

Bank in Hand

A Group Project Submitted for Undergraduate DBMS Lab (BCA 481) 2022 -2023

By

CHRISTOPHER TOM JOSE (2141012) D SANATH (2141013) DISHA AMIN (2141049)

Bachelor of Computer Science
Under the supervision of
Dr. KIRUBANAND V B

Project report submitted in partial fulfilment of the requirements of IV semester BCA, CHRIST (Deemed To Be University)

April - 2023



CERTIFICATE

This is to certify that the report titled **Bank in Hand** is a bona fide record of work done by **Disha Amin** (2141049), **D Sanath** (2141013) and **Christopher Tom** (2141012) of CHRIST (Deemed to be University), Bangalore, in partial fulfilment of the requirements of IV Semester BCA during the year 2023.

Head of the Department		Project Guide
Valued-by:		
	Name : Christopl	her Tom, D Sanath, Disha Amin
1.	Register Number	: : 2141012, 2041013, 2041049
	Examination	
2.	Centre	: CHRIST (Deemed to be University)
	Date of Exam	:

ACKNOWLEDGEMENT

First of all, we thank God almighty for his immense grace and blessings showered on us at every stage of this work. We are grateful to our respectable Head, Department of Computer Science, CHRIST (Deemed to be University), **Dr Ashok Immanuel V**, for providing the opportunity to take up this project as part of my curriculum.

We also pay our gratitude to the Coordinator, Department of Computer Science, CHRIST (Deemed to be University) **Dr Beaulah Soundarabai P** for their support throughout.

We are grateful to our guide, Associate Professor, Department of Computer Science, CHRIST (Deemed to be University), **Dr Kirubanand V B**, whose insightful leadership and knowledge benefited us to complete this project successfully. Thank you so much for your continuous support and presence whenever needed.

We would also like to thank our Alumni evaluator **Mr Abdul Kareem MA**, whose knowledge and guidance benefited us in making the changes as per the industry requirement. Thank you so much for your support and presence whenever needed.

We express our sincere thanks to all faculty members and staff of the Department of Computer Science, CHRIST (Deemed to be University), for their valuable suggestions during the course of this project. Their critical suggestions helped us to improve the project work.

Last but not the least, we would like to thank everyone who is involved in the project directly or indirectly.

CONTENTS

1 Introduction	6
1.1. The Project Description	6
1.2. Existing System	6
1.3. Objectives	8
1.4. Purpose, Scope and Applicability	8
1.4.1 Purpose	8
1.4.2 Scope	8
1.4.3 Applicability	8
1.5. Overview of the Project	9
2. System Analysis and Requirements	10
2.1. Problem Definition	10
2.2. Requirement Specification	10
2.2.1. Functional Requirements	10
2.2.2. Technical Requirements	10
2.3. System Requirements	12
2.3.1. Software Requirements	12
2.3.2 Hardware Requirements	12
2.3.3. Network Requirements	12
2.4. Conceptual Models	13
2.4.1. Data Flow Diagram	13
2.4.2. ER Diagram & Class Diagram	15
2.5. Planning and Scheduling	16
2.5.1. Gantt Chart	16
2.5.2. PERT Chart	17
2.6. Proposed Tools	16

3. Module Descriptions	19
3.1. Bank	19
3.2 Branch	19
3.3. Admin	19
3.4. Users	20
3.5. Existing Users	20
4. Proposed Process Logic of Modules	24
5. Testing	25
5.1. Testing Strategies	25
5.2. Test Cases and the Reports	26
6. Tables	28
7. UI and Implementation	32
8. Future Enhancements	43
9. Conclusion	44
10. Appendix	45

1. INTRODUCTION

1.1PROJECT DESCRIPTION

The world is becoming more Tech savvy day by day. New inventions and discoveries are constantly happening every moment. However yet, not all of us have adopted all these developments. In the Banking sector, we find that all Banks have Online banking systems but these apps are only for existing users.

Not all banks have inculcated the feature of creating a zero-balance account for the new users. That is why our project Bank is Hand, helps people to create their accounts in the bank in the online mode. The main objective of this project is to make new account creation more feasible for people in this bustling era. This platform will connect more people to different banks even if they are far away.

1.2 EXISTING SYSTEMS

The idea of the online banking is well known now especially after the covid period. The existing modules of our domain area focus on the banking works in an online mode. It gives emphasis to the existing customers.

The following are a few projects that the team has worked on improving (along with the hyperlink).

1.2.1 Banking Management System (studocu)

The main purpose of this project is to simplify the tedious task of banking by providing this service in a user-friendly environment.

This software allows the users to apply for new account and to update the previous account.

1.2.2 Bank Account Management System (ResearchGate)

The main aim of this project is to develop software for Bank Account Management System. This project has been developed to carry out the processes easily and quickly, which is not possible with the manuals systems, which are overcome by this software. This project is developed using PHP, HTML language and MYSQL use for database connection.

1.2.3 Bank Management System (academia)

The main objective of this project was to provide various types of customer service options for the users thus the main objective of this to find out about customer facilities.

1.2.4 Banking Management System (<u>lovelycoding</u>)

The main aim of this project is to manage bank branches throughout the system they used this module which kept the manageability of the branches and provide a unique identity to every branch.

They also aimed that the branch module will also help banks find out about their performance at a different location so they evaluate on this improve the customer service quality

1.2.5 Bank Management System (muengineers)

To develop a software for solving financial applications of a customer in banking environment in order to nurture the needs of an end banking user by providing various ways to perform banking tasks. Also to enable the user and workspace to have additional functionalities which are not provided under a conventional banking software.

1.3 OBJECTIVES

Our objective is to develop a website under which n number of banks can register and customers(new) can directly create an account with zero balance online without going to bank

1.4 PURPOSE, SCOPE AND APPLICABILITY

1.4.1. Purpose

All the existing projects have worked upon the online banking system for only existing customers and not new ones. This website will solely help to create accounts of new users without any difficulty. Moreover, one can visit multiple banks via one webpage.

1.4.2. Scope

We live in a fast era of technology where no one has spare time to stand in a long queue to open an account this website will be a boon to them.

1.4.3. Applicability

- The project is applicable for all banks to gain more customers and spread pan-India is the banks are regional. Customers can also open zero-balance account through a few clicks in savings or current mode.
- Big companies who are continuously recruiting employees can easily create their accounts with the employee's choice of bank
- Physically challenged people and those who are old aged don't have to suffer any physical strains that are involved in creating a bank account at the bank itself such as rush, travel requirements etc.

1.5. OVERVIEW OF THE PROJECT

This project is about creating a zero-balance bank account in the banks those have registered in the website through online mode in a hassle-free manner. The bank

account creation system - Bank in Hand ensures that we make better connectivity between banks and the people in a fast and easy way. It will make the bank more approachable to people and will benefit both customers as well as the bank organisations.

2.SYSTEM ANALYSIS AND REQUIREMENTS

2.1 PROBLEM DEFINITION

In the Banking sector, we find that all Banks have Online banking systems but these apps are only for existing users. Not all banks have inculcated the feature of creating a zero-balance account for the new users. Our project Bank is Hand, helps people to create their accounts in the bank in the online mode. The main objective of this project is to make new account creation more feasible for people in this bustling era. This platform will connect more people to different banks even if they are far away.

2.2. REQUIREMENT SPECIFICATION

2.2.1. Functional Requirements

- ➤ The software facilitates selection of various banks to access from a common portal
- > There is an option which provides for new user account creation
- Existing customers can create new accounts in different banks according to their desire
- ➤ Users can view their various account details and update certain restricted details
- ➤ Users can directly close their accounts in these banks through the portal

2.2.2. TECHNICAL REQUIREMENTS

- Data privacy
 - Confidential data such as account details are secure within the database
 - Bank In Hand ensures that personal data is kept secure and not shared with any outside users without authentication

> Performance

- The user must have a secure internet connection through which they can access the website
- The performance of the website depends on the system specifications of the user and the browser they are accessing it with

➤ Data Security

• The information stored by the security is stored in a secure manner such as account passwords

➤ Data Storage

- The data is securely stored in a database
- The database can only be accessed by authenticated admins of the software

> Reliability

- The website is well designed with attractive colour palettes for good user interface
- It is optimized for easy access and working of users so that anyone can easily do their required banking operations

2.3 SYSTEM REQUIREMENT

2.3.1 HARDWARE REQUIREMENTS

OS: Windows 10 or above

Processor: Core 2 Duo

Memory: 4 GB RAM

Storage: 1 GB available space

2.3.2 SOFTWARE REQUIREMENTS

Operating System: Windows 7 or later

Front End: PHP / HTML / JavaScript

Back End: MySQL

Software Required: XAMMP/PHPMyAdmin

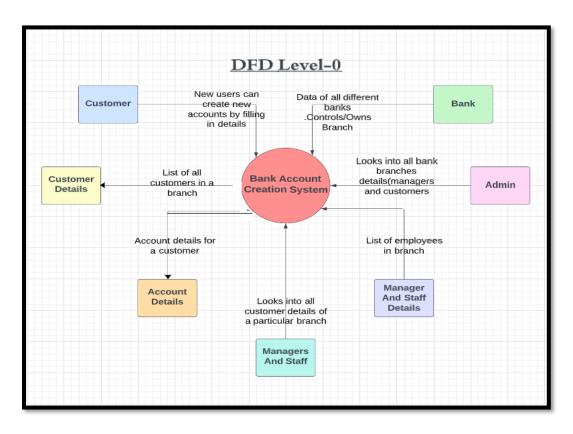
2.3.3 NETWORK REQUIREMENTS

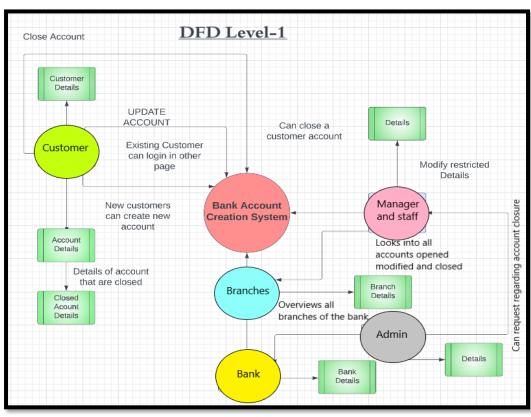
Network: Google Chrome / Mozilla or equivalent

WIFI: Internet Required.

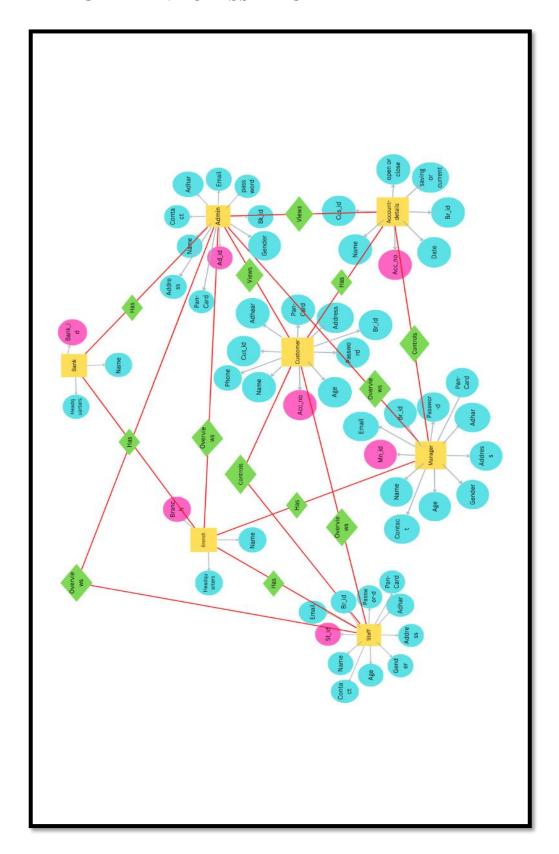
2.4 CONCEPTUAL MODEL

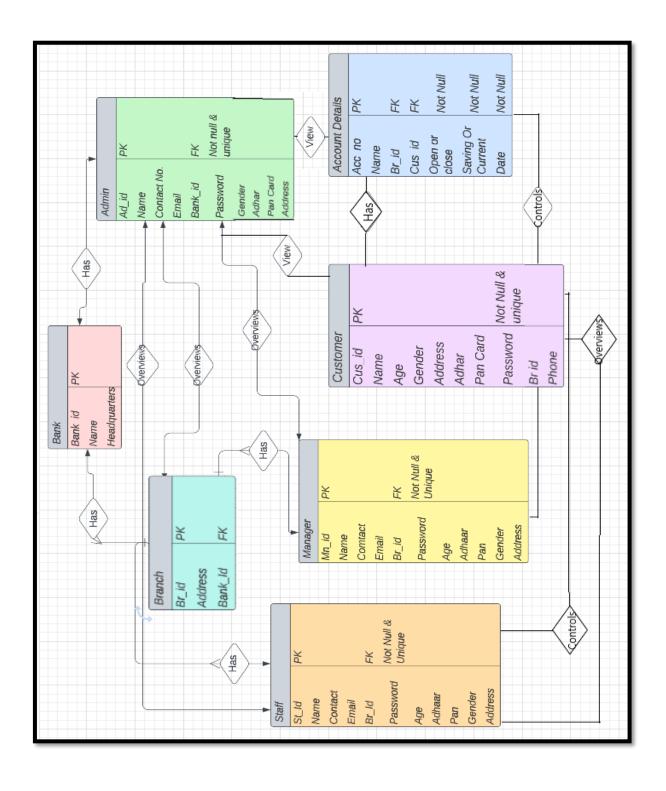
2.4.1 DATA FLOW DIAGRAM (DFD)





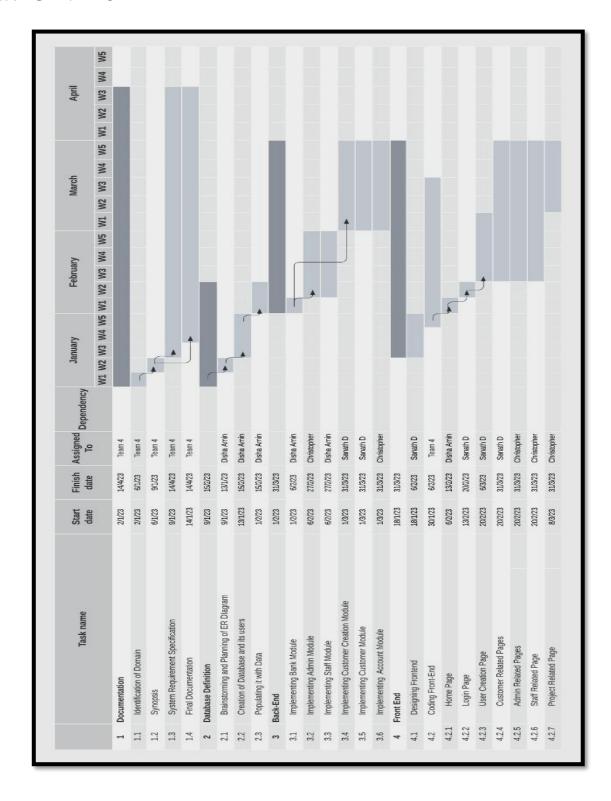
2.4.2 ER DIAGRAM AND CLASS DIAGRAM



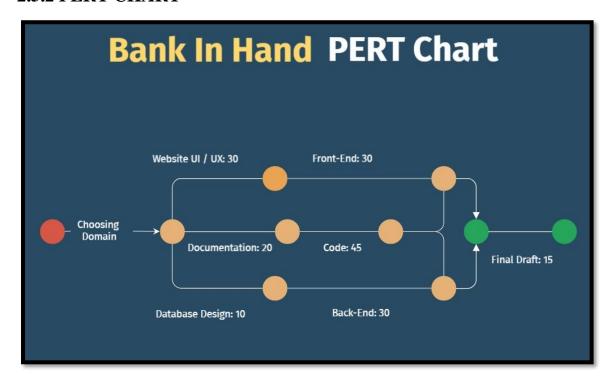


2.5 PROJECT PLANNING

2.5.1 GANTT CHART



2.5.2 PERT CHART



2.6. PROPOSED TOOLS AND PLATFORMS

2.6.1. Windows 10

Microsoft Windows 10 is a personal computer operating system developed and released by Microsoft. All the files containing code and database will be created in the Windows 10 operating system.

2.6.2. Google Chrome

Google Chrome is a cross platform web browser developed and maintained by Google. All the html and php files will be opening using Google Chrome for viewing their functionality and working.

2.6.3. HTML

HTML stands for Hypertext Mark-up Language which is the standard mark-up

language for documents designed to be displayed in a web browser. The basic web pages design will be implemented using HTML.

2.6.4. CSS

CSS or Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a mark-up language such as HTML. It will be used for adding more design and improving the look and feel of the website.

2.6.5. JavaScript

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. It is high-level, often just-in-time compiled, and multi-paradigm. It will be used to make the website responsive and dynamic.

2.6.6. PHP

PHP is a general-purpose scripting language especially suited for web development. It will be used to write the codes for the server side and connect to the database.

2.6.7. MySQL

MySQL is an open-source relational database management system. The data will be stored in a database while following maximum normal forms.

2.6.8. VISUAL STUDIO CODE

Visual Studio Code is a source-code editor that can be used with a variety of programming languages, including C#, Java, JavaScript, Go, Node.js, Python,

C++, C, Rust and Fortran. It is based on the Electron framework, which is used to develop Node.js web applications that run on the Blink layout engine. Visual Studio Code employs the same editor component (codenamed "Monaco") used in Azure DevOps (formerly called Visual Studio Online and Visual Studio Team Services).

3.Module Descriptions

3.1. BANK

Bank consists of

- Bank ID of bank
- Name of the Bank
- Headquarters of the bank

3.2. BRANCH

Branch consists of

- Branch ID of the particular branch of the bank
- Address
- Manager ID of the manager of the bank
- Bank ID of the bank

3.3. ADMIN

Admin consists of

- Admin ID
- Name
- Contact No.
- Email
- Bank ID
- Password
- Gender
- Address
- Aadhaar Card
- Pan Card

They can overview all the branches and its working. They can request the branch manager to close any account on necessary situations

3.4. CUSTOMER

Customer consists of

- Customer ID
- Name of the customer
- Age
- Gender
- Address
- Aadhaar
- Pan
- Password
- Br ID
- Phone

This module consists of customers in the login page where he/she has to login via user_ ID and password.

3.5. NEW CUSTOMER

New customer Login page will comprise of the details to be filled in after which they will receive their user_ ID and password.

3.6. MANAGER

Manager consists of

- Manager ID
- Name
- Contact

- Email
- Brach ID
- Password
- Age
- Aadhaar
- Pan
- Gender
- Address

They overview the account details, customer details of the branch and new account created or account closed can be viewed by them.

They can close the account of the customer under necessary condition.

3.7. STAFF

Staff consists of

- Staff ID
- Name
- Contact
- Email
- Brach ID
- Password
- Age
- Aadhaar
- Pan
- Gender
- Address

They overview the account details, customer details of the branch and new account created or account closed can be viewed by them.

They can't close the account of the customer under necessary condition.

3.8. ACCOUNT DETAILS

Account Details consists of

- Account Number
- Name
- Branch ID
- User ID
- Open or close account
- Savings or current account
- Date of Creation

4. PROPOSED PROCESS LOGIC OF MODULES

Bank account creation is also a kind of a person's existential proof. Moreover, we want people to get to know about the different banks in our country. So, if they wish, they can easily create an account in the bank they want. It will also be helpful for big companies to create accounts for all their new Employees without any hassle. The bank account creation system - Bank in Hand ensures that we make better connectivity between banks and the people in a fast and easy way.

- First customer opens the website
- Clicks on desired bank and chooses the branch
- It goes to a page where they select from which category they are and process
- Staffs will go to the login page and enter via user id & password
- Then move on to their portal
- Login page where they can overview the work going on with customer accounts
- Users can login to their page via user id and password after that they can view their account details and update restricted columns and can close their accounts
- New users can login via filling in their details and automatically bank branch will give their user id and password log in and they can create their account
- Managers can close customer accounts when admin asks him to do so in some typical situations.
- A customer can create multiple accounts in same or different branches and banks
- These points make up the process logic of the project

5. TESTING

5.1 TESTING STRATEGIES

A strategy for software testing integrates software test cases into a series of well-planned steps that result in a successful construction of software. Software testing is a broader topic for what is referred to as verification and validation. Verification refers to the set of activities that ensure that the software that has been built is traceable to customer's requirements.

The steps involved in testing are-

1. Unit testing

Unit testing means testing each unit of design separately. Here in this project, we tested each unit of design separately and verify that there were no errors. For this testing each design is run individually After executing each page if there any error occurs correction mechanism is done instantly.

2. Integration testing

In our project we combine many units of module to form a sub system. These sub systems are then tested. This is done to see whether the modules can be integrated properly. Based on integration testing some necessary changes were made to the design.

3. System testing

System testing is done to ensure the entire software performs its function as intended. In our project all the tested subsystems were integrated and tested for all the possible ranges of coupling variables, based on the testing errors were rectified for pleasant working experience.

4. Acceptance testing

The goal of acceptance testing is to see if the software meets all the requirements as needed. The testing was performed by data of all the users of the system. It was found that the software meets all the requirements of the host, tenant, administrator and service providers as needed.

5.2 TEST CASES AND REPORTS

Login Module:

1.1	Input: Valid	Output: Successfully	The user is
	credentials and the	logged in	successfully logged
	right bank/branch		into his account and
			redirected to their
			dashboard.
1.2	Input: Invalid	Output: Enter the right	The user is sent a
	credentials and the	credentials, Incorrect	prompt to recheck
	right bank/branch	Username and password	their details and
			enter the right
			credentials.

User Registration Module:

2.1	Input: Valid details	Output:	The user is
	entered following all	User_successfully	successfully
	the validations	registered	registered into the
			database and
			redirected to the
			login page.

2.2	Input: Valid details	Output: Enter all the	The user is
	entered, but empty	details	prompted to please
	fields		fill in all their
			details.
	Input: Data entered	Output: Please enter	The user is
2.3	fails validations or	valid details	prompted to recheck
	incorrect format		and enter the right
			data as per the
			requirement.

6. TABLES

Staff

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	st_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	name	varchar(25)	utf8mb4_general_ci		No	None		
3	contact	varchar(15)	utf8mb4_general_ci		No	None		
4	gender	varchar(10)	utf8mb4_general_ci		No	None		
5	dob	varchar(20)	utf8mb4_general_ci		No	None		
6	houseno	varchar(20)	utf8mb4_general_ci		No	None		
7	aadhar_no	varchar(25)	utf8mb4_general_ci		Yes	NULL		
8	pancard	varchar(20)	utf8mb4_general_ci		Yes	NULL		
9	br_id 🔑	int(11)			Yes	NULL		
10	password	varchar(20)	utf8mb4_general_ci		Yes	NULL		
11	street	varchar(50)	utf8mb4_general_ci		No	None		
12	landmark	varchar(50)	utf8mb4_general_ci		No	None		
13	city	varchar(50)	utf8mb4_general_ci		No	None		
14	state	varchar(50)	utf8mb4_general_ci		No	None		
15	zipcode	int(11)			No	None		

Bank

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	bank_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	name 🔑	varchar(20)	utf8mb4_general_ci		No	None		
3	headquarters	varchar(20)	utf8mb4_general_ci		No	None		

Manager

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	mn_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	name	varchar(25)	utf8mb4_general_ci		No	None		
3	contact	varchar(15)	utf8mb4_general_ci		No	None		
4	gender	varchar(10)	utf8mb4_general_ci		No	None		
5	dob	varchar(20)	utf8mb4_general_ci		No	None		
6	houseno	varchar(20)	utf8mb4_general_ci		No	None		
7	aadhar_no	mediumtext	utf8mb4_general_ci		Yes	NULL		
8	pancard	varchar(20)	utf8mb4_general_ci		Yes	NULL		
9	br_id 🔑	int(11)			Yes	NULL		
10	password	varchar(20)	utf8mb4_general_ci		Yes	NULL		
11	street	varchar(50)	utf8mb4_general_ci		No	None		
12	landmark	varchar(50)	utf8mb4_general_ci		No	None		
13	city	varchar(50)	utf8mb4_general_ci		No	None		
14	state	varchar(50)	utf8mb4_general_ci		No	None		
15	zipcode	int(11)			No	None		

Branch

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	br_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	address	varchar(60)	utf8mb4_general_ci		No	None		
3	bank_id 🔑	int(11)			No	None		

Admin

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	ad_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	name	varchar(20)	utf8mb4_general_ci		No	None		
3	contact 🔎	varchar(15)	utf8mb4_general_ci		No	None		
4	email	varchar(30)	utf8mb4_general_ci		No	None		
5	bank_id 🔎	int(11)			Yes	NULL		
6	gender	varchar(10)	utf8mb4_general_ci		No	None		
7	password	varchar(25)	utf8mb4_general_ci		Yes	NULL		
8	dob	varchar(20)	utf8mb4_general_ci		No	None		
9	houseno	varchar(20)	utf8mb4_general_ci		No	None		
10	street	varchar(50)	utf8mb4_general_ci		No	None		
11	landmark	varchar(50)	utf8mb4_general_ci		No	None		
12	city	varchar(50)	utf8mb4_general_ci		No	None		
13	state	varchar(50)	utf8mb4_general_ci		No	None		
14	zipcode	int(11)			No	None		
15	aadhar_no	mediumtext	utf8mb4_general_ci		Yes	NULL		
16	pancard	varchar(20)	utf8mb4_general_ci		Yes	NULL		

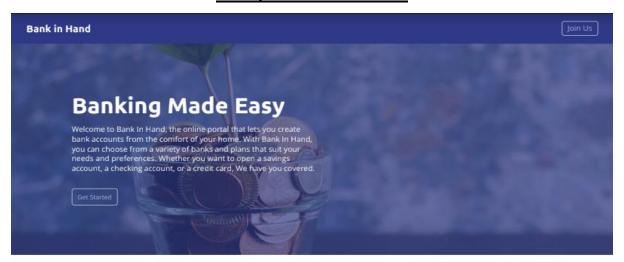
Customer

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	cus_id 🔑	int(11)			No	None		AUTO_INCREMENT
2	name	varchar(25)	utf8mb4_general_ci		No	None		
3	contact	varchar(15)	utf8mb4_general_ci		No	None		
4	gender	varchar(10)	utf8mb4_general_ci		No	None		
5	dob	varchar(20)	utf8mb4_general_ci		No	None		
6	houseno	varchar(50)	utf8mb4_general_ci		No	None		
7	street	varchar(20)	utf8mb4_general_ci		No	None		
8	landmark	varchar(50)	utf8mb4_general_ci		No	None		
9	city	varchar(50)	utf8mb4_general_ci		No	None		
10	state	varchar(50)	utf8mb4_general_ci		No	None		
11	zipcode	mediumint(9)			No	None		
12	aadhar_no	mediumtext	utf8mb4_general_ci		Yes	NULL		
13	pancard	varchar(20)	utf8mb4_general_ci		Yes	NULL		
14	password	varchar(20)	utf8mb4_general_ci		Yes	NULL		
15	bank_id 🔑	int(11)			Yes	NULL		
16	br_id 🔊	int(11)			Yes	NULL		

Account

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	acc_no 🔑	int(11)			No	None		AUTO_INCREMENT
2	state	varchar(10)	utf8mb4_general_ci		No	None		
3	type	varchar(15)	utf8mb4_general_ci		No	None		
4	join_date	date			No	None		
5	close_date	date			Yes	NULL		
6	br_id 🔊	int(11)			Yes	NULL		
7	cus_id 🔊	int(11)			Yes	NULL		

7. Implementation & UI



Banks



State Bank of India

The State Bank of India is the largest public sector bank in India and offers a wide range of banking services to individuals and businesses. With its extensive network of branches and ATMs across the country, the bank provides easy access to its customers. Its products and services include savings accounts, current accounts, fend deposits, banes, credit cards, and insurance. The bank also offers online and mobile banking services, making it easy for customers to manage their accounts from anywhere.





South Indian Bank

South Indian Bank is a private-sector bank headquartered in Kerala, India. The bank offers a range of financial products and services, including savings accounts, current accounts, fixed deposits, loans, credit cards, and insurance. The bank is known for its personalized customer service and its commitment to technology, focusing on providing innovative and convenient banking solutions to its customers.

Out Started



HDFC Bank

HDFC Bank is one of India's largest private sector banks and is known for its customer-centric approach to banking. The bank offers a range of products and services, including savings accounts, current accounts, the deposits, loans, readic cards, and insurance. The bank provides early access to its customers with its extensive network of branches and XMM nationwide. The bank is also known for its advanced technology, offering online and mobile banking services that make banking easy and convenient.

Get Started



ICICI Bank

ICICI Bank is one of India's largest private sector banks and offers a wide range of banking services to individuals and businesses. Its products and services include savings accounts, current accounts, fixed deposits, loans, credit cards, and insurance. The bank is known for its innovative and customerfriendly approach to banking, focusing on providing convenient and easy-to-use services to its customers; it has a strong presence in the digital space and offers online and mobile banking services that make banking easy and accessible.

Get Started



Indian Bank

Indian Bank is a public sector bank in India that offers its customers a range of financial products and services. Its products and services include savings accounts, current accounts, fixed deposits, loans, credit cards, and insurance. The bank is it nown for its strong focus on customer service and its commitment to technology. The bank provides aspy access to its customers with its extensive network of branche and ATMs nationwise.

Get Started



Canara Bank

Canara Bank is a public sector bank in India that offers individuals and businesses a wide range of banking services, its products and services include savings accounts, current cacounts, fixed deposits, loans, credit cards, and insurance. The bank is known for its strong customer focus and commitment to etherology, focusing on providing convenient and easy-to-use services to its customers. The bank provides easy access to its customers with its extensive network of branches and ATMs nationwide.

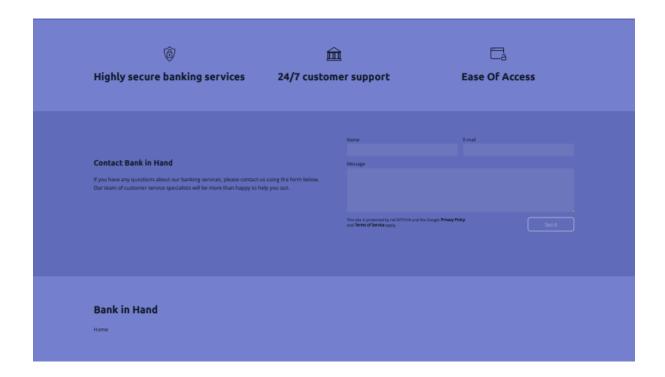
Get Started

Meet the team

We are the seam known as Bank in Hand. We strive to provide our customers with the ber banking services and solutions. We are focused on providing the best experience to our customers and ensuring that they are startified with their banking experience.

We look forward to serving our customers in their banking need





Implementation:

```
<!DOCTYPE html>
<html>
<head>
    <meta charSet="utf-8" />
    <meta name="viewport" content="width=device-width" />
    <meta name="theme-color" content="#2E3A87" />
    <link rel="icon" href="/favicon.ico" />
    <title>Home Page</title>
    <meta name="description"</pre>
        content="Bank in Hand, located in Bangalore Division, KA, is a full-
service banking business offering convenient services such as checking and
savings accounts, loans, investments, and more. With our experienced team of
professionals, we are committed to providing the best customer service and
financial solutions." />
    <meta name="keywords" content="keyword" />
    <meta property="og:title" content="Home Page" />
    <meta property="og:type" content="website" />
```

```
<meta property="og:description"</pre>
        content="Bank in Hand, located in Bangalore Division, KA, is a full-
service banking business offering convenient services such as checking and
savings accounts, loans, investments, and more. With our experienced team of
professionals, we are committed to providing the best customer service and
financial solutions." />
    <link rel="preconnect" href="https://fonts.googleapis.com" />
    <link rel="preconnect" href="https://fonts.gstatic.com" />
    <link rel="stylesheet"</pre>
        data-
href="https://fonts.googleapis.com/css2?family=Ubuntu:wght@700&family=Open
+Sans:wght@400&display=swap"
        data-optimized-fonts="true" />
    <meta name="robots" content="noindex,nofollow" />
    <style>
        #nprogress .bar {
            background: #A9B4D3;
            box-shadow: 0 0 10px #A9B4D3;
        }
    </style>
    <meta name="next-head-count" content="15" />
    <link rel="preload" href="/_next/static/css/c678f8121a178477.css"</pre>
as="style" />
    <link rel="stylesheet" href="/_next/static/css/c678f8121a178477.css" data-</pre>
n-g="" />
    <link rel="preload" href="/_next/static/css/30fd6dae99bf48e4.css"</pre>
as="style" />
    <link rel="stylesheet" href="/_next/static/css/30fd6dae99bf48e4.css"</pre>
/><noscript data-n-css=""></noscript>
    <script defer="" nomodule="" src="/_next/static/chunks/polyfills-</pre>
c67a75d1b6f99dc8.js"></script>
    <script defer="" src="/_next/static/chunks/664-</pre>
ac374a67af56732d.js"></script>
    <script defer="" src="/_next/static/chunks/644-</pre>
e19b240598ae46f9.js"></script>
    <script defer="" src="/_next/static/chunks/693-</pre>
c54d652e4eccb784.js"></script>
```

```
<script defer=""</pre>
src="/_next/static/chunks/732.bec75d7cfa3415a5.js"></script>
    <script defer=""</pre>
src="/_next/static/chunks/94.f00e1c53f76c128c.js"></script>
    <script defer=""</pre>
src="/ next/static/chunks/175.de70ad08039feb9e.js"></script>
    <script defer=""</pre>
src="/_next/static/chunks/925.c4bb35a50b0c1684.js"></script>
    <script defer="" src="/ next/static/chunks/675-</pre>
1918b3cbce167ef3.js"></script>
    <script defer=""</pre>
src="/_next/static/chunks/617.25ae01d1b11f9f5e.js"></script>
    <script defer=""</pre>
src="/_next/static/chunks/383.731ba464b9b978fe.js"></script>
    <script defer="" src="/_next/static/chunks/764-</pre>
f725e56f3f3798b5.js"></script>
    <script defer="" src="/_next/static/chunks/674-</pre>
87d21fc98e9feabc.js"></script>
    <script defer=""</pre>
src="/_next/static/chunks/77.bfdf04ef74f2607e.js"></script>
    <script defer=""</pre>
src="/_next/static/chunks/165.5fc46622ab1ba1b8.js"></script>
    <script src="/_next/static/chunks/webpack-91acce7e3b3c90b1.js"</pre>
defer=""></script>
    <script src="/_next/static/chunks/framework-8a37bd1e87a81516.js"</pre>
defer=""></script>
    <script src="/_next/static/chunks/main-ccefb599ad987b87.js"</pre>
defer=""></script>
    <script src="/_next/static/chunks/pages/_app-de0b152305ff5e07.js"</pre>
    <script src="/_next/static/chunks/c9184924-375a28b79120852d.js"</pre>
defer=""></script>
    <script src="/ next/static/chunks/228771e0-4f25607fabbf3101.js"</pre>
defer=""></script>
    <script src="/_next/static/chunks/65291039-c6f0e50e59aa756d.js"</pre>
defer=""></script>
    <script src="/_next/static/chunks/1b8dab7b-99ffffda4fe4c03e.js"</pre>
defer=""></script>
    <script src="/_next/static/chunks/561-9ce6a7286ef4ef3b.js"</pre>
defer=""></script>
```

```
<script src="/_next/static/chunks/692-942df7d7594c8cc7.js"</pre>
defer=""></script>
    <script src="/_next/static/chunks/pages/%5B%5B...slug%5D%5D-</pre>
c2a58b9f0c8d13e9.js" defer=""></script>
    <script src="/_next/static/8JwBqYSgarN-HNRKJ3CcC/_buildManifest.js"</pre>
defer=""></script>
    <script src="/ next/static/8JwBqYSgarN-HNRKJ3CcC/ ssgManifest.js"</pre>
defer=""></script>
    <link rel="stylesheet"</pre>
        href="https://fonts.googleapis.com/css2?family=Ubuntu:wght@700&family=
Open+Sans:wght@400&display=swap" />
</head>
<body>
    <div id="__next" data-reactroot="">
        <div class="min-h-full w-full flex flex-col smooth-scroll"</pre>
            style="font-family:'Open Sans', sans-serif;font-
weight:400">
            <header class="sticky top-0 shadow-sm !z-[2000]"</pre>
style="background-color:#FFFFFF;color:#000000">
                <div class="grid items-center lg:gap-6 xl:gap-10 mx-auto py-6</pre>
px-6 lg:px-12"
                    style="grid-template-columns:auto auto">
                    <div class="col-span-2 lg:col-span-1 truncate"><a</pre>
href="/">
                             <h1 class="text-h6 lg:text-h4 xl:text-h3 font-
medium truncate"
                                 style="color:#000000;font-
family:'Ubuntu', sans-serif;font-weight:700">Bank in
                                 Hand</h1>
                         </a></div>
                    <div class="hidden lg:flex item-center justify-end gap-10"</pre>
lg:col-span-2">
                         <div class="hidden lg:flex items-center flex-shrink-</pre>
0"><a
                                 class="button primary xl !text-2xl !py-1.5"
target="_self"
```

```
style="background:transparent;border-
radius:8px;color:#A9B4D3;border:2px solid #A9B4D3"
                                 href="/?pt=NjQ0MWR1YjI3YzkxMDUzZjQxYTA3YmFi0jE
20DIwNTk0NDYuNjk2OnByZXZpZXc%3D#">Join
                                 Us</a></div>
                    </div>
                    <div class="ml-auto lg:hidden"><button</pre>
                             class="inline-flex items-center justify-center p-2
rounded-md focus:outline-none"
                             style="color:#000000"><svg</pre>
xmlns="http://www.w3.org/2000/svg" fill="none"
                                 stroke="currentColor" viewBox="0 0 24 24"
width="24" height="24" class="block h-5 w-5"
                                 aria-hidden="true">
                                 <path stroke-linecap="round" stroke-</pre>
linejoin="round" stroke-width="1.5"
                                     d="M4 6h16M4 12h16M4 18h16"></path>
                             </svg></button></div>
                </div>
            </header>
            <div
                style="position:fixed;top:1px;left:1px;width:1px;height:0;padd
ing:0;margin:-1px;overflow:hidden;clip:rect(0, 0, 0, 0);white-
space:nowrap;border-width:0;display:none">
            </div>
            <div class="overflow-x-hidden">
                <section class="flex-shrink-0 relative flex items-center min-</pre>
h-120">
                    <div class="relative container mx-auto px-6 z-10 py-12</pre>
lg:py-32 xl:py-40 text-8xl">
                         <div class="max-w-3xl text-null mx-auto"></div>
                    </div>
                </section>
                <section class="flex-shrink-0" style="background-</pre>
color:#FFFFFF">
                    <div class="container mx-auto py-12 lg:py-14 xl:py-20">
```

```
<div class="flex flex-col sm:flex-row flex-wrap gap-10"</pre>
justify-end"><span</pre>
                                 class="hidden justify-center justify-end
justify-start"></span>
                             <div class="block-list-item w-full">
                                 <div class="text-null"></div>
                             </div>
                             <div class="block-list-item w-full">
                                 <div class="text-null"></div>
                             </div>
                         </div>
                     </div>
                </section>
                <section class="flex-shrink-0" style="background-</pre>
color:#FFFFFF">
                     <div class="container mx-auto py-12 lg:py-14 xl:py-20">
                         <div class="flex flex-col lg:flex-row w-full gap-10</pre>
lg:gap-20 items-center">
                             <div class="flex-1 flex flex-col items-center</pre>
lg:items-start">
                                 <div class="rich-text-block"</pre>
style="color:#111827"></div>
                             </div>
```

```
<div class="flex-1 flex w-full justify-center</pre>
lg:justify-start"></div>
                         </div>
                     </div>
                 </section>
                 <section class="flex-shrink-0" style="background-</pre>
color:#FFFFFF">
                     <div class="container mx-auto py-12 lg:py-14 xl:py-20">
                         <div class="flex flex-col sm:flex-row flex-wrap gap-10"</pre>
justify-end"><span</pre>
                                  class="hidden justify-center justify-end
justify-start"></span>
                             <div class="block-list-item w-full">
                                  <div class="text-null"></div>
                             </div>
                             <div class="block-list-item w-full">
                                  <div class="text-null"></div>
                             </div>
                             <div class="block-list-item w-full">
                                  <div class="text-null"></div>
                             </div>
                         </div>
                     </div>
                 </section>
                 <section class="flex-shrink-0" style="background-</pre>
color:#FFFFFF">
                     <div class="container mx-auto py-12 lg:py-14 xl:py-20">
                         <div class="flex flex-col w-full gap-10 lg:gap-20</pre>
lg:flex-row">
                             <div class="w-full lg:w-1/2 lg:mt-10">
                                  <div class="rich-text-block"</pre>
style="color:#111827"></div>
                             </div>
                             <div class="w-full lg:w-1/2">
                                  <form novalidate="">
```

```
<div class="flex flex-col lg:flex-row gap-</pre>
4 mb-4">
                                          <div class="flex-1"><label class="mb-1"</pre>
text-label"
                                                   style="color:#111827">Name</la</pre>
bel><input type="text"
                                                   class="input border-none
!shadow-none !placeholder-current" value=""
                                                   style="border-
radius:8px;background-color:rgba(0,0,0,0.07);color:#111827" />
                                          </div>
                                          <div class="flex-1"><label class="mb-1</pre>
text-label"
                                                   style="color:#111827">E-
mail</label><input type="text"</pre>
                                                   class="input border-none
!shadow-none !placeholder-current" value=""
                                                   style="border-
radius:8px;background-color:rgba(0,0,0,0.07);color:#111827" />
                                          </div>
                                      </div>
                                      <div class="mb-4"><label class="mb-1 text-</pre>
label"
                                               style="color:#111827">Message</lab</pre>
el><textarea
                                               class="input border-none !shadow-
none !placeholder-current" placeholder=""
                                               rows="5"
                                               style="border-
radius:8px;background-color:rgba(0,0,0,0.07);color:#111827"></textarea>
                                      </div>
                                      <div class="flex flex-col md:flex-row</pre>
justify-between items-start gap-4">
                                          <div class="text-xs max-w-sm text-</pre>
gray-500" style="color:#111827">This site is
                                               protected by reCAPTCHA and the
Google<a target="_blank" class="font-bold"</pre>
                                                   style="color:#111827"
href="https://policies.google.com/privacy">
```

```
Privacy Policy</a> and<a
target="_blank" class="font-bold"
                                              style="color:#111827"
href="https://policies.google.com/terms"> Terms of
                                              Service</a>
apply.</div><button type="submit"
                                          class="button primary lg w-36 mt-2
md:mt-0"
                                          style="background:transparent;bord
er-radius:8px;color:#A9B4D3;border:2px solid #A9B4D3">Send</button>
                                  </div>
                                  <div class="invisible"></div>
                              </form>
                           </div>
                       </div>
                   </div>
               </section>
           </div>
           <div class="Toastify"></div>
           <footer class="flex-1" style="background-</pre>
color:#FFFFFF;color:#111827">
               <div class="container mx-auto py-12 lg:py-14 xl:py-20">
                   <div class="flex flex-col lg:flex-row lg:justify-between"</pre>
gap-12">
                       <div class="flex flex-col items-start gap-12 lg:gap-</pre>
6">
                           <h3 class="text-xl lg:text-2xl xl:text-h3"</pre>
                              style="color:#111827;font-
family:'Ubuntu', sans-serif;font-weight:700">Bank in
                              Hand</h3>
                           <div class="flex flex-col lg:flex-row lg:items-</pre>
center gap-12">
                              start lg:items-center flex-wrap gap-6"
                                  style="color:#111827">
                                  color:transparent"><a</pre>
```

```
class="block py-1.5 font-light"
href="/">Home</a>
                           flex-wrap">
                        </div>
                    </div>
                    <div class="flex flex-col gap-6"></div>
                 </div>
             </div>
          </footer>
          <div
             style="position:fixed;top:1px;left:1px;width:1px;height:0;padd
ing:0;margin:-1px;overflow:hidden;clip:rect(0, 0, 0, 0);white-
space:nowrap;border-width:0;display:none">
          </div>
      </div>
   </div>
</body>
</html>
```

8.FUTURE ENHANCEMENTS

While Bank In Hand is certainly heading in the right direction, it can never be considered complete, new requirements can always be accommodated and obsolete ones removed. If given a chance of updating the website in the near future following modules could be considered to enhance the website further:

- Updation of Bank Details
- UPI bank money transfer
- KYC (Know your customer)
- Development of a mobile application
- Online Bank Registration

9. Conclusion

In conclusion, the Bank in Hand project has successfully developed a user-friendly and accessible bank portal website that enables customers to easily open bank accounts from anywhere and at any time. This innovative solution eliminates the need for physical visits to the bank and provides a secure and convenient banking experience for customers. With a range of features such as account management and updating account details, the Bank in Hand website provides customers with complete control over their finances. Overall, the Bank in Hand project represents a significant step towards digitizing the banking industry and meeting the evolving needs of customers in the modern era.

10. Appendix

Login.php

```
?php
session_start();
include "formcss.php";
include_once "connection.php";
$flag = 0;
$bid = $_SESSION['bankID'];
function test_input($data)
  $data = trim($data);
  $data = stripslashes($data);
$data = htmlspecialchars($data);
return $data;
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
  $cus_id = $_POST['cus_id'];
$pass = $_POST['pass'];
  if (empty($cus_id) || empty($pass)) {
    $error = "Please enter both Customer ID and Password";
     $query = "SELECT * FROM customer WHERE cus_id='$cus_id' AND password='$pass' AND bank_id='$bid'";
    $result = mysqli_query($conn, $query);
    if (mysqli_num_rows($result) > 0) {
   $redirect_url = "ADMINPAGE.php";
       $flag++;
    } else {
    $error = "Invalid username or password";
```

Register.php

```
if (empty($_POST["lastname"])) {
    $lastnamer = "Last Name is required";
} else {
  if (!ctype_alpha($_POST["lastname"])) {
    $lastnamer = "Only letters are allowed
     $lastname = test_input($_POST["lastname"]);
     $flag++;
$name = $firstname . " " . $lastname;
if (empty($_POST["dob"])) {
  $dobr = "DOB is required";
} else {
   if (is_string($birthday)) {
     $birthday = strtotime($birthday);
  f
if (time() - $birthday < $age * 31556926) {
    $dobr = "Please Enter a Valid Age";
} else {
    $dob = test_input($_POST["dob"]);</pre>
      $flag++;
if (empty($_POST["phone"])) {
    $phoner = "Phone Number is required";
} else {
  $phone = $_POST["phone"];
if (!preg_match($number_validation_regex, $phone)) {
    $phoner = "Invalid Phone Number";
     $phone = test_input($_POST["phone"]);
      $flag++;
```

```
if (empty($_POST["address"])) {
    $addressr = "Address is required";
} else {
  $address = test_input($_POST["address"]);
if (empty($_POST["gender"])) {
   $genderr = "Gender is required";
} else {
  $gender = test_input($_POST["gender"]);
if (empty($_POST["acc"])) {
    $accr = "Account Type is required";
} else {
  $acc = test_input($_POST["acc"]);
if (empty($_POST["aadhar"])) {
    $aadharr = "Aadhar ID is required";
} else {
  if (preg_match($aadhar_validation_regex, $aadhar)) {
     $aadharr = "Invalid Aadhar ID";
     $aadhar = test_input($_POST["aadhar"]);
     $flag++;
if (empty($_POST["pan"])) {
    $panr = "PAN ID is required";
} else {
  $pan = test_input($_POST["pan"]);
  $flag++;
```

```
if ($flag == 9) {
    $sql = "INSERT INTO customer values($id, '$name',$phone, '$gender', '$dob', '$address', '$aadhar', '$pan', '$password',$bid,$brid);";

if (mysqli_query($conn, $sql)) {
    $snedirect_url = "CREATION.php";
    $flag++;

    $_$ESSION['cus_id'] = $id;
} else {
    echo "Error: " . $sql . ": " . mysqli_error($conn);
}

$sql = "INSERT INTO account values($aid, '$state', '$acc', '$curdate',null,$brid,$id);";

if (mysqli_query($conn, $sql)) {
    $flag++;
} else {
    echo "Error: " . $sql . ": " . mysqli_error($conn);
}

mysqli_close($conn);
}
```