



INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT (IACSD), AKURDI, PUNE

Documentation On

CoinBank-Digital Wallet Service

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ABSTRACT

This project is a web-based digital wallet system for transacting the digital currency. The project objective is to deliver the online transactions across internet through a web platform.

The service is designed to be secure and convenient. Users' personal credentials and financial data are encrypted and stored in secure database. The service is expected to benefit both businesses and consumers. Businesses will be able to transact easily and increase their sales. Consumers will be able to shop more conveniently and securely.

The service is still under development, but it has the potential to revolutionize the way we transact digital currency. The "CoinBank" project is modeled after popular platforms like Paytm. This digital wallet solution aims to provide users with a convenient and secure way to manage their financial transactions. Users can effortlessly load funds into their digital wallets, send money to other users, and withdraw funds as needed. The project's core features are designed to replicate the ease and accessibility of existing digital wallet services, offering a user-friendly solution for modern financial needs.

ACKNOWLEDGEMENT

I take this occasion to thank God, almighty for blessing us with his grace and taking our endeavor to a successful culmination. I extend my sincere and heartfelt thanks to our esteemed guide, **Mrs. Geeta Garunte** for providing me with the right guidance and advice at the crucial juncture and for showing me the right way. I extend my sincere thanks to our respected **Centre Co-Ordinator Mr. Rohit Puranik Sir**, for allowing us to use the facilities available. I would like to thank the other faculty members also, at this occasion. Last but not the least, I would like to thank my friends and family for the support and encouragement they have given me during the course of our work.

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INTRODUCTION

This Software Requirements Specification (SRS) aims to provide a comprehensive and well-documented outline of the requirements for the "CoinBank" digital wallet payment service. This document serves as a guiding resource to articulate the fundamental aspects of the digital wallet ecosystem. "CoinBank" constitutes a dynamic platform encompassing multiple functionalities, catering to both users and sellers. The digital wallet system comprises two integral subsystems: the User Wallet subsystem and the Merchant Services subsystem. Generally, in society all the work is decided in meetings and maintenance bills, contact no of members are noted on the papers. There is no automated system for doing all the things that generally happen in society, so that members can come to know what is happening in society.

The "CoinBank" digital wallet payment service is engineered to revolutionize the realm of online financial transactions, allowing users to manage their funds with unparalleled convenience and security. By amalgamating cutting-edge technology with a user-centric approach, the system facilitates secure and efficient transactions within an extensive network of users and merchants. This digital wallet service is a reflection of the modern age's transformational shift towards digital finance, ensuring seamless financial interactions and enhancing financial inclusion.

Features: -

1. Separate login for Customer and Admin.
2. Easy to add or update the customer information by admin.
3. Easy to do online transactions by customer.
4. Admin can manage all customers' accounts and transactions done by customers.
5. Customers can check their account transaction history, also can get statement on email.
6. Easy to do update profile and to do transactions.
7. Customer can apply for FD or Loan as per their requirement.

1.1 PROJECT OBJECTIVE

The objective of the project is to create a secure and user-friendly digital wallet platform that enables easy fund management, peer-to-peer transactions, and seamless interactions with online merchants. Prioritize security, accessibility, affordability, and financial inclusivity, while offering a convenient interface and expanding global seller services.

1.2 PROJECT OVERVIEW

The "CoinBank" digital wallet payment service presents a streamlined solution for users to manage their finances seamlessly, eliminating the need for physical payment methods. Likewise, the service benefits sellers by extending their reach to a global audience. This system is designed to be accessible to users of various backgrounds, requiring only basic computer and smartphone operation skills for efficient use.

The "CoinBank" platform offers user-friendly interfaces for both buyers and sellers. Users can effortlessly top up their digital wallets, make peer-to-peer transactions, and conduct hassle-free online purchases from a diverse range of merchants. The project emphasizes accessibility and inclusivity, allowing individuals without technical expertise to participate effectively.

➤ Product Perspective

The "CoinBank" digital wallet service addresses the needs of individuals who seek efficient and secure financial transactions without the need to visit physical locations. It streamlines the process of managing funds, making payments, and conducting transactions online.

➤ Product Function

Adding funds to digital wallets

Facilitating peer-to-peer money transfers

Enabling online purchases from a variety of merchants
E-Commerce CoinBank should support this use case:

➤ User Characteristics

Users should have a basic understanding of terms like account login, wallet balance, transactions, and security features to effectively utilize the "CoinBank" digital wallet service.

➤ Principle Actors

Users (both customers and sellers)
Admin for system management and oversight

➤ General Constraints & Dependencies

The "CoinBank" digital wallet service is reliant on users having access to a computer or smartphone with a stable internet connection. This infrastructure is essential for the seamless operation of the system and its core functionalities.

1.3 PROJECT SCOPE

The "CoinBank" digital wallet payment service serves as a comprehensive platform for secure and seamless financial transactions. It enables users to effortlessly manage their funds, engage in peer-to-peer money transfers, and conduct transactions with various online merchants. By creating a secure and user-friendly ecosystem, the project enhances financial inclusivity and empowers users with a digital wallet solution that adapts to modern finance trends.

The "CoinBank" project is designed to facilitate interactions between users and sellers on a global scale. Users can easily add funds to their digital wallets, make swift money transfers, and engage in online transactions with confidence. The service stands out for its ability to offer users a convenient way to manage their financial activities from a remote location, eliminating the need for physical presence.

Key features, such as recommendation models and detailed transaction histories, provide users with personalized insights and help in discovering suitable products. These features, accompanied by secure money transactions and reliable delivery services, contribute to customer satisfaction and build a sense of trust within the user community.

The "CoinBank" project is dedicated to increasing sales and customer loyalty. Corporate goals involve optimizing management costs, ensuring customer satisfaction, and fostering long-term relationships. Embracing technology, innovative marketing strategies, and adaptive research and development efforts form the cornerstone of the project's growth strategy. The vision for "CoinBank" is to establish itself as a user-centric, efficient platform that caters to the evolving financial needs of both customers and sellers, creating a robust digital finance ecosystem.

1.4 STUDY OF THE SYSTEM

1.4.1 MODULES:

The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

- Administrator
- Users

➤ Administrator

The administrator is the super user of this application. Only admin have access into this admin page. Admin may be the owner of the platform. The administrator has all the information about the users and about all transactions. This module is divided into different sub modules.

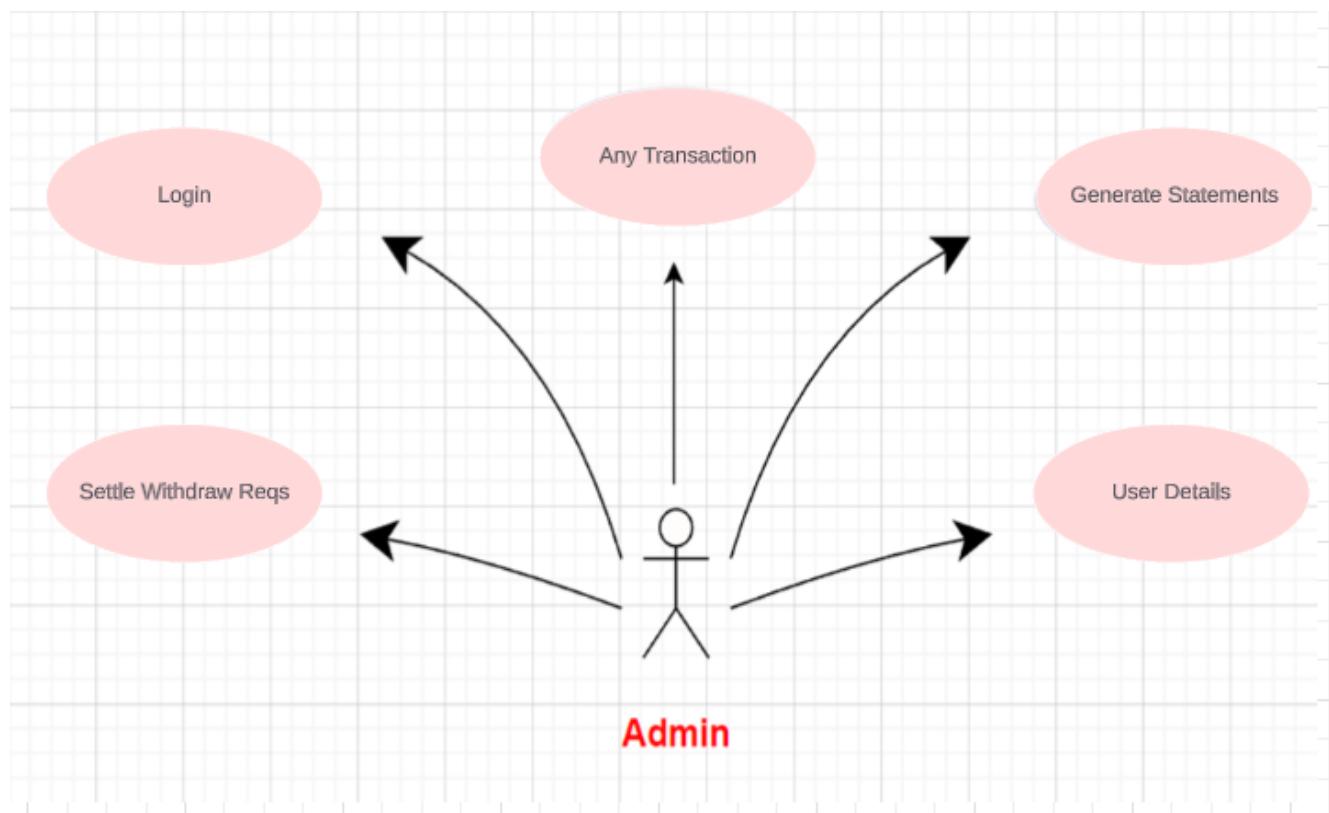


Figure 1: Admin Activity Diagram

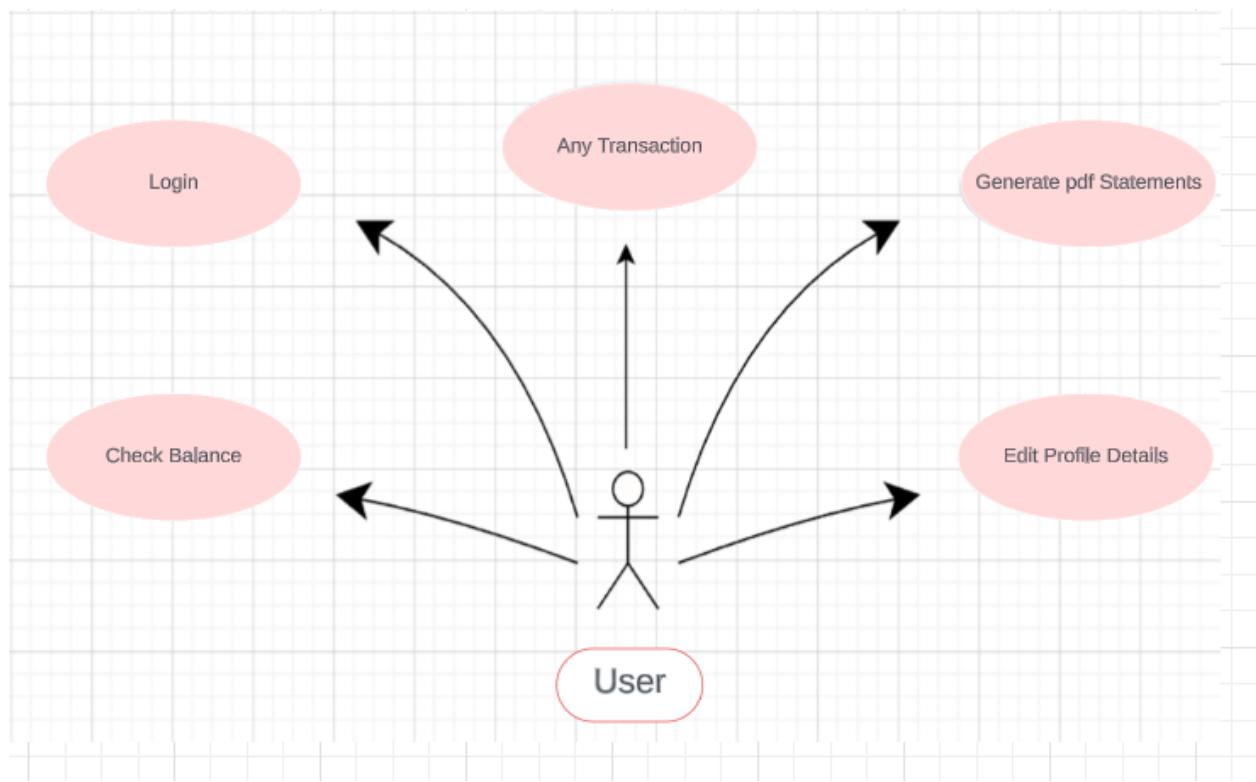


Figure 2: User Activity Diagram

SYSTEM ANALYSIS

System analysis is the process of gathering and interpreting facts, diagnosing problems, and using the information to recommend improvements on the system. System analysis is a problem-solving activity that requires intensive communication between the system users and system developers.

System analysis or study is an important phase of any system development process. The system is viewed as a whole, the inputs are identified, and the system is subjected to close study to identify the problem areas. The solutions are given as a proposal. The proposal is reviewed on user request and suitable changes are made. This loop ends as soon as the user is satisfied with the proposal.

2.1 EXISTING SYSTEM

The current system for payments is to visit the shop manually and produce the currency cash for of the price of the item.

- ✓ It is less user-friendly.
- ✓ User must go to shop and encash the products.
- ✓ It is difficult to count currency for large the required product.
- ✓ It is a time-consuming process
- ✓ Not in reach of distant users.

2.2 PROPOSED SYSTEM

The "CoinBank" digital wallet payment service radically transforms the existing shopping paradigm. Unlike the manual process of visiting physical stores, the project brings convenience and efficiency to users' fingertips.

2.3 SYSTEM REQUIREMENT SPECIFICATION

A Software Requirements Specification (SRS) document for a digital wallet system outlines the functional and non-functional requirements of the system, as well as its scope, architecture, user interfaces

2.3.1 SYSTEM OBJECTIVES

- To provide a Web application for online payments across globe.
- To provide an online payments web site for business and individual users.

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2.3.2 SYSTEM REQUIREMENTS

NON-FUNCTIONAL REQUIREMENTS

Modularity:

- CoinBank would be complex application due to its functionality expected.
- CoinBank would be composed using set of reusable modules.

Portability:

- CoinBank could be accessed from any personal device.
- CoinBank will provide portable user interface using standard web technologies while building portal.
- CoinBank could be deployed to any server Operating Environment.
- CoinBank could be deployed to any Cloud such as Microsoft Azure or Amazon Web Service(AWS) or GCP
- CoinBank could have been deployed to any other physical server or Virtualized server.

Security:

- CoinBank will implement Role based security to access content from Remote place.
- CoinBank will provide secure communication between payment gateway applications (SSL)
- CoinBank will expire session maintained for each user after 15 minutes.
- CoinBank will not keep any sensitive data on user's device.
- Users' information would be protected.
- All servers where CoinBank deployed would have been protected using firewall.

Safe:

- CoinBank will keep regular back up of data in incremental way.
- CoinBank will be protected against malicious attack with proper cybersecurity rules.
- CoinBank hosted servers would have been protected within restricted environment.

Reliability:

- CoinBank will always be available 99.999%
- CoinBank should have low downtime
- CoinBank server would keep their availability using failover server

Scalability:

- CoinBank will provide consistent user experience irrespective of number users grow on particular events such as festival season as transactions increase. (Load balancing).

Compatibility:

- CoinBank could be installed on Windows server, Linux server.
- CoinBank will provide chrome browser compatible user interface.

FUNCTIONAL REQUIREMENTS**USER****➤ USER LOGIN****Description of feature**

This feature used by the user to login into system. A user must login with his username and password to the system after registration. If they are invalid, the user not allowed to enter the system.

Functional Requirement

- Username and password will be provided after user registration is confirmed.
- Password should be hidden from others while typing it in the field.

➤ REGISTER NEW USER**Description of feature**

A new user will have to register in the system by providing essential details in order to transact in the system. The admin must approve new transaction.

Functional Requirement

- System must be able to verify and validate information.
- The system must encrypt the password of the customer to provide security.

Functional Requirement

- ✓ System must ensure that, only a registered customer can carry transactions.
- ✓ Admin account should be secured so that only owner can access that account
- ✓ Users can create accounts with valid email addresses and passwords.
- ✓ User authentication will be required for accessing wallet functionalities.
- ✓ Users can view their wallet balances.
- ✓ Users must be able to add funds to their digital wallets using various payment methods such as credit/debit cards, net banking, and UPI.
- ✓ The system should provide real-time updates of wallet balances after successful top-up transactions.
- ✓ Users should be able to send money to other users within the platform using recipient's wallet ID or Bank Account ID.
- ✓ Users should be able to withdraw funds from their digital wallets to their linked bank accounts.
- ✓ Withdrawal requests should be processed securely and efficiently.
- ✓ Maintain a detailed transaction history for each user, including top-ups, transfers, withdrawals, and purchases.
- ✓ Users should be able to view their transaction history within the application.
- ✓ PDF statements download facility.
- ✓ Admins should have access to a secure panel for managing user accounts, verifying sellers, and monitoring transactions.
- ✓ Design the system architecture to handle a high volume of concurrent transactions without performance degradation.
- ✓ Provide a platform for users to contact customer support for assistance with transactions, account issues, and inquiries.

ADMIN

➤ MANAGE USER

Description of features

The administrator can add user, delete user, view user and block user.

➤ VIEW TRANSACTION

Description of features

The administrator can view transactions and details of customers.

➤ Functional Requirements:

- The system must identify the login of the admin.
- Admin account should be secured so that only owner of the shop can access that account.

SYSTEM DESIGN

System design is the solution for the creation of a new system. This phase focuses on the detailed implementation of the feasible system. Its emphasis on translating design specifications to performance specification. System design has two phases of development.

- Logical Design
- Physical Design

During logical design phase the analyst describes inputs (sources), outputs(destinations), databases (data stores) and procedures (data flows) all in a format that meets the user requirements. The analyst also specifies the needs of the user at a level that virtually determines the information flow in and out of the system and the data resources. Here the logical design is done through data flow diagrams and database design. The physical design is followed by physical design or coding. Physical design produces the working system by defining the design specifications, which specify exactly what the candidate system must do. The programmers write the necessary programs that accept input from the user, perform necessary processing on accepted data and produce the required report on a hard copy or display it on the screen.

3.1 INPUT AND OUTPUT DESIGN

3.1.1 INPUT DESIGN:

Input design is the link that ties the information system into the world of its users. The input design involves determining the inputs, validating the data, minimizing the data entry and provides a multi-user facility. Inaccurate inputs are the most common cause of errors in data processing. Errors entered by the data entry operators can be controlled by input design. The user-originated inputs are converted to a computer-based format in the input design. Input data are collected and organized into groups of similar data. Once identified, the appropriate input media are selected for processing. All the input data are validated and if any data violates any conditions, the user is warned by a message. If the data satisfies all the conditions, it is transferred to the appropriate tables in the database. In this project the student details are to be entered at the time of registration. A page is designed for this purpose which is user friendly and easy to use. The design is done such that users get appropriate messages when exceptions occur.

3.1.2 OUTPUT DESIGN:

Computer output is the most important and direct source of information to the user. Output design is a very important phase since the output needs to be in an efficient manner. Efficient and intelligible output design improves the system relationship with the user and helps in decision making. Allowing the user to view the sample screen is important because the user is the ultimate judge of the quality of output. The output module of this system is the selected notifications.

DATABASE DESIGN

3.2 DATABASE

Databases are the storehouses of data used in the software systems. The data is stored in tables inside the database. Several tables are created for the manipulation of the data for the system. Two essential settings for a database are -

- Primary key - the field that is unique for all the record occurrences
- Foreign key - the field used to set relation between tables

Normalization is a technique to avoid redundancy in the tables.

3.3 SYSTEM TOOLS

The various system tools that have been used in developing both the front end and the back end of the project are being discussed in this chapter.

3.3.1 FRONT END:

React is a library (version 17.0) which is developed by Facebook and is utilized to implement the frontend. React (also known as React.js or ReactJS) is a free and open-source front-end JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single page or mobile applications. However, React is only concerned with state management and rendering that state to the DOM, so creating React applications usually requires the use of additional libraries for routing, as well as certain client-side functionality.

3.3.2 BACKEND:

The back end is implemented using MySQL(8.0) which is used to design databases.

MySQL:

MySQL is the world's second most widely used open-source relational database management system (RDBMS). The SQL phrase stands for Structured Query Language.

Spring-Boot(v 3.1.3):

This is used to connect MySQL and fetch data from database and store the data in database. The Spring Framework is an application framework and inversion of control container for the Java platform. The framework's core features can be used by any Java application, but there are extensions for building web applications on top of the Java EE (Enterprise Edition) platform. Although the framework does not impose any specific programming model, it has become popular in the Java community as an addition to the Enterprise JavaBeans (EJB) model. The Spring Framework is Open-source Framework.

Customer Data Flow Diagram

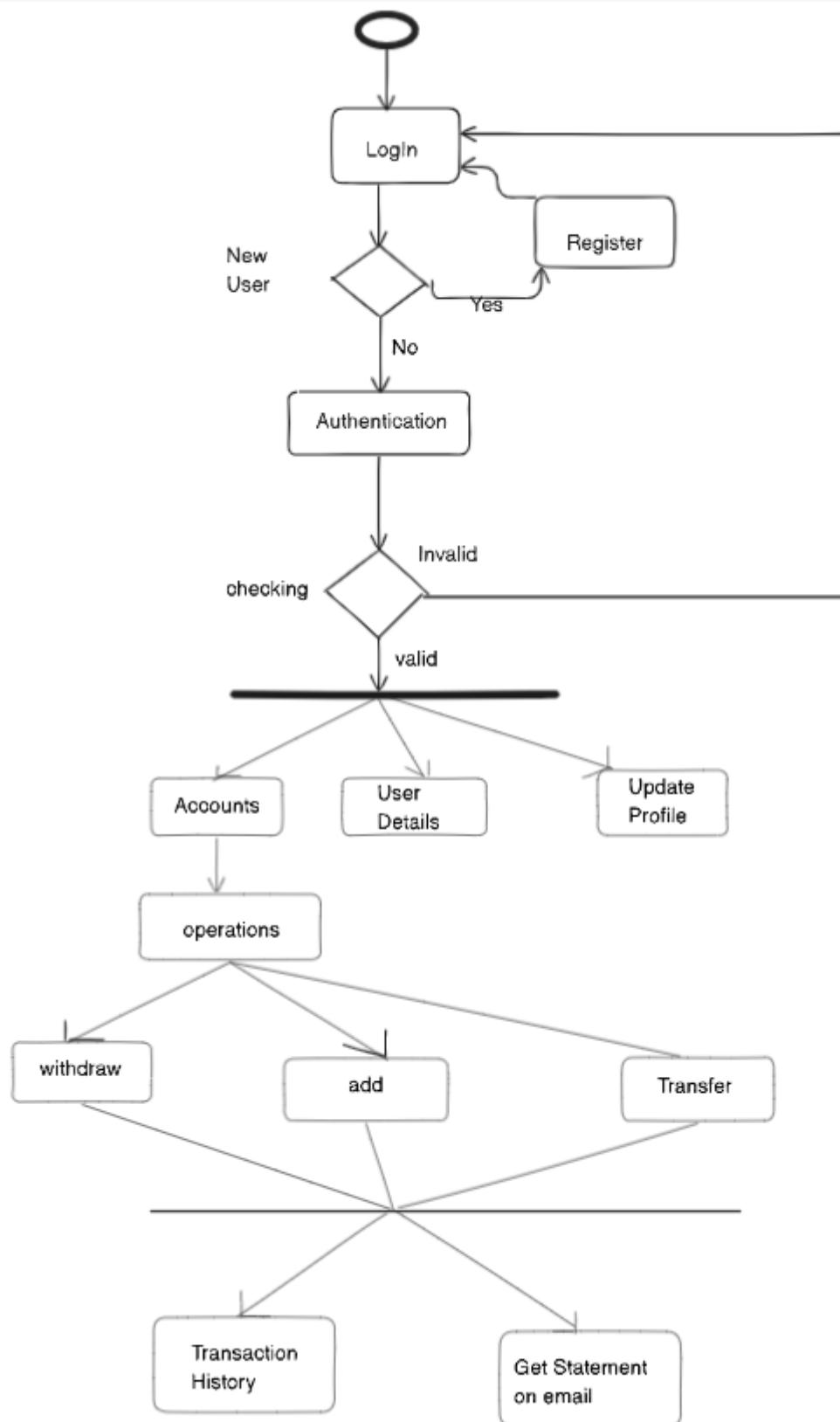


Figure 5: Customer Data Flow Diagram

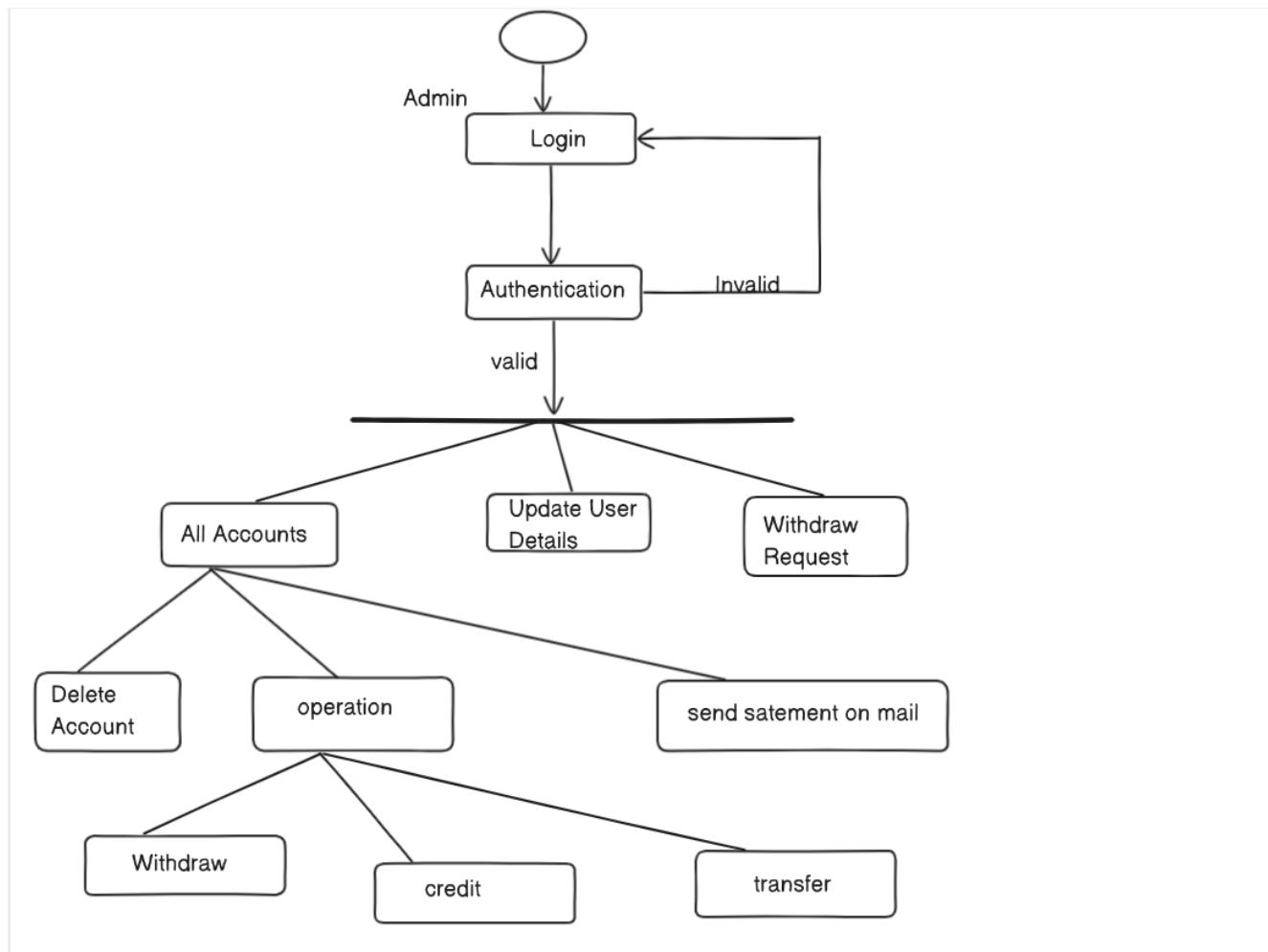
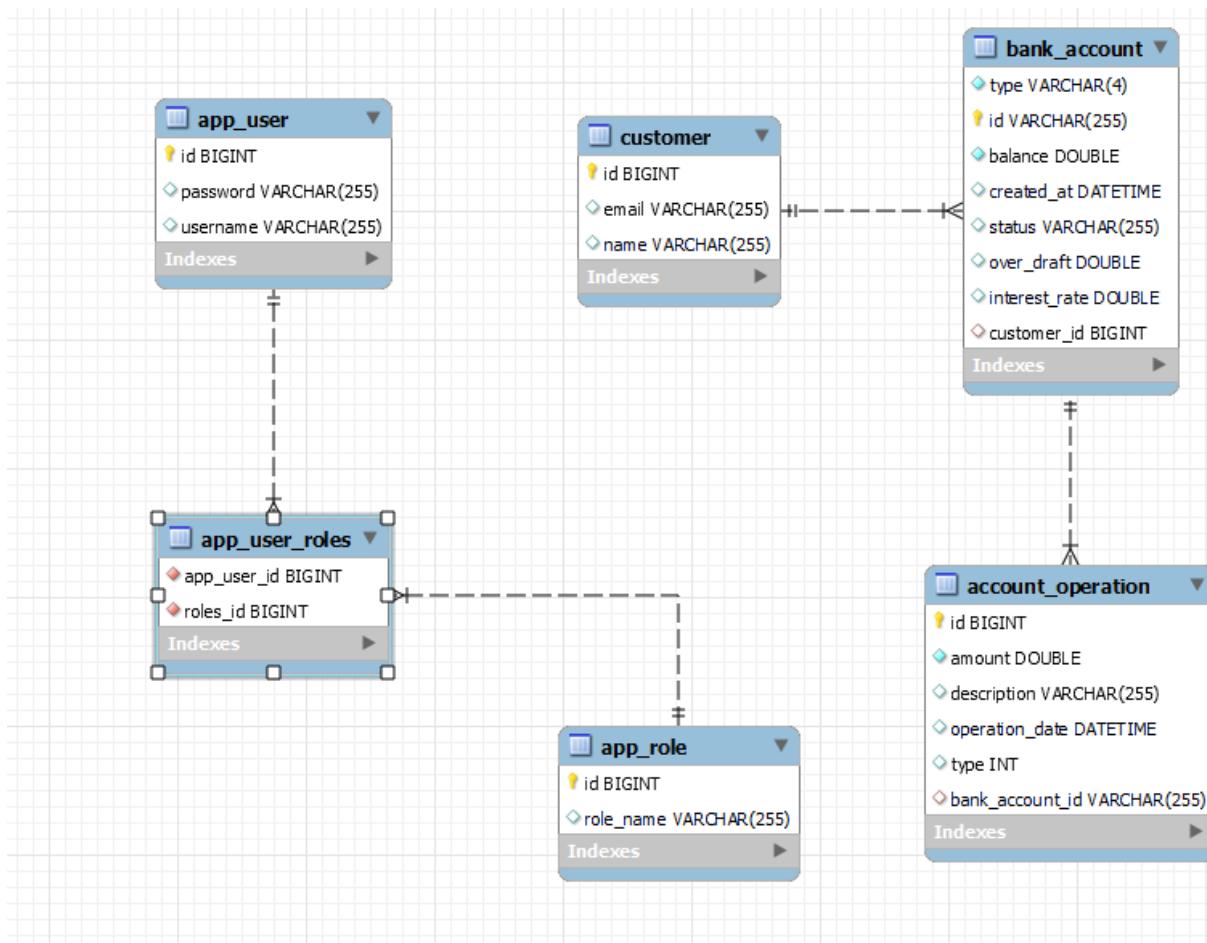


Figure 5.1: Admin Data Flow Diagram

Class Diagram



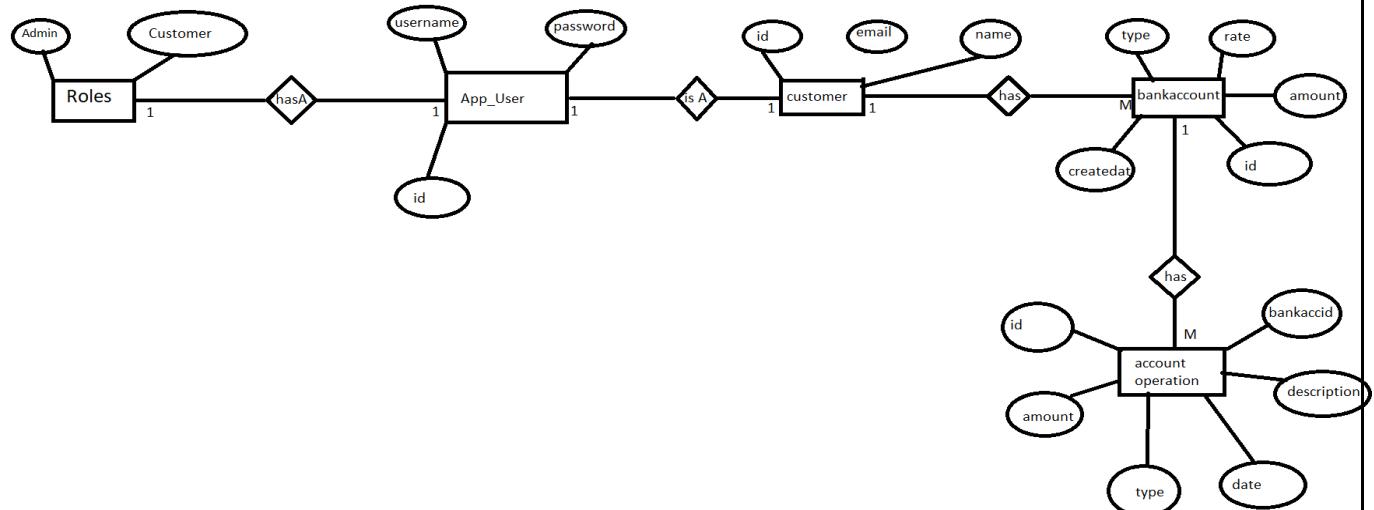
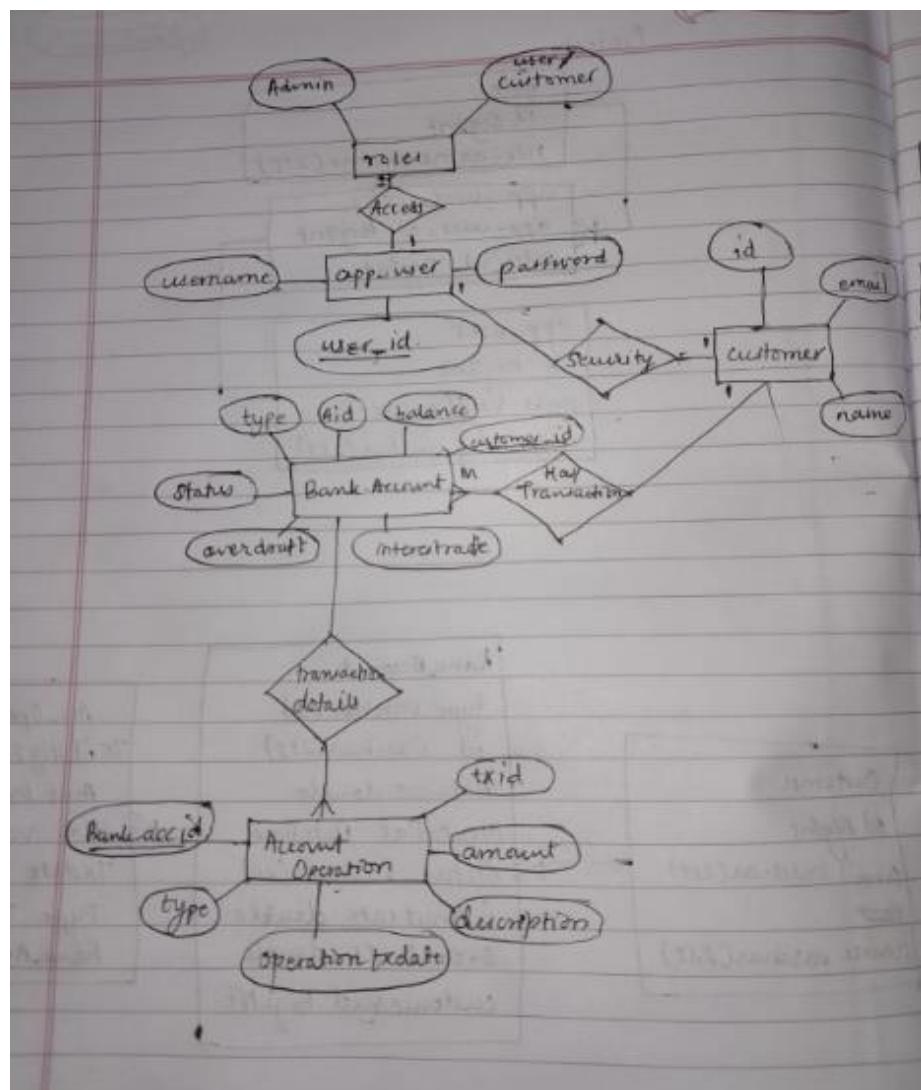
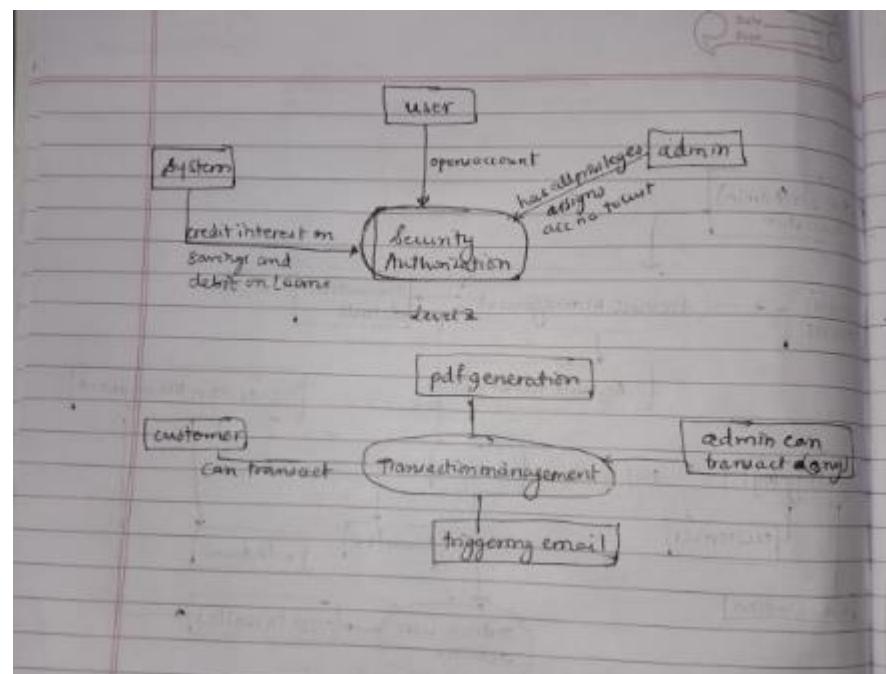


Figure 6: E-R Diagram

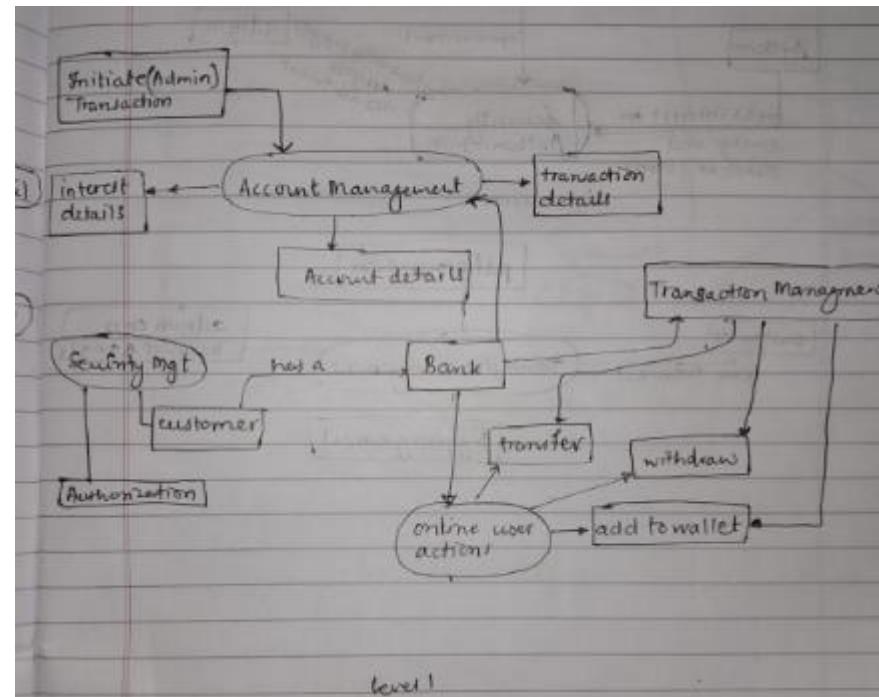


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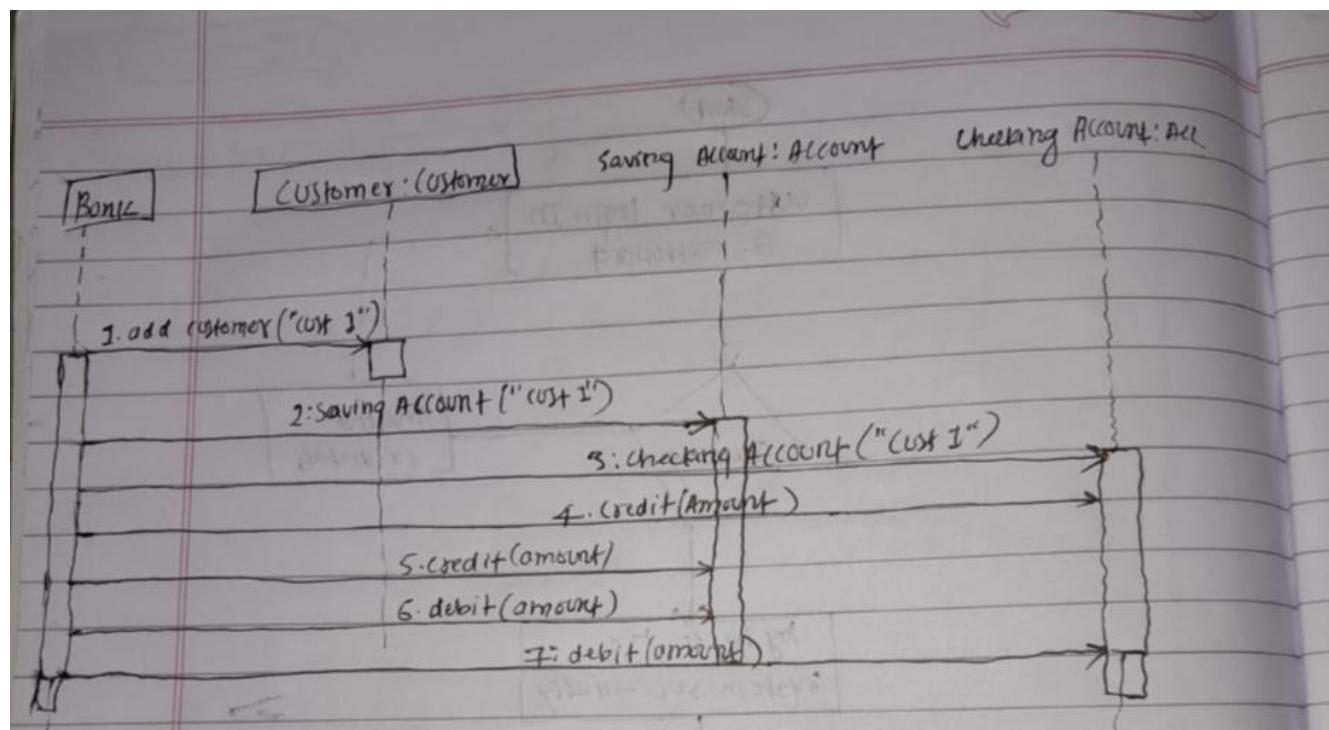
Figure 6: E-R Diagram



Level 0 DFD



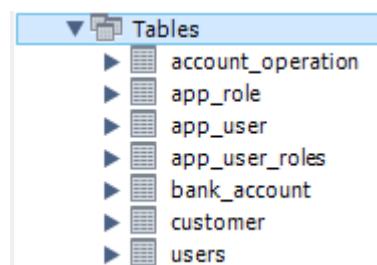
Level 1



Sequence Diagram

Table Structure

Tables :



BankAccount :

	Field	Type	Null	Key	Default	Extra
▶	type	varchar(4)	NO		NULL	
	id	varchar(255)	NO	PRI	NULL	
	balance	double	NO		NULL	
	created_at	datetime	YES		NULL	
	status	varchar(255)	YES		NULL	
	over_draft	double	YES		NULL	
	interest_rate	double	YES		NULL	
	customer_id	bigint	YES	MUL	NULL	

Account Operation:

	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	amount	double	NO		NULL	
	description	varchar(255)	YES		NULL	
	operation_date	datetime	YES		NULL	
	type	int	YES		NULL	
	bank_account_id	varchar(255)	YES	MUL	NULL	

Customer :

	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	email	varchar(255)	YES		NULL	
	name	varchar(255)	YES		NULL	

AppRole :

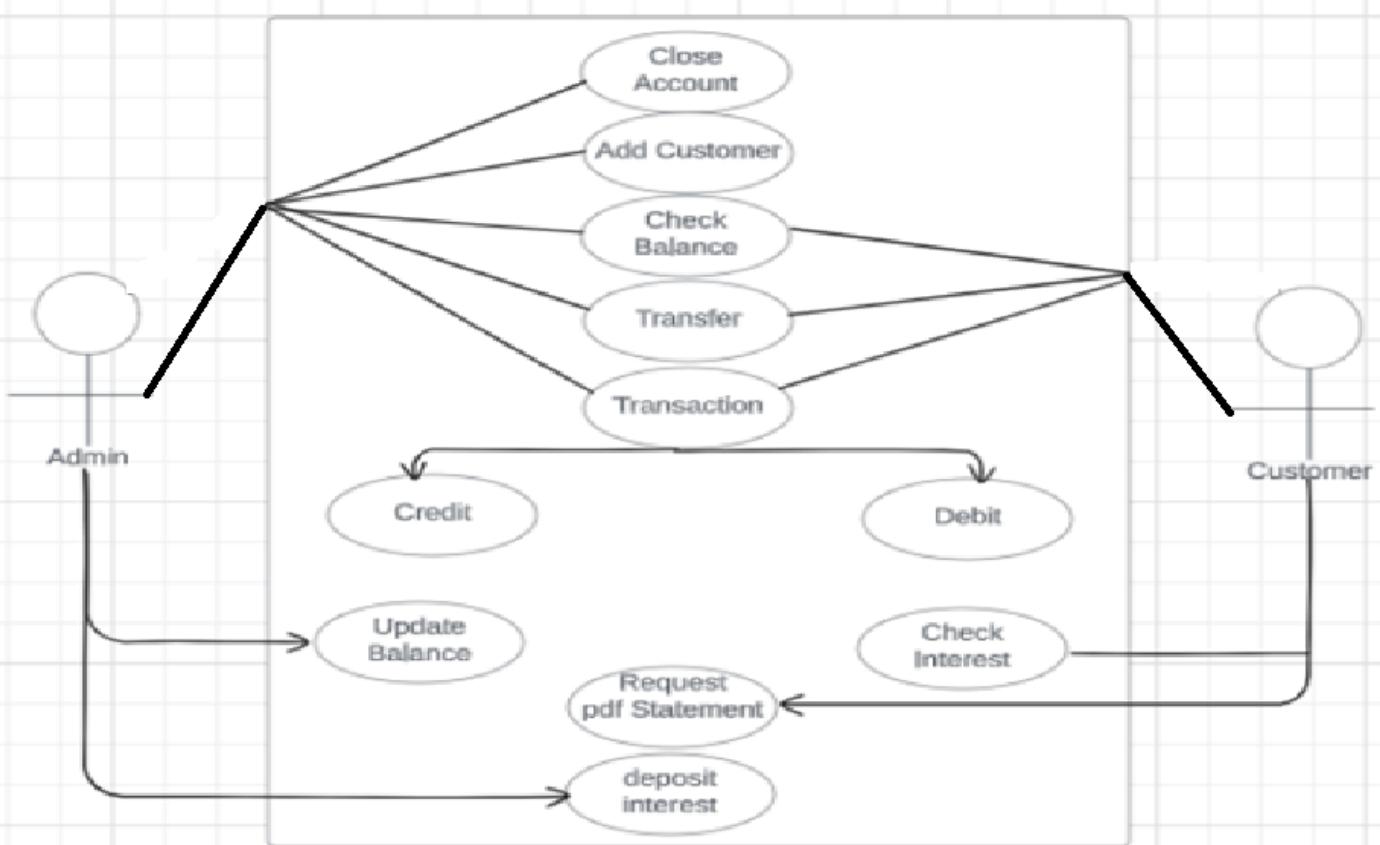
	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	role_name	varchar(255)	YES		NULL	

AppUser :

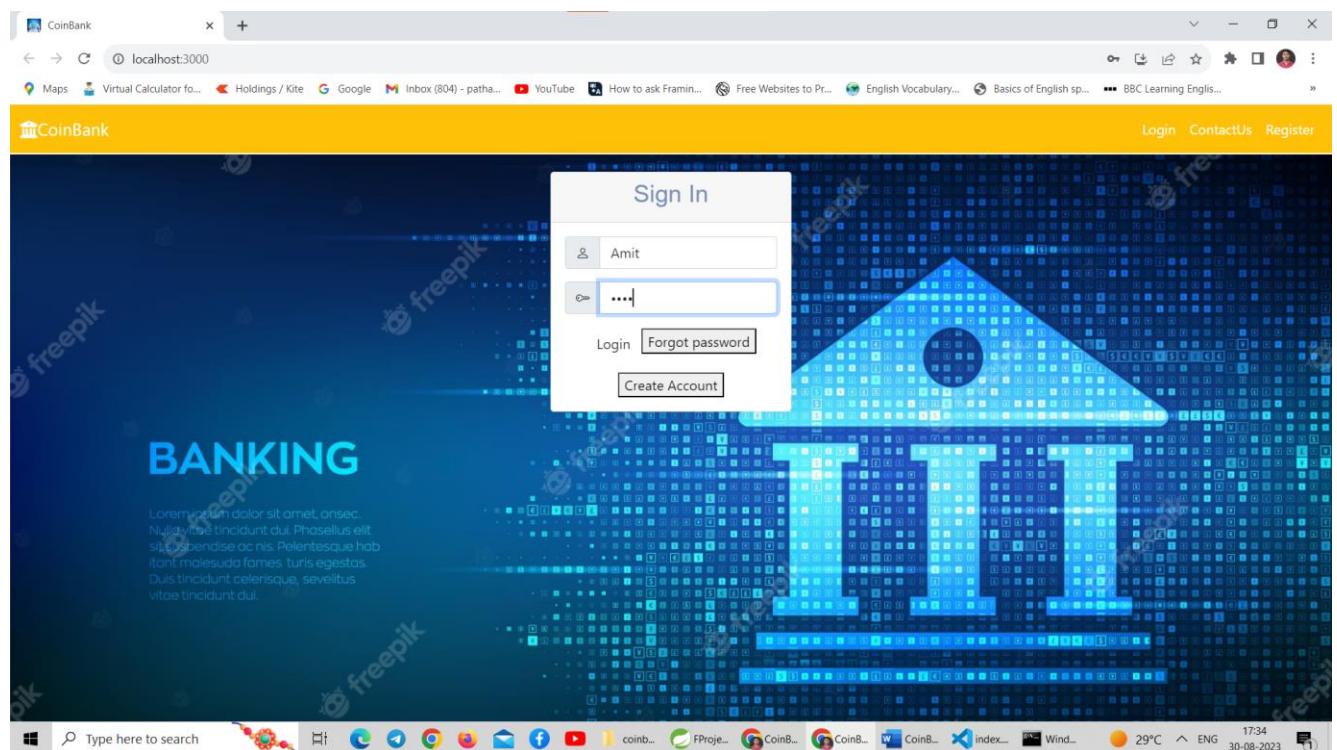
	Field	Type	Null	Key	Default	Extra
▶	id	bigint	NO	PRI	NULL	auto_increment
	password	varchar(255)	YES		NULL	
	username	varchar(255)	YES		NULL	

AppUserRoles :

	Field	Type	Null	Key	Default	Extra
▶	app_user_id	bigint	NO	MUL	NULL	
	roles_id	bigint	NO	MUL	NULL	

Use Case Diagram:

PROJECT DIAGRAMS



CoinBank

localhost:3000/customer-accounts/2

CoinBank Logout ContactUs

Name : Shubham

Email : Shubham@gmail.com

Update Profile

Accounts

Account Id	Balance	Type	Actions
2023680777	0 Rs	Current	View All Operations
202395269	0 Rs	Saving	View All Operations

localhost:3000/contactUs

CoinBank

localhost:3000/update-customer/2

CoinBank Logout ContactUs

Update Customer Profile

Name

Email

Save

The screenshot shows a web browser window titled "CoinBank" with the URL "localhost:3000/contactUs". The page has a yellow header bar with the "CoinBank" logo, "Logout", and "ContactUs" links. Below the header, the title "Contact Us" is displayed, followed by email and phone contact information.

Email: coinbank.iacs@gmail.com
Phone: +91 9420750460
Phone: +91 9834530751

The screenshot shows a web browser window titled "CoinBank" with the URL "localhost:3000/one-account/2023680777". The page has a yellow header bar with the "CoinBank" logo, "Logout", and "ContactUs" links. It features a "Go To Wallet" button and two buttons for "FD Section" and "Loan Section".

Account ID: 2023680777

Balance: 0.00 Rs

Transaction Type

WithDraw Add To Wallet Transfer

Amount

1000

Description

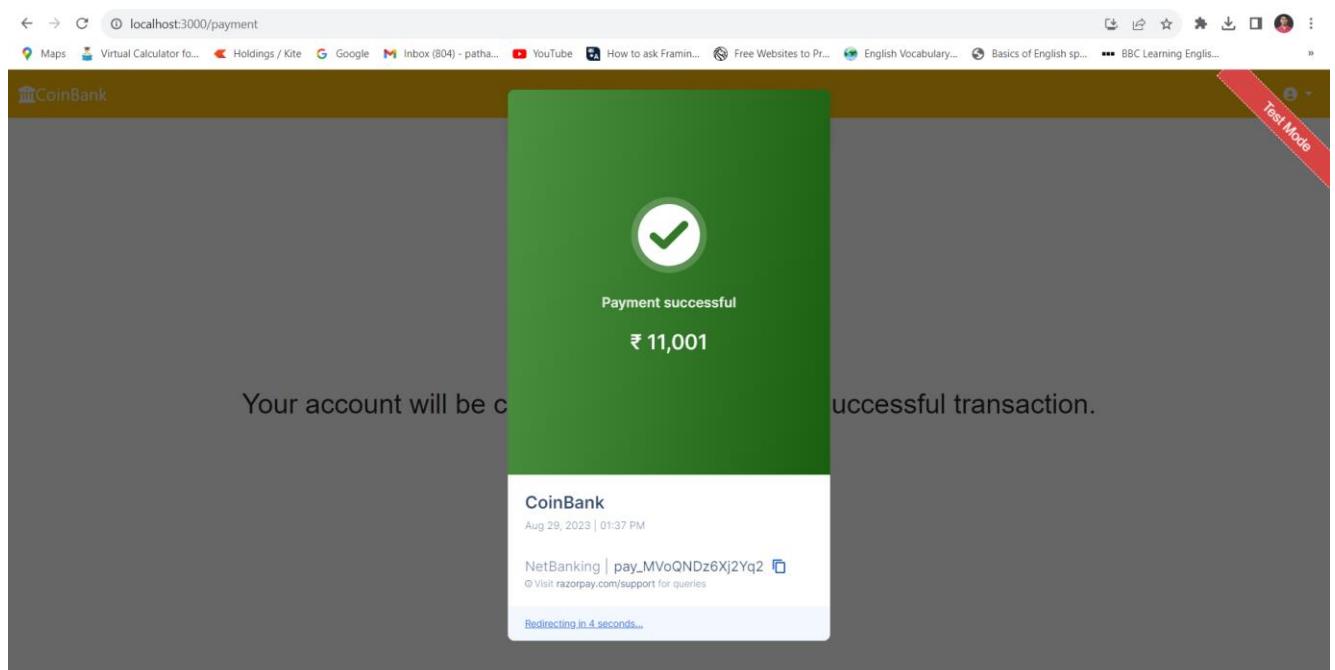
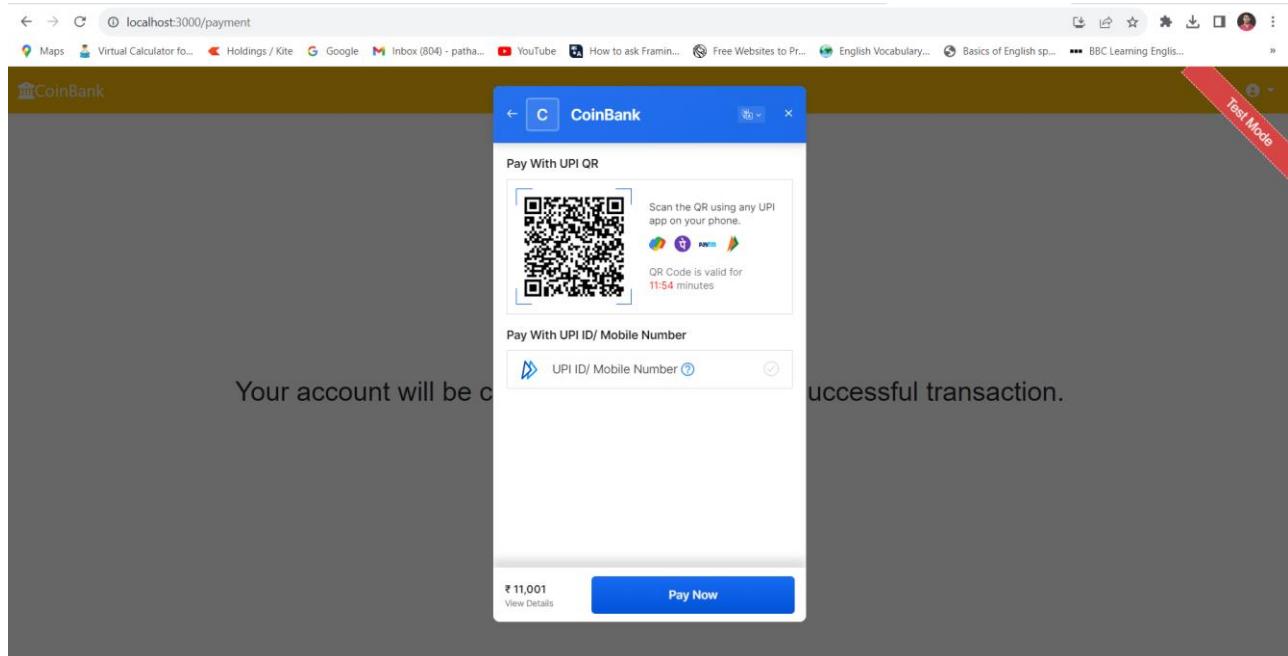
wallet

Submit

Transaction History

[Send Statement by Email](#)

Transaction Id	Date	Type	Amount	Description



The screenshot shows a web browser window for 'CoinBank' at 'localhost:3000/customers'. The title bar says 'Customers'. A yellow header bar contains the 'CoinBank' logo, 'Login', 'ContactUs', and 'Register' links. Below the header is a search bar with a placeholder 'Keyword:' and a button labeled 'Search'. Inside the search bar, the text 'withdraw requests' is typed. The main content area displays a table with columns 'Name', 'Email', and 'Actions'. Three rows are listed: Amit (Amit@gmail.com), Shubham (Shubham@gmail.com), and Mandar (Mandar@gmail.com). Each row has three buttons in the 'Actions' column: 'Delete' (red), 'Update' (yellow), and 'View Accounts' (green).

Name	Email	Actions
Amit	Amit@gmail.com	<button>Delete</button> <button>Update</button> <button>View Accounts</button>
Shubham	Shubham@gmail.com	<button>Delete</button> <button>Update</button> <button>View Accounts</button>
Mandar	Mandar@gmail.com	<button>Delete</button> <button>Update</button> <button>View Accounts</button>

The screenshot shows a yellow header bar with the 'CoinBank' logo, 'Login', 'ContactUs', and 'Register' links. Below the header is a table with columns 'Accountid', 'Amount', 'Description', and 'UpId'. Two rows are listed: one with Accountid 2023262865, Amount 100, Description 'withdraw', and UpId null; and another with Accountid 2023262865, Amount 500, Description 'CA', and UpId 'transfer'.

Accountid	Amount	Description	UpId
2023262865	100	withdraw	
2023262865	500	CA	transfer

The screenshot shows a web browser window for 'CoinBank' at 'localhost:3000/register'. The title bar says 'localhost:3000/register'. The page has a yellow header with the 'CoinBank' logo and navigation links for 'Login', 'ContactUs', and 'Register'. The main content area is titled 'Register' with a sub-section 'OTP'. It displays two input fields: 'asad' in the 'Name' field and 'ad@gmail.com' in the 'Email' field. A blue 'Submit' button is below the fields. At the bottom, there's a link 'Already have an account? [Sign in](#)'.

The screenshot shows a web browser window for 'CoinBank' at 'localhost:3000/verifyOTP'. The title bar says 'localhost:3000/verifyOTP'. The page has a yellow header with the 'CoinBank' logo and navigation links for 'Login', 'ContactUs', and 'Register'. The main content area is titled 'OTP' with a sub-section 'Verification Code'. It displays a message: 'We have sent a verification code to your mobile number'. Below this is a horizontal line. At the top of the line is a blue 'Verify Me' button, and at the bottom is a purple button with the text 'Did'nt Recieve OTP'.

4 of 9,220 < >

Authentication OTP Inbox x

 coinbank.iacs...@gmail.com
to me ▾

Your OTP for Authentication:2997

 coinbank.iacs...@gmail.com
to me ▾

Your OTP for Authentication:2175

Reply Forward

ACCOUNT CREATION Inbox x

 coinbank.iacs...@gmail.com
to me ▾

congratulation! Your account has been created.
Account Details:
Name:fgfg
Account Id:4
Password:fgfg

Reply Forward

← → ⌂ mail.google.com/mail/u/0/#inbox

Maps Virtual Calculator fo... Holdings / Kite Google Inbox (804) - patha... YouTube How to ask Framin... Free Websites to Pr... English Vocabulary... Basics of English sp... BBC Learning Engl... »

 MyStatement.pdf Open with ...

Compose ... Primary

Inbox 7,543 ... Starred ... Snoozed ... Drafts 48 ... More ... Labels ... [imap]/Trash 1 ... HDFO ... Dhan ... HDFO ... HDFO ...

COINBANK

IACSD,Akhurdi,Pune-413511

Customer Name: toufik Account Number: 2023525089 Current Balance: 90.0

STATEMENT OF ACCOUNT

Transaction ID	Date	Transaction Type	Transaction Amount
1	2023-08-27 00:27:48.0	CREDIT	100.0
2	2023-08-27 00:28:01.0	DEBIT	10.0

Page 1 / 1 - +

1-60 of 9,221 < >

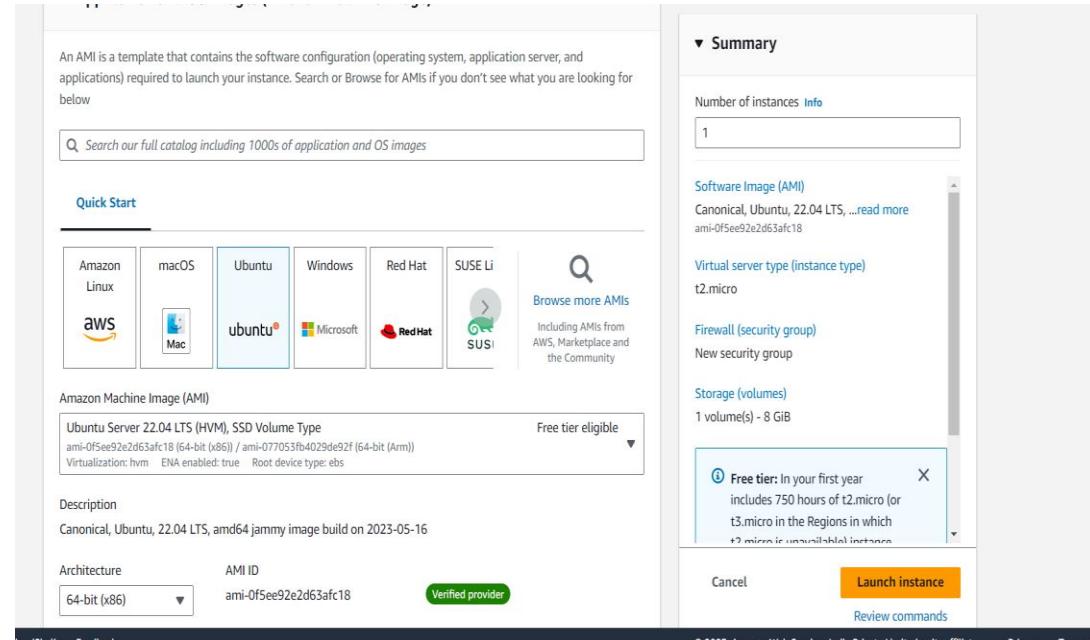
...com Date: Su... 1:40 PM
for your Microsoft 365 Files ...
with your family! Book Now ... 11:00 AM
Join Community on 13/05/20... 4:07 AM
Account Id:4 Password:fgfg 11:00 AM
PATRAN, Client ID: LF3664 ... 12:48 AM
Email not display... Aug 28
GreenHeader": Import Hea... Aug 27
2023 - View your SmartSta... Aug 26
On this Raksha Bandhan w... Aug 26

Deployment:-

We deployed CoinBank Webapp at AWS instance of EC2, Amazon S3 and Node to deploy front end build using Serve

1. Deployment Backend

1. Creating EC2 instance on AWS



2. Creation of private key(.ppk) to connect local machine with remote machine using putty software

Create key pair

Key pair name
Key pairs allow you to connect to your instance securely.

backend5

The name can include upto 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

RSA
RSA encrypted private and public key pair

ED25519
ED25519 encrypted private and public key pair

Private key file format

.pem
For use with OpenSSH

.ppk
For use with PuTTY

⚠️ When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. [Learn more ↗](#)

Cancel **Create key pair**

3. Creating of bucket on Amazon S3 to upload Spring Boot application jar file.

The screenshot shows the AWS S3 console homepage. On the left, there's a sidebar with links like Buckets, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, IAM Access Analyzer for S3, Block Public Access settings, Storage Lens, Dashboards, AWS Organizations settings, Feature spotlight (with 7 items), and AWS Marketplace for S3. The main content area has a dark header with the text "Amazon S3" and "Storage". Below it is a large banner with the heading "Amazon S3" and the subtext "Store and retrieve any amount of data from anywhere". It also states that "Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance." To the right of the banner is a "Create a bucket" button. Further down, there's a "How it works" section with a video thumbnail titled "Introduction to Amazon S3" and a "Copy link" button. On the far right, there's a "Pricing" section with information about no minimum fees and a link to the AWS Simple Monthly Calculator. At the bottom of the page, there are links for CloudShell, Feedback, and various AWS terms like Privacy, Terms, and Cookie preferences.

4. Coinbankback bucket created on Amazon S3

The screenshot shows the AWS S3 Buckets list page. At the top, there's a breadcrumb navigation showing "Amazon S3 > Buckets". Below it is an "Account snapshot" section with a "View Storage Lens dashboard" button. The main area is titled "Buckets (1) [Info](#)". A note says "Buckets are containers for data stored in S3. [Learn more](#)". There are buttons for "Create bucket", "Copy ARN", "Empty", and "Delete". A search bar at the top says "Find buckets by name". A table lists one bucket: "Name" (coinbankback), "AWS Region" (Asia Pacific (Mumbai) ap-south-1), "Access" (Objects can be public), and "Creation date" (September 29, 2023, 22:06:52 (UTC+05:30)).

5. Upload of jar file on Amazon S3

Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.

Files and folders (1 Total, 52.3 MB)

All files and folders in this table will be uploaded.

<input type="checkbox"/>	Name	Folder	Type	Size
<input type="checkbox"/>	digital banking-1.0.0...	-	-	52.3 MB

Destination

Destination
<s3://coinbankback>

► **Destination details**
Bucket settings that impact new objects stored in the specified destination.

► **Permissions**
Grant public access and access to other AWS accounts.

► **Properties**
Specify storage class, encryption settings, tags, and more.

Cancel **Upload**

⌚ **Upload succeeded**
View details below.

⌚ The information below will no longer be available after you navigate away from this page.

Summary

Destination	Succeeded	Failed
s3://coinbankback	⌚ 1 file, 52.3 MB (100.00%)	⌚ 0 files, 0 B (0%)

Files and folders (1 Total, 52.3 MB)

<input type="checkbox"/>	Name	Folder	Type	Size	Status	Error
<input type="checkbox"/>	digital banking-1.0.0.jar	-	-	52.3 MB	⌚ Succeeded	-

6. Connect to linux command line using ec2 instance connect

Connect to instance [Info](#)

Connect to your instance i-02ea1941487b8dfeb (CoinBankBackend) using any of these options

[EC2 Instance Connect](#) | [Session Manager](#) | [SSH client](#) | [EC2 serial console](#)

Instance ID
[i-02ea1941487b8dfeb](#) (CoinBankBackend)

Connection Type

Connect using EC2 Instance Connect
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

Connect using EC2 Instance Connect Endpoint
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address
[13.127.40.235](#)

User name

Enter the user name defined in the AMI used to launch the instance. If you didn't define a custom user name, use the default user name, ubuntu.

ubuntu

Note: In most cases, the default user name, ubuntu, is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

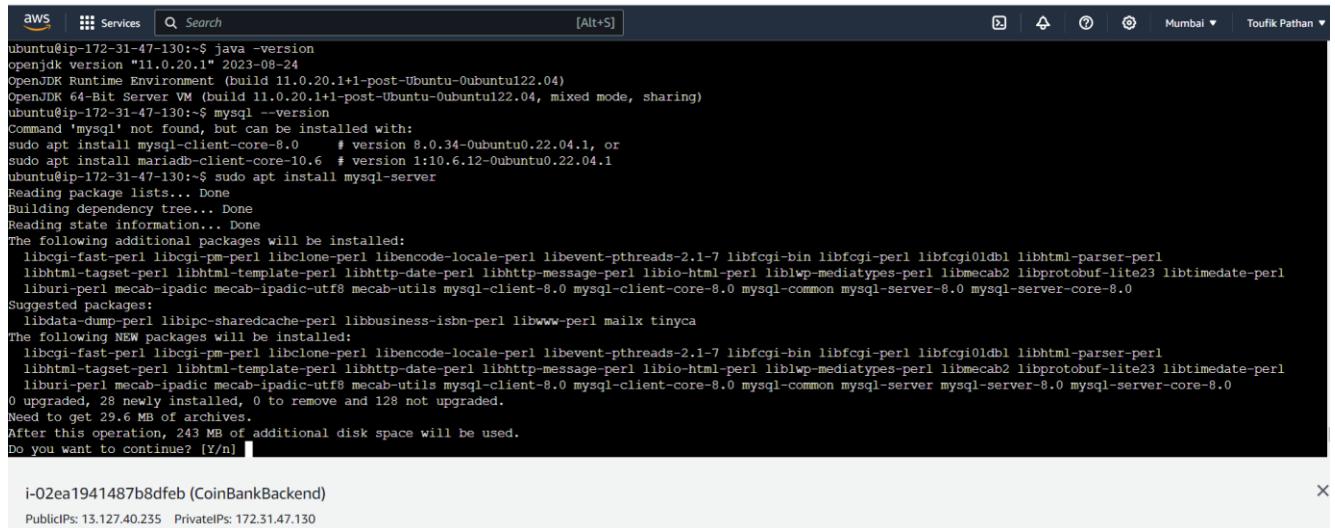
[Cancel](#) [Connect](#)

7. Checking java on ubuntu and java-11 installation

aws Services Search [Alt+S] Mumbai Toufik Pathan

```
buntu@ip-172-31-47-130:~$ java -version
command 'java' not found, but can be installed with:
udo apt install openjdk-11-jre-headless # version 11.0.20.1+1-Ubuntu1~22.04, or
udo apt install default-jre # version 2:1.11-72build2
udo apt install openjdk-17-jre-headless # version 17.0.8.1+1-Ubuntu1~22.04
udo apt install openjdk-18-jre-headless # version 18.0.2+9-2~22.04
udo apt install openjdk-19-jre-headless # version 19.0.2+7-Ubuntu3~22.04
udo apt install openjdk-8-jre-headless # version 8u382-ga-1~22.04.1
buntu@ip-172-31-47-130:~$ sudo apt install openjdk-11-jdk
eadring package lists... Done
uilding dependency tree... Done
eadring state information... Done
he following additional packages will be installed:
alsa-topology-conf alsamixer-ucm-conf at-spi2-core ca-certificates-java dconf-gsettings-backend fontconfig-service fonts-dejavu-core fonts-dejavu-extra
gsettings-desktop-schemas java-common libasound2 libasound2-data libatk+bridge2.0-0 libatk+wrapper-java libatk+wrapper-jni libatk1.0-0 libatk1.0-data libatspi2.0-0
libavahi-client3 libavahi-common-data libavahi-common3 libcurl2 libdconf1 libdrm-amdgpu libdrm-intel libdrm-nouveau2 libdrm-radeon1 libfontconfig1 libfontenc1 libgbif7
libgl1 libgl1-amber-dri libgl1-mesa-dri libglapi-mesa libglvnd0 libglx-mesa0 libglx0 libgraphite2-3 libharfbuzz0b libice-dev libice6 libjpeg-turbo8 libjpeg8 liblcms2-2
liblwm5 libpciaccess0 libpcsc-lite1 libpthread-stubs0-dev libseensors-config libseensors5 libshm-dev libsm6 libxi11-6 libxi11-dev libxi11-xcb1 libxau-dev libxaw7
libxcb-dri2-0 libxcb-dri3-0 libxcb-glx0 libxcb-present0 libxcb-randr0 libxcb-shape0 libxcb-shm0 libxcb-sync1 libxcb-xfixes0 libxcb-composite1 libxdmcp-dev
libxf86x3 libxrt2 libx16 libxinerama1 libxxbf file libxm6 libxpm4 libxrandr2 libxrender1 libxshmfence1 libxt-dev libxt6 libxtst libxv1 libxf86dg1 libxf86vml
openjdk-11-jdk-headless openjdk-11-jre openjdk-11-jre-headless session-migration x11-common x11-utils xproto-dev xorg-sgml-doctools xtrans-dev
uggested packages:
default-jre libasound2-plugins alsamixer cups-common libice-doc liblcm2s-utils pcosd lm-sensors libsm-doc libxcb-doc libxt-doc openjdk-11-demo
openjdk-11-source visualvm libnss-mdns fonts-ipafont-gothic fonts-ipafont-mincho fonts-wqy-microhei1 fonts-wqy-zenhei fonts-indic mesa-utils
he following NEW packages will be installed:
alsa-topology-conf alsamixer-ucm-conf at-spi2-core ca-certificates-java dconf-gsettings-backend fontconfig-service fonts-dejavu-core fonts-dejavu-extra
```

8. Mysql installation and configuration in linux(ubuntu) on Ec2

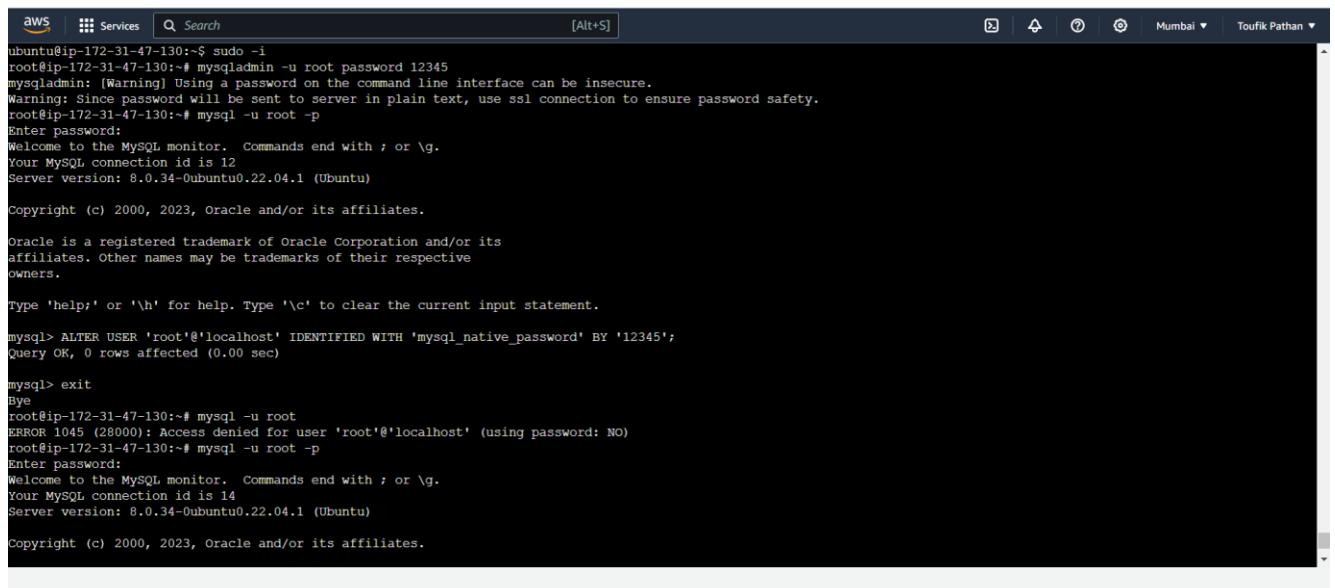


```

aws Services Search [Alt+S]
ubuntu@ip-172-31-47-130:~$ java -version
openjdk version "11.0.20.1" 2023-08-24
OpenJDK Runtime Environment (build 11.0.20.1+1-post-Ubuntu-0ubuntu122.04)
OpenJDK 64-Bit Server VM (build 11.0.20.1+1-post-Ubuntu-0ubuntu122.04, mixed mode, sharing)
ubuntu@ip-172-31-47-130:~$ mysql --version
Command 'mysql' not found, but can be installed with:
sudo apt install mysql-client-core-8.0      # version 8.0.34-0ubuntu0.22.04.1, or
sudo apt install mariadb-client-core-10.6   # version 1:10.6.12-0ubuntu0.22.04.1
ubuntu@ip-172-31-47-130:~$ sudo apt install mysql-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libfcgi-fast-perl libfcgi-pm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi01db libhtml-parser-perl
  libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimestame-perl
  liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0 mysql-client-core-8.0 mysql-common mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
  libdata-dump-perl libipc-sharedcache-perl libbusiness-isbn-perl libwww-perl mailx tinyca
The following NEW packages will be installed:
  libfcgi-fast-perl libfcgi-pm-perl libclone-perl libencode-locale-perl libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi01db libhtml-parser-perl
  libhtml-tagset-perl libhtml-template-perl libhttp-date-perl libhttp-message-perl libio-html-perl liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimestame-perl
  liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0 mysql-client-core-8.0 mysql-common mysql-server mysql-server-8.0 mysql-server-core-8.0
0 upgraded, 28 newly installed, 0 to remove and 128 not upgraded.
Need to get 29.6 MB of archives.
After this operation, 243 MB of additional disk space will be used.
Do you want to continue? [Y/n] [REDACTED]

i-02ea1941487b8dfeb (CoinBankBackend)
PublicIPs: 13.127.40.235 PrivateIPs: 172.31.47.130

```



```

aws Services Search [Alt+S]
ubuntu@ip-172-31-47-130:~$ sudo -i
root@ip-172-31-47-130:~# mysqladmin -u root password 12345
mysqldadmin: [Warning] Using a password on the command line interface can be insecure.
Warning: Since password will be sent to server in plain text, use ssl connection to ensure password safety.
root@ip-172-31-47-130:~# mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 8.0.34-0ubuntu0.22.04.1 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> ALTER USER 'root'@'localhost' IDENTIFIED WITH 'mysql_native_password' BY '12345';
Query OK, 0 rows affected (0.00 sec)

mysql> exit
Bye
root@ip-172-31-47-130:~# mysql -u root
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: NO)
root@ip-172-31-47-130:~# mysql -u root -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 14
Server version: 8.0.34-0ubuntu0.22.04.1 (Ubuntu)

Copyright (c) 2000, 2023, Oracle and/or its affiliates.

```

9. Downloading jar file from Amazon S3 storage to EC2 instance

The screenshot shows the AWS S3 console with the object details for 'digital banking-1.0.0.jar'. The left sidebar includes 'Amazon S3' and 'Services' sections, and the top navigation bar has tabs for 'Properties', 'Permissions', and 'Versions'. The main content area is titled 'Object overview' and displays the following details:

Attribute	Value
Owner	1f6e9c6c40ef002e52668b015840eb7babf4f7562ca4ab526d6e0892c3c3df0
AWS Region	Asia Pacific (Mumbai) ap-south-1
Last modified	September 29, 2023, 22:17:47 (UTC+05:30)
Size	52.3 MB
Type	jar
Key	digital banking-1.0.0.jar
S3 URI	s3://coinbankback/digital.banking-1.0.0.jar
Amazon Resource Name (ARN)	arn:aws:s3:::coinbankback/digital.banking-1.0.0.jar
Entity tag (Etag)	70f9ec5a4474159a95a091814aa90209-4
Object URL	https://coinbankback.s3.ap-south-1.amazonaws.com/digital.banking-1.0.0.ja

```
aws Services Search [Alt+S] Mumbai Toufik Pathan
ubuntu@ip-172-31-47-130:~$ wget https://coinbankback.s3.ap-south-1.amazonaws.com/digital banking-1.0.0.jar
--2023-09-29 17:10:24-- https://coinbankback.s3.ap-south-1.amazonaws.com/digital banking-1.0.0.jar
Resolving coinbankback.s3.ap-south-1.amazonaws.com (coinbankback.s3.ap-south-1.amazonaws.com)... 52.219.158.154, 3.5.211.132, 3.5.213.105, ...
Connecting to coinbankback.s3.ap-south-1.amazonaws.com (coinbankback.s3.ap-south-1.amazonaws.com)|52.219.158.154|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 54876703 (52M) [binary/octet-stream]
Saving to: 'digital banking-1.0.0.jar'

digital banking-1.0.0.jar          100%[=====] 52.33M 49.5MB/s    in 1.1s

2023-09-29 17:10:25 (49.5 MB/s) - 'digital banking-1.0.0.jar' saved [54876703/54876703]

ubuntu@ip-172-31-47-130:~$ ls
digital banking-1.0.0.jar
ubuntu@ip-172-31-47-130:~$
```

10. Running jar file and starting the backend server

11. Setting incoming requests to backend server and allowing for all traffic(setting of inbound rules)

Security group rule ID	Type Info	Protocol Info	Port range Info	Source Info	Description - optional Info
sgr-064d0c8e021017aa9	SSH	TCP	22	Custom	0.0.0.0/0
-	HTTP	TCP	80	Anyw...	java
-	All traffic	All	All	Anyw...	java

Add rule

⚠️ Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel Preview changes Save rules

2. FrontEnd Development

1. Installation of Node and npm on linux machine

```
ubuntu@ip-172-31-42-250:~$ node -version
Command 'node' not found, but can be installed with:
sudo apt install nodejs
ubuntu@ip-172-31-42-250:~$ sudo apt install nodejs
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  javascript-common libc-ares2 libjs-highlight.js libnode72 nodejs-doc
Suggested packages:
  apache2 | lighttpd | httpd npm
The following NEW packages will be installed:
  javascript-common libc-ares2 libjs-highlight.js libnode72 nodejs nodejs-doc
0 upgraded, 6 newly installed, 0 to remove and 129 not upgraded.
Need to get 13.7 MB of archives.
After this operation, 53.9 MB of additional disk space will be used.
Do you want to continue? [Y/n] 

i-0be1b6e046c9945d0 (frontend)
Public IPs: 13.126.62.155 Private IPs: 172.31.42.250
```

```
aws Services Search [Alt+S] Mumbai Toufik Pathan
ubuntu@ip-172-31-42-250:~$ npm -version
Command "npm" not found, but can be installed with:
sudo apt install npm
ubuntu@ip-172-31-42-250:~$ sudo apt install npm
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
adwaita-icon-theme at-spi2-core build-essential bzip2 cpp cpp-11 dconf-gsettings-backend dconf-service dpkg-dev fakeroot fontconfig fontconfig-config fonts-dejavu-core
g++ g++-11 gcc gcc-11 gcc-11-base gcc-12-base gsettings-desktop-schemas gtk-update-icon-cache gyp hicolor-icon-theme humanity-icon-theme libalgorithm-diff-perl
libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan6 libatk-bridge2.0-0 libatk1.0-0 libatm1.0-0 libatombspi2.0-0 libauthen-sasl-perl libavahi-client3
libavahi-common-data libavahi-common3 libblk-dev-bin libc-dev libc6 libcairo2 libgobject2 libcairo0 libclone-perl libcolord2 libcrypt-dev libcupsc2
libdata-perl libdabi libdconf1 libdeflate0 libdpkg-perl libdrm-amdgpu libdrm-intel libdrm-nouveau2 libdrm-radeon1 libencode-locale-perl libepoxy0 libfakeroot
libfile-basedir-perl libfile-desktopentry-perl libfile-fcntrlock-perl libfile-listing-perl libfile-mimeinfo-perl libfont-afm-perl libfontconfig1 libfontenc1
libgdk-11-dev libgcc1-sjl libgd3 libgdk-pixbuf2.0-0 libgdk-pixbuf2.0-0-bin libgdk-pixbuf2.0-common libglib1-amber-dri libglib1-mesa-dri libgapi-mesa libglibvnd0
libglx-mesa0 libglx0 libgomp1 libgraphite2-3 libgtk-3-0 libgtk-3-bin libgtk-3-common libgtk3-3-0 libharfbuzz2b libhtml-form-perl libhtml-format-perl libhtml-parser-perl
libhtml-tagset-perl libhttp-tree-perl libhttp-cookies-perl libhttp-daemon-perl libhttp-date-perl libhttp-message-perl libhttp-negotiate-perl libice6 libio-html-perl
libio-socket-ssl-perl libio-stringy-perl libipc-system-simple-perl libis123 libjbig0 libjpeg-turbo8 libjpeg8 libjs-events libjs-inherits libjs-is-typedarray
libjs-psl libjs-source-map libjs-sprintjs ls libjs-typedarray-to-buffer liblcms2-2 liblvm1 liblvm15 liblisan liblwp-mediatypes-perl liblwp-protocol-https-perl
libmailtools-perl liblmpc3 libnet-dbus-perl libnet-http-perl libnet-smtp-ssl-perl libnet-ssleay-perl libnode-dev libnotifify bin libnotifity4 libnsn-dev libpango-1.0-0
libpangocairo-1.0-0 libpangoft2-1.0-0 libpiciaccesso3 libphobos2-ldc-shared9 libpixman-1-0 libquadiummath0 librsv2-2 librsvg2-2 librsvg2-common libensors-config libensors5 libssm6
libssl-dev libss3 libstdc++-libltdc libthai-data libthai0 libtirix-ihash-perl libtiff5 libtimagecode-perl libtirpc-dev libtriny-tiny-perl libtsan0 libubsan1
liburi-perl libuvul-dev libvte-2.91-0 libvte-2.91-common libvteb-3-0 libwayland-client0 libwayland-cursor0 libwayland-eql libwebp7 libwww-perl libwww-robotrules-perl
libx11-6 libx11-protocol-perl libx11-xcb1 libxaw7 libxcb-dri2-0 libxcb-dri3-0 libxcb-glx0 libxcb-present0 libxcb-randr0 libxcb-render0 libxcb-shape0 libxcb-shm0
libxcb-sync1 libxcb-xfixes0 libxcbcompositelib cursor0 libxdamage1 libxfixes3 libxft2 libx11 libxinerama libxkbcommon libxkbfile libxml-parser-perl libxml-twig-perl
libxml-xpathengine-perl libxmlxm libxmlxm libxrender1 libxshmfence1 libxt6 libxtst6 libxv1 libxxf86dga libxxf86vm linux-libc-dev lto-disabled-list make
manpages-dev node-abbrev node-agent-base node-ansi-regex node-ansi-styles node-ansiStyles node-aproba node-archy node-are-we-there-yet node-arparsse
node-arrify node-asap node-asynckit node-balanced-match node-brace-expansion node-builtins node-cachache node-chalk node-chown node-clean-yaml node-object-node-clitable
node-clone node-color-convert node-color-name node-colorify node-combined-stream node-commander node-console-control-strings node-copy-concurrently
node-core-util-is node-coveralls node-cssom node-cssstyle node-debug node-decompress-response node-defaults node-delayed-stream node-delegates node-depd node-diff
node-encoding node-end-of-stream node-err-code node-escape-string-regexp node-esprima node-events node-fancy-loc node-fetch node-foreground-child node-form-data
node-fs-write-stream node-atomic node-fs.realpath node-function-bind node-gauge node-get-stream node-glob node-get node-graceful-fs node-growl node-gyp node-has-flag
node-has-unicode node-hosted-git-info node-https-proxy-agent node-iconv-lite node-iferr node-imurmashash node-indent-string node-inflight node-inherits node-ini-node-ip
```

2. Building React application and uploading it to github repository

The screenshot shows the VS Code interface with the following details:

- Open Editors:** src > service > **J5** user.service.js > apiUrl
- Frontend:** OneAccountComp..., OTPVerification.css, PaymentCompone..., SignUpForm.css, SignUpForm.js, UpdateCustomerC..., WithDrawRequests...
- Guard:** guard
- Schemas:** schemas
- Service:** service
 - J5** account.service.js
 - J5** auth.header.js
 - J5** user.service.js
- Services:** accounts.service.js, auth.service.js, customer.service.js
- Store:** store
- App:** App.css, App.js

Terminal: PS C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp\FrontEnd> **npm run build**

```
> coinbank@0.1.0 build
> react-scripts build

Creating an optimized production build...
|
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19044.2364]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp>git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add/rm <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   FrontEnd/build/asset-manifest.json
    modified:   FrontEnd/build/index.html
    deleted:    FrontEnd/build/static/js/main.d09deafb.js
    deleted:    FrontEnd/build/static/js/main.d09deafb.js.LICENSE.txt
    deleted:    FrontEnd/build/static/js/main.d09deafb.js.map
    modified:   FrontEnd/src/Components/CustomerAccountComponent.js
    modified:   FrontEnd/src/common/constant.js
    modified:   FrontEnd/src/service/account.service.js
    modified:   FrontEnd/src/service/user.service.js

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    FrontEnd/build/static/js/main.04b2dd6c.js
    FrontEnd/build/static/js/main.04b2dd6c.js.LICENSE.txt
    FrontEnd/build/static/js/main.04b2dd6c.js.map
    New folder - Shortcut.lnk

no changes added to commit (use "git add" and/or "git commit -a")

C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp>
```

```
C:\Windows\System32\cmd.exe
C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp>git add .

C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp>git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   FrontEnd/build/asset-manifest.json
    modified:   FrontEnd/build/index.html
    renamed:    FrontEnd/build/static/js/main.d09deafb.js -> FrontEnd/build/static/js/main.04b2dd6c.js
    renamed:    FrontEnd/build/static/js/main.d09deafb.js.LICENSE.txt -> FrontEnd/build/static/js/main.04b2dd6c.js.LICENSE.txt
    new file:   FrontEnd/build/static/js/main.04b2dd6c.js.map
    deleted:    FrontEnd/build/static/js/main.d09deafb.js.map
    modified:   FrontEnd/src/Components/CustomerAccountComponent.js
    modified:   FrontEnd/src/common/constant.js
    modified:   FrontEnd/src/service/account.service.js
    modified:   FrontEnd/src/service/user.service.js
    new file:   New folder - Shortcut.lnk

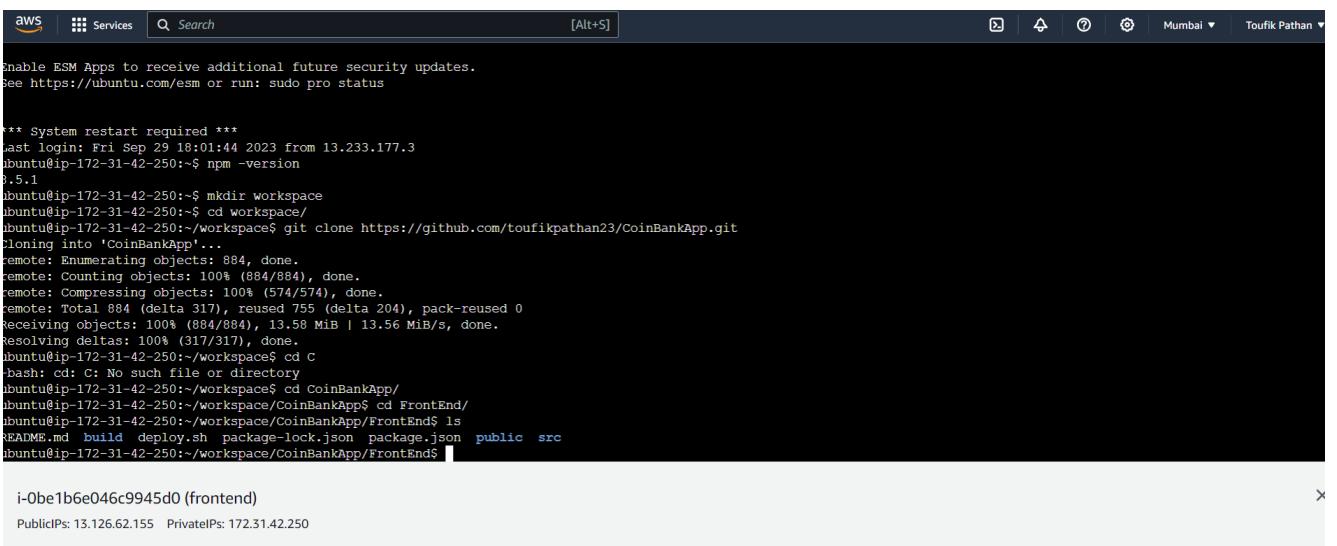
C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp>
```

```
C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp>git commit -m "deploy"
[main bb71c52] deploy
11 files changed, 12 insertions(+), 12 deletions(-)
rename FrontEnd/build/static/js/{main.d09deafb.js => main.04b2dd6c.js} (89%)
rename FrontEnd/build/static/js/{main.d09deafb.js.LICENSE.txt => main.04b2dd6c.js.LICENSE.txt} (100%)
create mode 100644 FrontEnd/build/static/js/main.04b2dd6c.js.map
delete mode 100644 FrontEnd/build/static/js/main.d09deafb.js.map
create mode 100644 New folder - Shortcut.lnk

C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp>git push
Enumerating objects: 34, done.
Counting objects: 100% (34/34), done.
Delta compression using up to 8 threads
Compressing objects: 100% (18/18), done.
Writing objects: 100% (19/19), 543.71 KiB | 5.33 MiB/s, done.
Total 19 (delta 11), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (11/11), completed with 11 local objects.
remote:
remote: GitHub found 6 vulnerabilities on toufikpathan23/CoinBankApp's default branch (1 critical, 2 high, 2 moderate, 1 low). To find out more, visit:
remote:     https://github.com/toufikpathan23/CoinBankApp/security/dependabot
remote:
To https://github.com/toufikpathan23/CoinBankApp.git
  6e86d1f..bb71c52  main -> main

C:\Users\Rafik PATHAN\Desktop\New folder\CoinBankApp>
```

3. Cloaning React Appl. Repo on Ec2 linux machine



The screenshot shows a terminal window titled 'aws' with a blue header bar containing the AWS logo, 'Services', a search bar, and user information for 'Mumbai' and 'Toufik Pathan'. The main area of the terminal displays the following command-line session:

```
Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

*** System restart required ***
Last login: Fri Sep 29 18:01:44 2023 from 13.233.177.3
ubuntu@ip-172-31-42-250:~$ npm -version
3.5.1
ubuntu@ip-172-31-42-250:~$ mkdir workspace
ubuntu@ip-172-31-42-250:~$ cd workspace/
ubuntu@ip-172-31-42-250:~/workspace$ git clone https://github.com/toufikpathan23/CoinBankApp.git
Cloning into 'CoinBankApp'...
remote: Enumerating objects: 884, done.
remote: Counting objects: 100% (884/884), done.
remote: Compressing objects: 100% (574/574), done.
remote: Total 884 (delta 317), reused 755 (delta 204), pack-reused 0
Receiving objects: 100% (884/884), 13.58 MiB | 13.56 MiB/s, done.
Resolving deltas: 100% (317/317), done.
ubuntu@ip-172-31-42-250:~/workspace$ cd CoinBankApp/
-bash: cd: C: No such file or directory
ubuntu@ip-172-31-42-250:~/workspace$ cd FrontEnd/
ubuntu@ip-172-31-42-250:~/workspace/CoinBankApp$ cd FrontEnd/
ubuntu@ip-172-31-42-250:~/workspace/CoinBankApp/FrontEnd$ ls
README.md  build  deploy.sh  package-lock.json  package.json  public  src
ubuntu@ip-172-31-42-250:~/workspace/CoinBankApp/FrontEnd$
```

At the bottom of the terminal window, there is a message bar with the text 'i-Obe1b6e046c9945d0 (frontend)' and 'PublicIPs: 13.126.62.155 PrivateIPs: 172.31.42.250'.

4. Installing Serve library and starting front end server

```

ubuntu@ip-172-31-42-250:~/workspace/CoinBankApp/FrontEnd$ serve
Command 'serve' not found, but can be installed with:
sudo snap install serve
ubuntu@ip-172-31-42-250:~/workspace/CoinBankApp/FrontEnd$ sudo snap install serve
serve 0.3.0 from Philipp Gillé (philippgille) installed
ubuntu@ip-172-31-42-250:~/workspace/CoinBankApp/FrontEnd$ serve

Serving "." on all network interfaces (0.0.0.0) on HTTP port: 8080

Local network interfaces and their IP addresses so you can pass one to your colleagues:
  Interface | IPv4 Address | IPv6 Address
  -----|-----|-----
lo      | 127.0.0.1 | ::1
eth0    | 172.31.42.250 | fe80::e0:ffff:fe0c:2a74

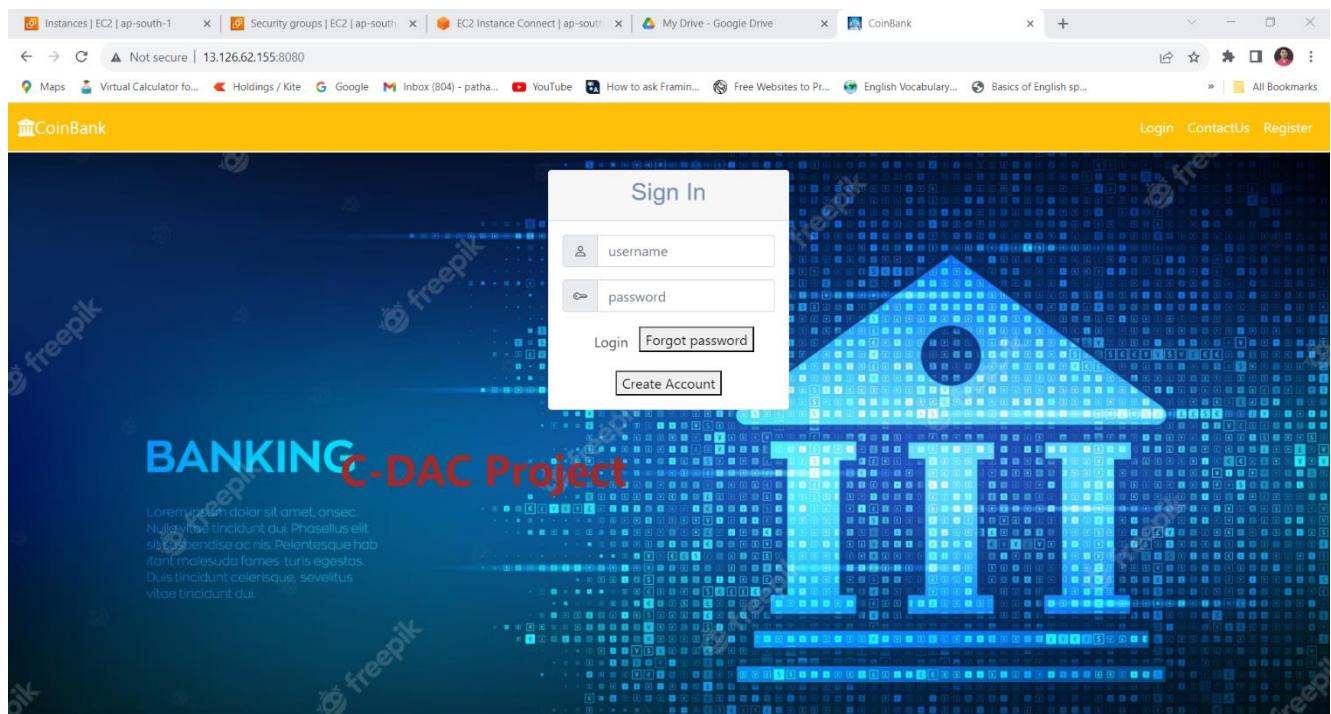
You probably want to share:
http://172.31.42.250:8080
^C
ubuntu@ip-172-31-42-250:~/workspace/CoinBankApp/FrontEnd$ serve build

WARNING: You didn't use the "-d" flag, but a positional argument instead. It seems to be a valid directory though, so serve is going to serve it.

Serving "build" on all network interfaces (0.0.0.0) on HTTP port: 8080

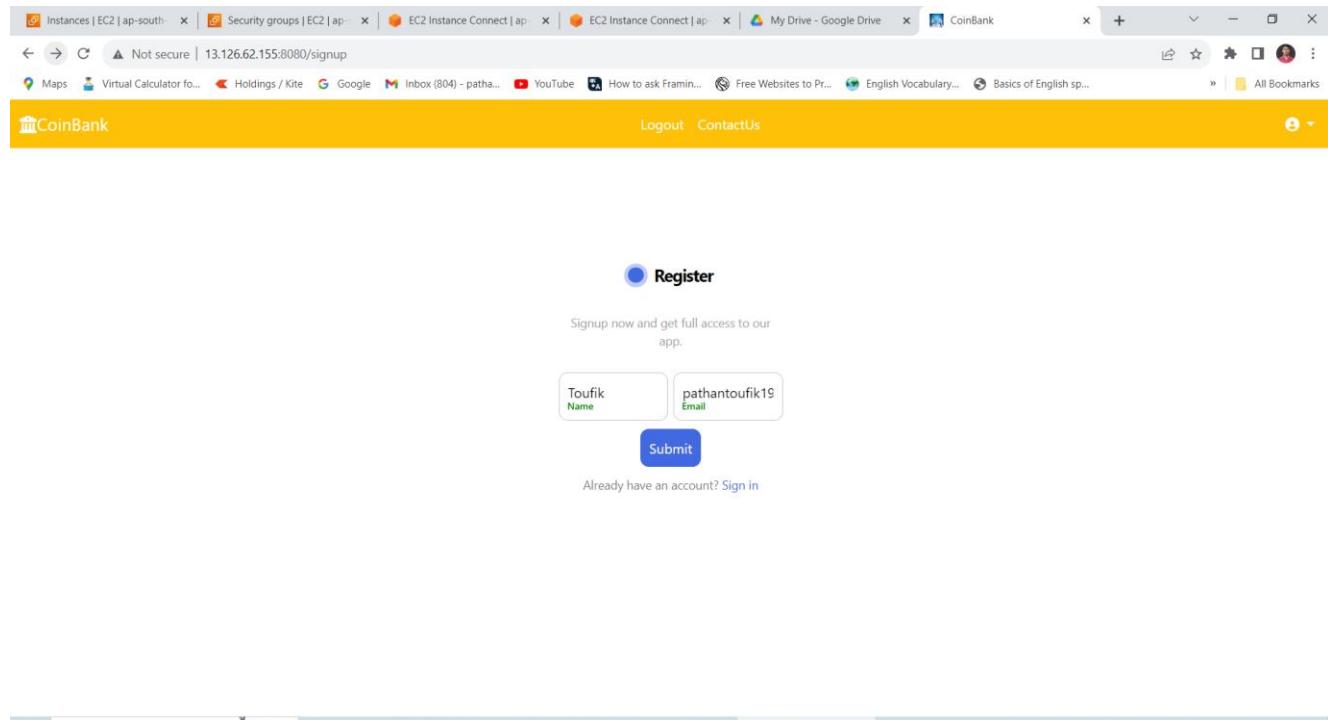
Local network interfaces and their IP addresses so you can pass one to your colleagues:
  Interface | IPv4 Address | IPv6 Address
  -----|-----|-----
lo      | 127.0.0.1 | ::1
eth0    | 172.31.42.250 | fe80::e0:ffff:fe0c:2a74

```

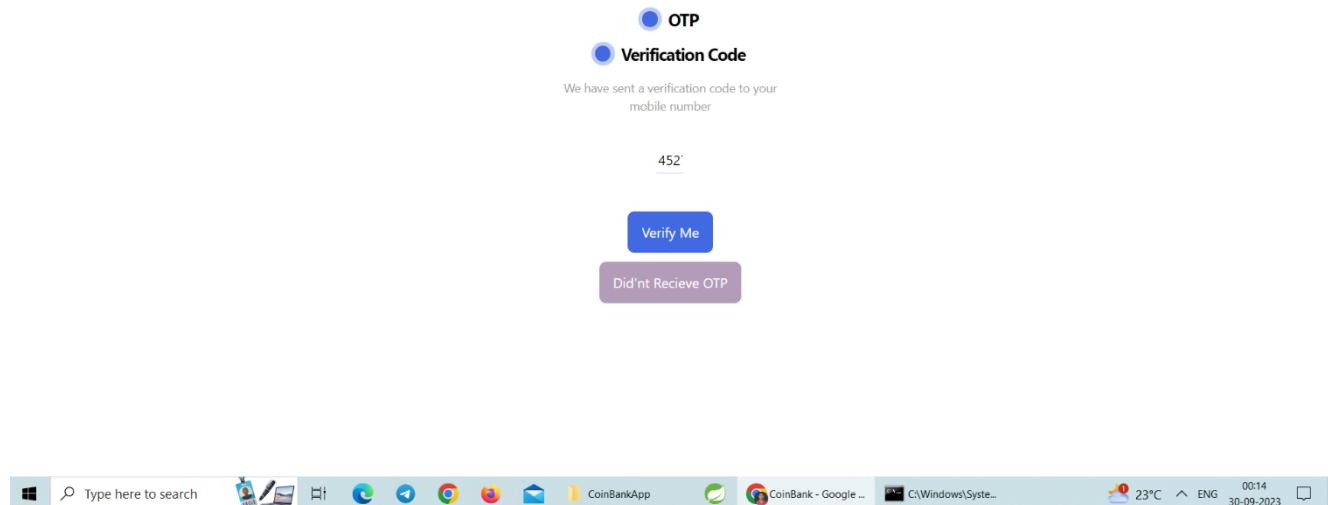
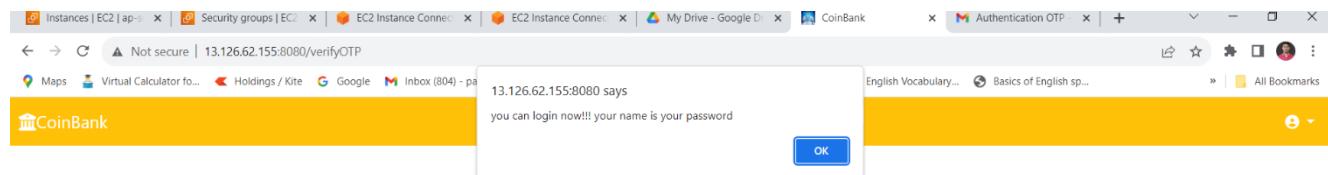


3. Client-Backend interaction

1. User Registration



2. OTP Verification for registration



3. Log In

The screenshot shows a web browser window with multiple tabs open. The active tab is the CoinBank login page, which displays a form for entering Name (Toufik) and Email (pathantoufik1998@gmail.com). Below the form is a button labeled "Update Profile". To the right of the main content, a Google Password Manager overlay is visible, prompting the user to save their password. The overlay includes fields for "Username" (Toufik) and "Password" (redacted), along with "Save" and "Never" buttons. A note at the bottom of the overlay states: "Passwords are saved to [Google Password Manager](#) on this device." The background of the browser window features a blue digital pattern. The taskbar at the bottom of the screen shows various pinned icons and the date/time (30-09-2023, 00:15).

Future Scope

Cross-Border Payments: The scope of digital payment wallets can expand to facilitate seamless cross-border payments. IoT and Wearables Integration: With the rise of Internet of Things (IoT) devices and wearable technology, payment wallets could extend their functionality to allow for convenient and secure payments through these devices. Contactless and NFC Payments: As contactless payments gain popularity, payment wallet systems could expand their support for near-field communication (NFC) technology. This enables users to make payments simply by tapping their smartphones or cards on compatible terminals. Personal Finance Management: Future payment wallet systems could evolve into comprehensive personal finance management platforms, providing users with insights into their spending patterns, budgeting tools, and investment recommendations.

CONCLUSION

The "CoinBank" digital wallet payment service project has been brought to a successful culmination, fulfilling its intended objectives and purposes. The endeavor to create a secure, efficient, and user-centric digital wallet ecosystem has been achieved with diligence, resulting in a system that empowers users and facilitates seamless financial interactions.

Throughout the course of this project, significant strides have been made in the domain of modern digital finance. The project's success is attributed to its error-free development, efficiency, and time-saving capabilities. The core aim of developing a digital wallet service to streamline financial activities and online transactions has been realized effectively.

The project's implementation journey was both educational and enlightening. The utilization of cutting-edge technologies like React.js, responsive templates, REST APIs, and MySQL database management enriched our practical knowledge. The development process further deepened our understanding of software development life cycles and project management phases. Rigorous testing methodologies were employed to ensure the system's robustness and reliability.

In the context of future prospects, the "CoinBank" digital wallet payment service holds immense potential for expansion and enhancement. Possibilities for integrating features such as detailed product descriptions, user feedback mechanisms, and online payment methods exist. As the digital finance landscape evolves, the "CoinBank" project is well-positioned to adapt and grow, contributing to the continued evolution of online financial platforms.

In conclusion, the completion of the "CoinBank" digital wallet payment service project signifies a successful endeavor in crafting an application that redefines how financial transactions are conducted. This project not only serves as an achievement in itself but also sets the stage for ongoing innovation and refinement in the realm of digital wallet solutions.

REFERENCES

- [1] <https://aws.amazon.com/solutions/case-studies/paytm/>
- [2] <https://www.storegrowers.com/google-gpay-case-studies>
- [3] Mc Graw Hill's, Java: The complete reference 7thEdition, HerbertScheldt
- [4] <https://www.geeksforgeeks.org/web-development-projects/>

ONLINE REFERENCE

- [1] www.Google.com
- [2] www.w3school.com
- [1] www.javatpoint.com