review text, ratings (e.g., star ratings), timestamps, and user identifiers. Display reviews and ratings to help other users make informed purchasing decisions.

**Analytics and User Behavior:** Implement analytics tools to track user interactions and behavior within the app, collecting data on app usage, navigation paths, popular products, conversion rates, and other metrics. Use this data to gain insights into user preferences, identify trends, and optimize the app's performance and user experience.

**Push Notifications Preferences:** Allow users to opt-in or opt-out of receiving push notifications for order updates, promotions, discounts, and other relevant notifications. Collect and manage user preferences for notification types and frequency to personalize the communication with users.

**Localization and Internationalization:** Collect data for supporting multiple languages and currencies to cater to users from different regions. Store localized content, such as product names and descriptions, in language-specific resourcefiles, and implement currency conversion functionality for displaying prices in the user's preferred currency.

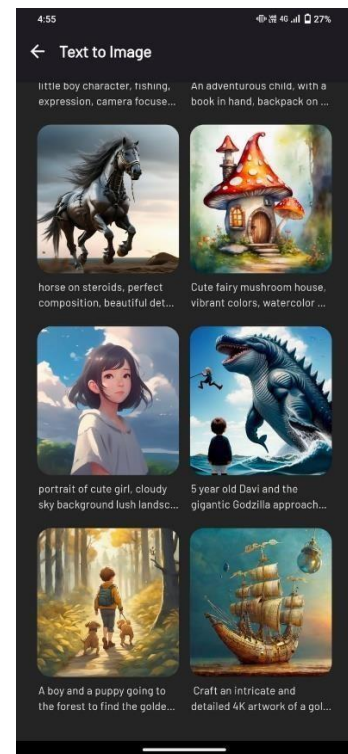
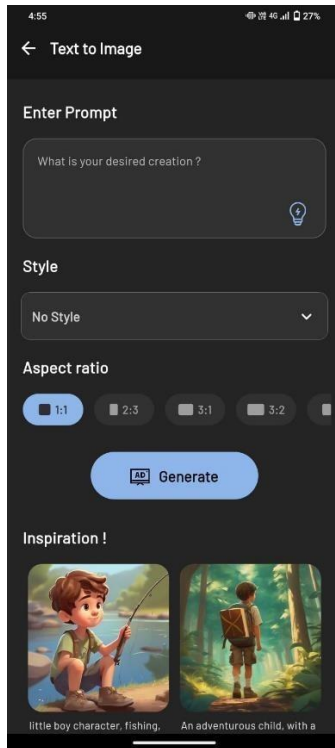
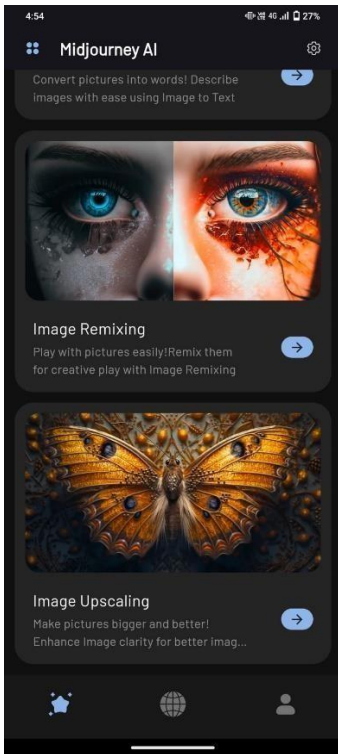
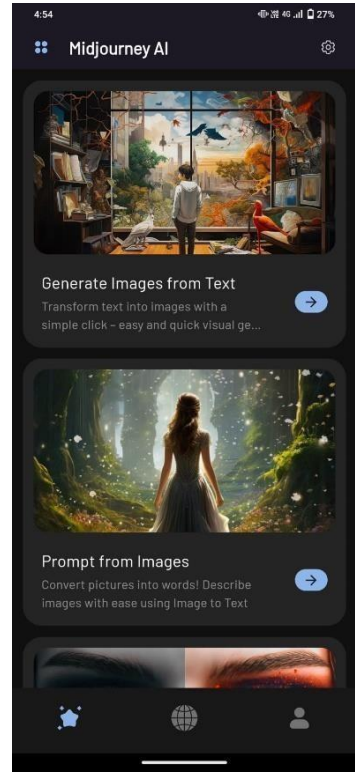
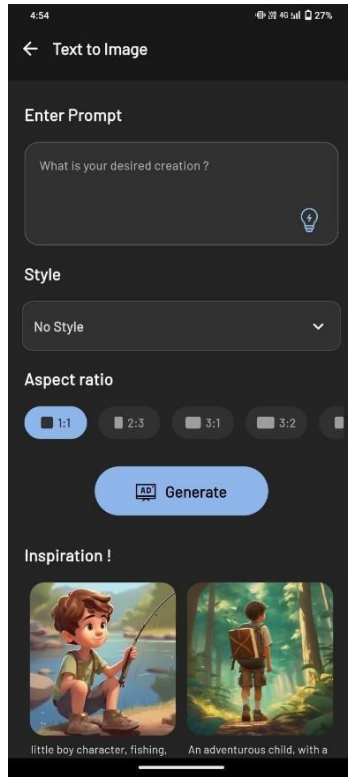
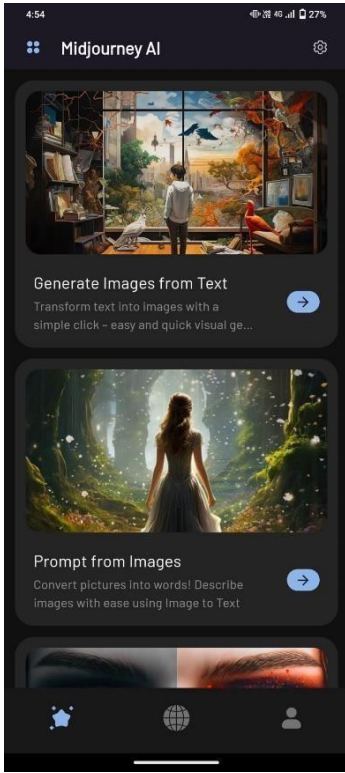
**Third-Party Integrations:** Integrate with third-party services and APIs for features such as payment processing, shipping tracking, and social media sharing. Collect and manage data exchanged with these services, ensuring compliance with their respective privacy policies and terms of service.

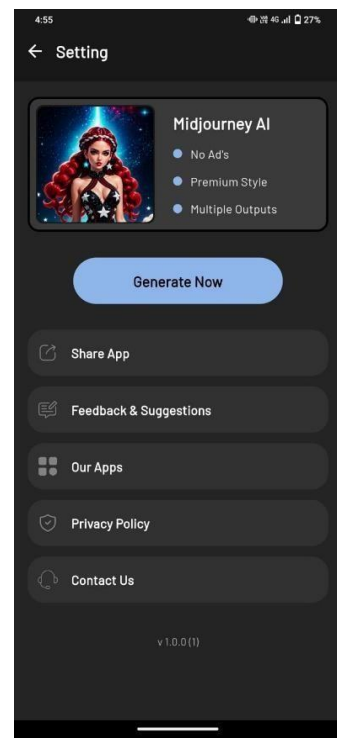
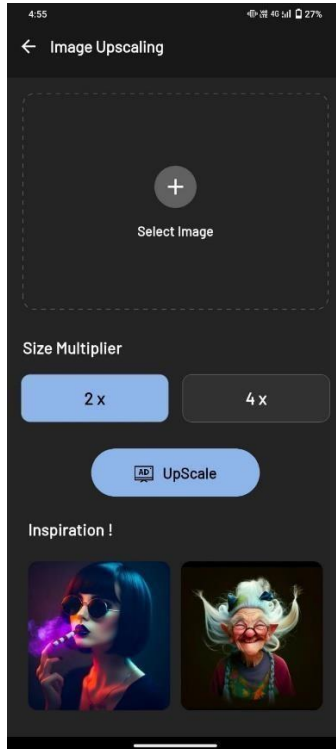
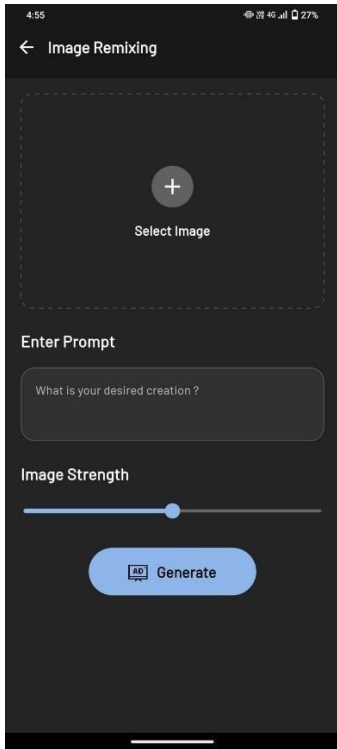
### 3.3 Deployment

To deploy the Application using on App Store, we follow these general steps:

1. **App Store Preparation:** Ensure that the shopping app meets all App Store guidelines and requirements set by Apple. This includes adhering to design and content guidelines, addressing any potential copyright or legal issues, and providing accurate metadata for the app listing.
2. **Flask Code Signing and Provisioning Profiles:** Generate distribution certificates and provisioning profiles for the app using Apple's developer portal. Code sign the app using these certificates to ensure that it can be installed and run on iOS devices.
3. **Start App Submission:** Use Xcode to archive the app for distribution and upload the archive to App Store Connect. Fill out the required information, such as pricing, categories, and app availability, and submit the app for review by Apple's App Review team.
4. **Once App Review Process:** Wait for the app to undergo review by Apple's App Review team. The review process typically involves checks for compliance with App Store guidelines, including technical requirements, content guidelines, and app functionality.
5. **App Approval and Release:** Once the app passes review, it will be approved for release on the App Store. Set the desired release date and time for the app launch, and the app will become available for download by users on the designated release date.

### 3.4 Snapshot of Output





## CHAPTER 4: LEARNING OUTCOMES & DISCUSSION

---

In the digital age, finance tracking applications have emerged as essential tools for individuals and businesses alike. These applications offer a wide range of features that simplify financial management and provide users with greater control over their monetary transactions. This literature review explores some common features, benefits, challenges, trends, and limitations associated with finance tracking applications, shedding light on the significance of such tools in the realm of personal and business finance.

### **Benefits:**

- 3.4.1 **Improved Efficiency:** Automation of financial tracking processes reduces manual effort, improving efficiency and reducing the time spent on financial record-keeping.
- 3.4.2 **Enhanced Financial Decision-Making:** Real-time access to financial data empowers users to make informed decisions about budgeting, investments, and savings.
- 3.4.3 **Cost Savings:** Efficient financial management can lead to cost savings through the identification of areas for potential expenditure reduction.
- 3.4.4 **Improved Financial Health:** These applications can improve users' financial health by providing insights into spending patterns and enabling proactive financial planning.

### **Challenges:**

1. **Technical Issues:** As with any software, these applications can experience technical problems such as downtime, bugs, and software glitches.
2. **Data Security:** Safeguarding sensitive financial data is paramount. Inadequate security measures can expose user information to cyberattacks and data breaches.
3. **User Training:** Users often require training to harness the full potential of these applications, which can be time-consuming and costly.

## **Trends:**

1. **Cloud-Based Systems:** An increasing number of applications are adopting cloud-based architectures, facilitating data access and reducing infrastructure costs.
2. **User Engagement:** Applications are focusing on engaging users by providing easy access to financial records and offering features for setting financial goals.
3. **Artificial Intelligence:** Integration of AI into these applications aims to provide insights for better decision-making in finance and resource allocation.
4. **Mobile Access:** To accommodate the on-the-go lifestyle of users, mobile access is gaining importance, allowing easy access to financial data from anywhere.

#### 4.1 Details of Reporting Schedule

Sr. No.	Reporting Dates	Points Discussed
1	30-12-2023	1 <sup>st</sup> Reporting along with Project Title & Scope of Work:
2	13-01-2024	2 <sup>nd</sup> Reporting to Institute with Progress of Work:(online)
3	27-01-2024	1 <sup>st</sup> Review of Project Work by Experts:
4	10-02-2024	3 <sup>rd</sup> Reporting to Institute with Progress of Work:(online)
5	24-02-2024	4 <sup>th</sup> Reporting to Institute with Progress of Work
6	09-03-2024	2 <sup>nd</sup> Review of Project Work by Experts:
7	30-03-2024	5 <sup>th</sup> Reporting to Institute & submission of Training Completion certificate Signed by Compy Personal
8	06-04-2024	Project Report Submission to Guide for Verification and Submission of Training Completion Certificate Signed by Company Personal (via mail)
9	10-04-2024	Evaluation by Company Personal
10	15-04-2024	Project Report Submission to Guide (2 Hard Copies)
11	22-04-2024	Project Exam Presentation

Table 2 Reporting Schedule

## 4.2 Future Scope

The future scope of Hospital Management Screen is vast and promising, as technology continues to advance and education becomes increasingly important in our globalized world. Here are some potential future developments in e-learning Android applications:

1. **Enhanced Payment Features:** Expanding the application's capabilities to facilitate financial transactions and payment methods can offer users a comprehensive financial management tool. Integration with various payment platforms and secure transaction management can be a valuable addition.
2. **Advanced Search Functionality:** Continuing to improve the search bar and implementing advanced search filters can help users quickly locate specific transactions or financial records. This can enhance the user experience and streamline data retrieval.
3. **Interactive Quizzes and Educational Tools:** To further empower users in their financial management journey, consider incorporating interactive quizzes or educational modules. These tools can help users improve their financial literacy and make more informed financial decisions.
4. **Publication on App Stores:** As a part of the future scope, making the application available on app stores, such as the Google Play Store and Apple App Store, can significantly increase its accessibility and reach. This would enable a wider user base to benefit from the financial management features.
5. **Cross-Platform Accessibility:** Expanding the application's compatibility to include various platforms, such as web-based applications and desktop versions, can make it more versatile and accessible across different devices.

## CHAPTER 5: CONCLUSION

---

In conclusion, the Finance Tracking Application stands as a promising tool in the realm of personal and business financial management. With its well-structured code, adherence to Object-Oriented Programming (OOP) principles, and robust state management, the application delivers a user-friendly and efficient experience. Its key features, including account management, transaction tracking, PDF report generation, and customizable categories, empower users to maintain precise and transparent financial records.

The project's objectives, encompassing automation, improved patient care, and data security, were well-addressed. By automating routine financial tasks and providing real-time access to financial data, the application aids users in making informed financial decisions and enhances the quality of financial management. Furthermore, the option to create custom categories and associate transactions with specific companies adds a personalized touch to financial record-keeping.

Despite these achievements, the project may encounter challenges in technical issues, staff training, and data security, which require ongoing attention and vigilance. Ensuring data security and addressing technical glitches is crucial for the application's long-term success.