

FINANCIAL WEBSITE

A MINI-PROJECT REPORT

Submitted by

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CD19643 – WEB ESSENTIALS

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BONAFIDE CERTIFICATE

Certified that this project report “**FINANCIAL WEBSITE**” is the bonafide work of “**NAREN M B (211701036) SHUGAVANESHWAR R (211701051)**” who carried out the project work for the subject CD19643 – Web Essentials under my supervision.

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ABSTRACT:

The financial website project is a comprehensive online platform developed using HTML, CSS, and PHP technologies, facilitating efficient account management for a finance company. With a focus on accessibility and security, the website provides distinct login portals for administrators, users, and staff members, each tailored to their specific roles and responsibilities. Admin login enables authorized personnel to oversee and manage user accounts, transactions, and system settings, ensuring smooth operation and compliance with regulatory requirements. Users are granted access to their accounts, where they can perform various financial activities such as fund transfers, bill payments, and account inquiries. Staff members utilize their login credentials to handle customer inquiries, resolve issues, and provide assistance, enhancing customer satisfaction and retention. The project's primary objective is to streamline account access and management processes, offering a user-friendly interface and robust backend functionality. Leveraging PHP to interact with the database, the website ensures data integrity and security while facilitating seamless communication between users and the financial system. Through meticulous design and implementation, the project addresses key challenges in the finance industry, including data privacy, transaction security, and user experience. By prioritizing usability, accessibility, and security measures, the website enhances the overall efficiency and reliability of financial transactions, catering to the diverse needs of both individual users and institutional clients. In conclusion, the financial website project represents a significant milestone in modernizing account management practices within the finance sector. Its user-centric design, coupled with robust technical infrastructure, positions it as a valuable asset for the finance company, empowering users with convenient, secure, and seamless access to their financial accounts.

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CHAPTER 1

INTRODUCTION

In an era marked by digital transformation, the financial sector stands at the forefront of innovation, continually adapting to meet the evolving needs of customers and businesses alike. Recognizing the pivotal role of technology in enhancing accessibility, efficiency, and security, our project endeavors to introduce a comprehensive financial website tailored for a finance company. Harnessing the power of HTML, CSS, and PHP technologies, our project aims to revolutionize account management processes, offering a seamless and intuitive platform for users to access their financial accounts. With a user-centric approach, the website caters to diverse user roles, including administrators, users, and staff members, each entrusted with distinct functionalities to ensure smooth operation and optimal user experience. The primary objective of this project is to address the complexities and challenges inherent in traditional account management practices, where cumbersome processes and limited accessibility often hinder user engagement and satisfaction. By providing dedicated login portals for administrators, users, and staff, our website streamlines account access and empowers users with greater control over their financial transactions. Through meticulous design and implementation, we have endeavored to create a secure, user-friendly, and feature-rich platform that not only meets the immediate needs of our finance company but also lays the foundation for future scalability and innovation. Leveraging PHP to interact with the underlying database, the website ensures data integrity and confidentiality, safeguarding sensitive financial information against potential threats and vulnerabilities. As we delve deeper into the intricacies of our project, this report will offer a comprehensive overview of its objectives, functionalities, technical implementation, user experience, security measures, and future prospects. By examining each facet of the project in detail, we aim to provide stakeholders with valuable insights into the significance and impact of our efforts in modernizing account management practices within the finance sector. In conclusion, our financial website project represents a testament to our commitment to innovation, efficiency, and excellence in the realm of financial technology. By embracing the transformative potential of digital solutions, we endeavor to empower users with greater control, convenience, and confidence in managing their financial affairs, thereby advancing the mission of our finance company in serving as a trusted partner in financial prosperity.

CHAPTER 2

OBJECTIVE

2.1. Streamlined Account Access:

- Facilitate easy and intuitive access to financial accounts for administrators, users, and staff members.
- Minimize the time and effort required for users to log in and perform account-related activities.

2.2. Role-Based Functionality:

- Implement distinct login portals and functionalities for administrators, users, and staff members.
- Ensure that each user role has access only to the features and information relevant to their responsibilities.

2.3. Efficient Account Management:

- Enable administrators to manage user accounts, transactions, and system settings efficiently and effectively.
- Empower users to perform a range of financial activities, including fund transfers, bill payments, and account inquiries, with ease.

2.4. Enhanced User Experience:

- Design a user-friendly interface that promotes ease of navigation and accessibility for users of all technical proficiencies.
- Optimize the website's performance to deliver a seamless and responsive user experience across various devices and screen sizes.

2.5. Data Security and Confidentiality:

- Implement robust security measures to safeguard sensitive financial data against unauthorized access, breaches, and cyber threats.
- Ensure compliance with industry standards and regulations governing data privacy and security.

2.6. Technical Integration and Scalability:

- Utilize PHP to seamlessly connect the website with the underlying database, ensuring efficient data retrieval and manipulation.
- Design the website architecture to accommodate future expansion, scalability, and integration with other systems or platforms.

2.7. Customer Support and Satisfaction:

- Provide adequate support and assistance to users through staff login functionalities, including resolving inquiries, addressing issues, and providing guidance.
- Enhance customer satisfaction by delivering prompt and personalized support services tailored to individual user needs.

2.8. Business Objectives Alignment:

- Align the website's functionalities and features with the broader business objectives and goals of the finance company.
- Ensure that the website contributes to the company's mission of providing reliable, efficient, and customer-centric financial services.

CHAPTER 3

FUNCTIONAL OVERVIEW

3.1. Administrator:

- **User Management:** Administrators can create, modify, and delete user accounts. They have the authority to manage user permissions and roles within the system.
- **Transaction Monitoring:** Administrators can view and monitor user transactions, including fund transfers, bill payments, and account balances.
- **System Configuration:** Administrators have access to system settings and configurations, allowing them to customize features, security settings, and other parameters as needed.
- **Reporting and Analytics:** Administrators can generate reports and analyze financial data to track performance metrics, identify trends, and make informed decisions.

3.2. User:

- **Account Access:** Users can log in to their accounts securely using their credentials.
- **Account Management:** Users can perform various account management tasks, such as viewing account balances, updating personal information, and changing passwords.
- **Financial Transactions:** Users can initiate fund transfers between accounts, make bill payments to authorized merchants, and view transaction history.
- **Communication:** Users may have access to messaging or support features to communicate with customer service representatives or submit inquiries.

3.3. Staff:

- **Customer Support:** Staff members can access user accounts to provide assistance, answer inquiries, and resolve issues promptly.
- **Issue Resolution:** Staff members have tools to address user concerns, such as transaction disputes, account discrepancies, or technical issues.

- Documentation and Notes: Staff members can add notes or documentation to user accounts for reference and tracking purposes.

- User Verification: Staff members may have the authority to verify user identities or perform additional security checks as needed.

3.4. General Functions (for all user roles):

- Security Features: All users benefit from security measures such as encrypted communication, password protection, and multi-factor authentication to safeguard their accounts and data.

- Notifications: Users receive notifications for important account activities, such as successful transactions, password changes, or security alerts.

- Accessibility: The website is designed to be accessible to users with disabilities, complying with accessibility standards and guidelines.

- Help and Support: Users can access help resources, FAQs, or support channels to obtain assistance or guidance as needed.

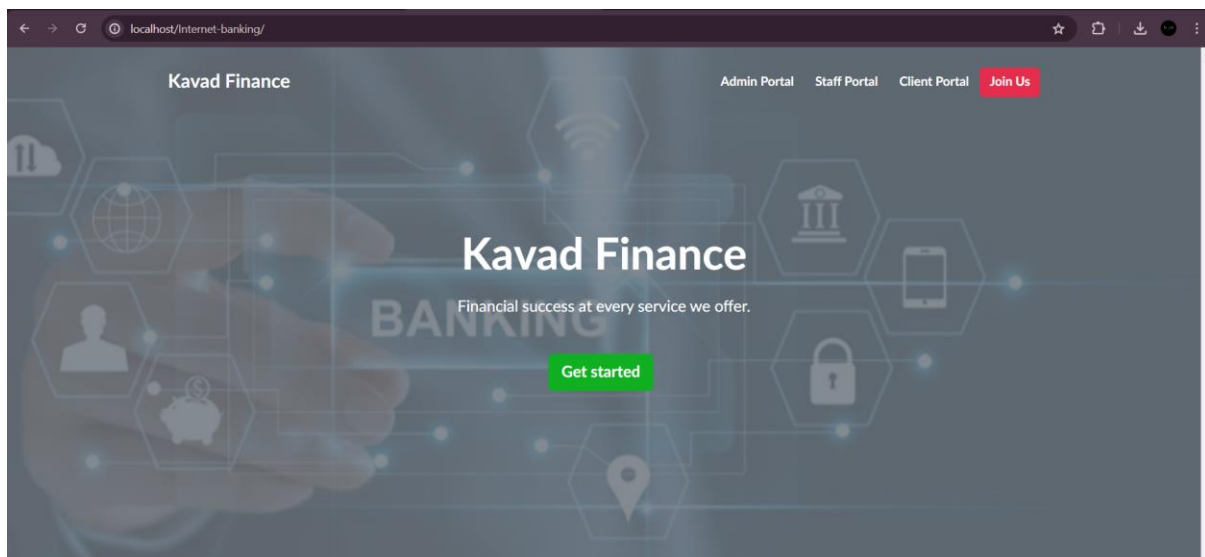


Fig 3.1.1 Login page for different accounts.

3.5 Features of the online banking system in PHP:

- Registration system
- Login and Logout system
- Admin panel
- Staff panel
- Client panel
- Deposit Amount
- Withdraw Amount
- Transfer amount
- Check account balance
- Print account statement
- Platform settings
- Notification system
- Reports on each account
- Add staffs
- Manage staffs
- Add clients
- Manage registered clients
- Multiple accounts by users
- Transaction history
- Script Details

CHAPTER 4

TECHNICAL IMPLEMENTATION

4.1. Frontend Development:

HTML/CSS: The frontend of the website is built using HTML for structuring the content and CSS for styling and layout design.

Responsive Design: The website is designed to be responsive, ensuring optimal viewing and interaction experience across a wide range of devices and screen sizes.

User Interface (UI): The UI is designed with a focus on usability and accessibility, featuring intuitive navigation, clear call-to-action buttons, and user-friendly forms.

4.2. Backend Development:

PHP: The backend of the website is powered by PHP, a server-side scripting language, which handles dynamic content generation and interacts with the database.

Database Connectivity: PHP is used to establish connections with the database, allowing for data retrieval, manipulation, and storage.

Object-Oriented Programming (OOP): PHP is structured using object-oriented programming principles, enhancing code modularity, reusability, and maintainability.

Database Management System (DBMS): MySQL or another relational database management system (DBMS) is utilized to store and manage user data, account information, transaction records, and system configurations.

4.3. User Authentication and Authorization:

User Authentication: The website employs secure authentication mechanisms, such as hashing and salting, to authenticate users and verify their identity during login.

Session Management: PHP session management techniques are utilized to maintain user sessions and track user activity throughout their session duration.

Role-Based Access Control (RBAC): Role-based access control is implemented to define and enforce user roles and permissions, ensuring that users only have access to functionalities relevant to their role.

4.4 Step by step to run the script (installation)

A server is required to run this project. We will be using XAMPP.

For XAMPP:

The script is provided below, click on download to start downloading the script.

Go to your download folder in your Pc and extract the source code folder.

Copy the folder you extracted and paste it in (for XAMPP xampp/htdocs, for WAMPP wampp/www, for LAMPP var/www/html) root directory in your pc.

Open your XAMPP Control panel and start Apache and MYSQL.

Creating a database:

Open your browser

Go to this path “<http://localhost/phpmyadmin/>”

Click on New on the left side of the screen.

Create a database named “internetbanking_db”.

Click on the import tab.

Click on browse file and select “internetbanking_db.sql” from the DATABASE folder we extracted.

Click on Go.

After creating a database:

Open a new tab on your browser and go to the path. E.g. “http://localhost/Internet-banking/”
OR http://localhost/[The project folder]/. The home page will be displayed; from there you can access different portals which are on the website.

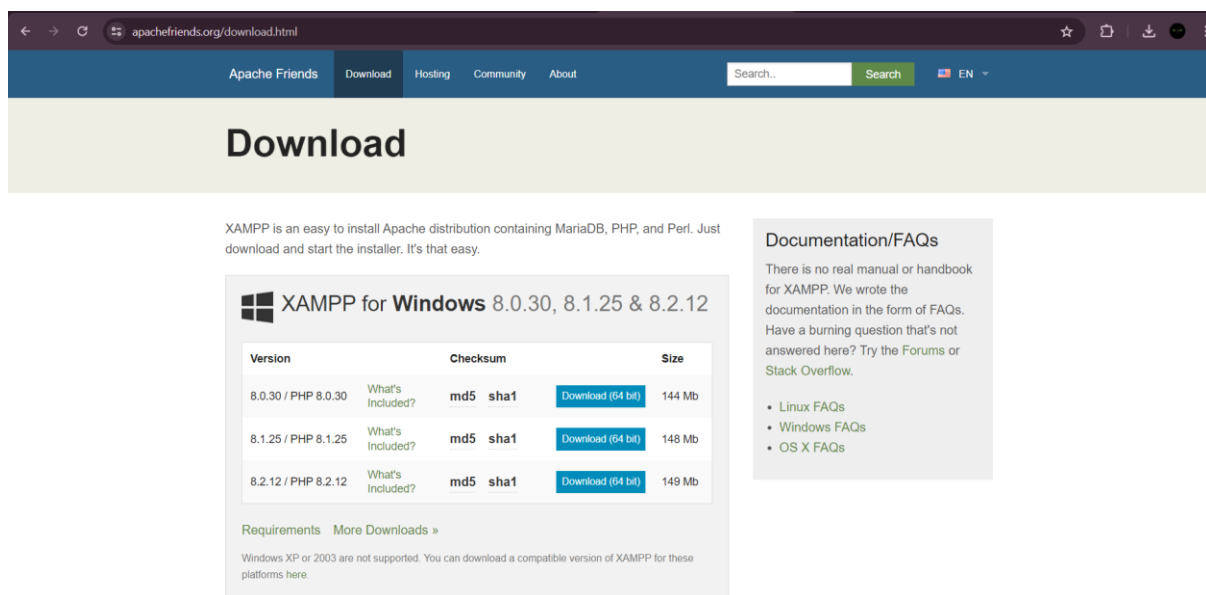


Fig 4.4.1 Website for downloading XAMPP

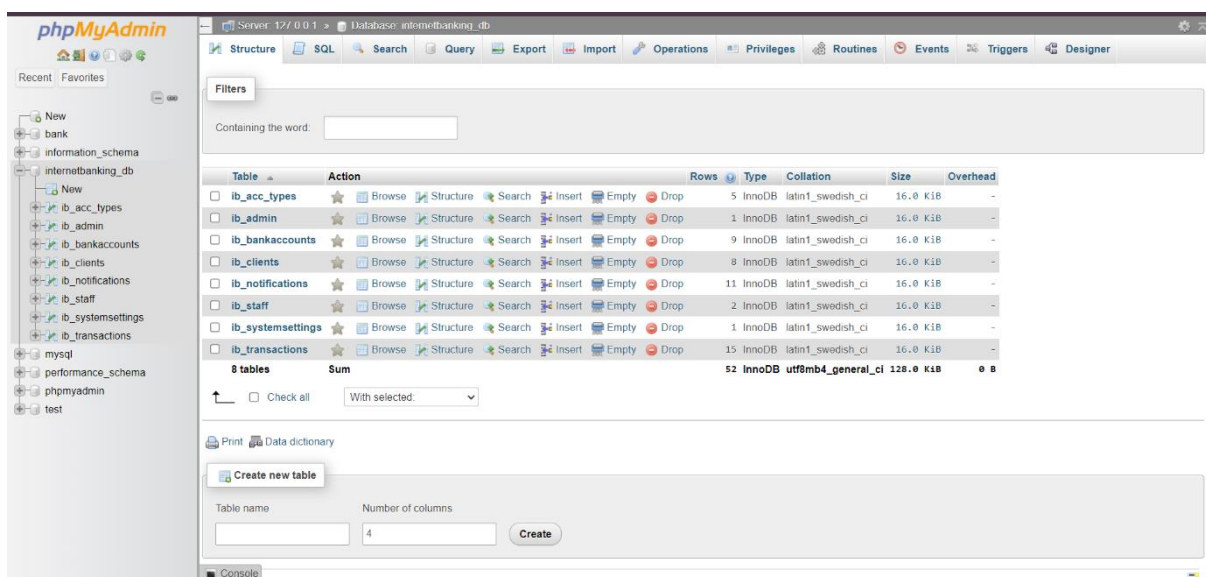


Fig 4.4.2 Loading the database into the PHP admin portal

4.5 WORKFLOW:

Upon accessing the financial website via a web browser, users are directed to the login page where they input their credentials, including username and password. The website then verifies the entered credentials for authentication and identifies the user's role based on the provided information, distinguishing between administrators, regular users, and staff members. Following successful authentication, users are redirected to their respective dashboards tailored to their roles. Administrators gain access to a comprehensive set of administrative tools encompassing user management, transaction monitoring, and reporting functionalities. Regular users are equipped with account management features enabling tasks such as viewing balances, initiating transactions, and updating personal information. Upon completing their tasks or when exiting the website, users log out of the system, terminating their sessions and clearing any session data. With the logout process concluded, users conclude their sessions, either exiting the website or continuing with other activities as needed.

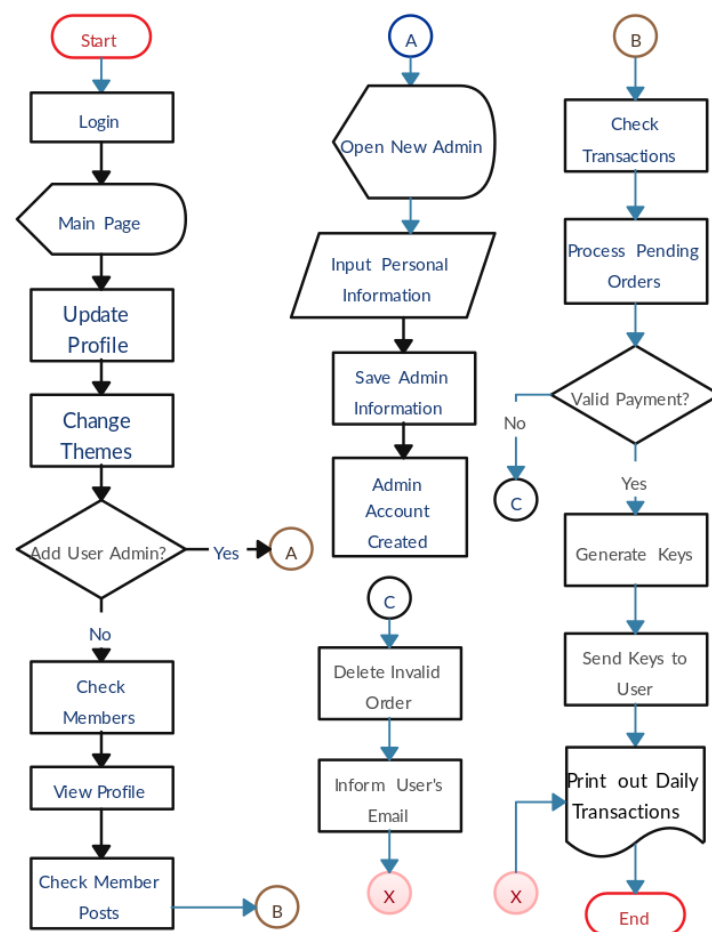


Fig 4.5.1 Workflow Diagram

4.6 USER INTERFACE:

The user interface of our financial website is designed with a primary focus on usability, accessibility, and intuitive navigation to enhance the overall user experience. The UI features a clean and modern design, with a visually appealing layout that facilitates easy comprehension and interaction for users of all levels of technical proficiency.

Key Features of the User Interface:

1. **Responsive Design:** The website is optimized to adapt seamlessly to various screen sizes and devices, ensuring consistent usability and accessibility across desktops, laptops, tablets, and mobile phones.
2. **Intuitive Navigation:** Clear and logical navigation menus, buttons, and links are strategically placed throughout the website to guide users efficiently to their desired destinations and functionalities.
3. **User-Friendly Forms:** Input forms for login, account registration, and other interactions are designed to be user-friendly, with clear labels, instructions, and error messages to assist users in completing tasks accurately and efficiently.
4. **Visual Consistency:** Consistent use of colors, fonts, icons, and imagery throughout the website maintains visual coherence and reinforces brand identity, contributing to a cohesive and professional user experience.
5. **Accessibility Features:** Accessibility considerations are incorporated into the design to ensure that all users, including those with disabilities, can access and interact with the website effectively. This includes support for keyboard navigation, screen reader compatibility, and adherence to accessibility standards and guidelines.
6. **Interactive Elements:** Interactive elements such as buttons, sliders, dropdown menus, and modal dialogs are implemented judiciously to enhance user engagement and facilitate seamless interaction with the website's functionalities.
7. **Feedback and Validation:** Real-time feedback and validation mechanisms are integrated into form fields and user actions to provide users with immediate feedback on their inputs, helping to prevent errors and guide them through the user journey smoothly.

CHAPTER 6

OUTPUT



Fig 6.1 Admin page dashboard

Transaction Code	Account No.	Type	Amount	Acc. Owner	Timestamp
hrfGpMm0bTUVRPOQkoyK	421873905	Transfer	\$ 19	Christine Moore	28-Jun-2023 09:06:30
FMyw7YGtnpQPzXtuWmR	357146928	Deposit	\$ 6800	Harry Den	16-Feb-2023 10:02:09
9jQsTd0YV6tfqCZckGW	724310586	Transfer	\$ 100	John Doe	16-Feb-2023 10:02:38
kQBMaoO42sAeqZtS9Ifz	719360482	Withdrawal	\$ 120	Liam Moore	16-Feb-2023 10:02:14
P5urU12mcnObbG0NMVHX	719360482	Deposit	\$ 600	Liam Moore	16-Feb-2023 10:02:57
m2OIVZgkQwTPp5VHS9WN	724310586	Deposit	\$ 8550	John Doe	16-Feb-2023 10:02:49
J7cWITO4hPofHFaAlvx1	719360482	Transfer	\$ 1256	Liam Moore	16-Feb-2023 10:02:15
GCNrZ7n3oJyM62SzpKWs	719360482	Withdrawal	\$ 777	Liam Moore	16-Feb-2023 09:02:38
1S6wRtU3zP0lpgCYyTGF	719360482	Deposit	\$ 5650	Liam Moore	16-Feb-2023 09:02:14
wXQyVgizubsp6UnTNfL4	287359614	Deposit	\$ 2658	Amanda Stiefel	16-Feb-2023 09:02:22
FFySvxkq7T1IHs06p2Qa	421873905	Transfer	\$ 665	Christine Moore	15-Feb-2023 10:02:45
RG11EohqrgS3K4MUAHaf	357146928	Deposit	\$ 2660	Harry Den	10-Jan-2023 09:01:21

Fig 6.2 Admin accessing the transaction, staff and clients.

Shugavaneshwar

- Dashboard
- Account
- Clients
- Accounts
- Finances
- Advanced Modules
- Transactions History
- Financial Reports
- Log Out

iBanking Account Types

[Dashboard](#) / [iBank Account Types](#) / [Manage Clients](#)

Select on any action options to manage your account types

Show 10 entries

Search:

#	Name	Rate	Code	Action
1	Current account	20%	ACC-CAT-408QW	<div>Manage</div> <div>Delete</div>
2	Recurring deposit	15%	ACC-CAT-VBQLE	<div>Manage</div> <div>Delete</div>
3	Fixed Deposit Account	40%	ACC-CAT-A86GO	<div>Manage</div> <div>Delete</div>
4	Savings	20%	ACC-CAT-4EZFO	<div>Manage</div> <div>Delete</div>
5	Retirement	10%	ACC-CAT-1QYDV	<div>Manage</div> <div>Delete</div>

Showing 1 to 5 of 5 entries

Previous

1

Next

Fig 6.3 Staff managing the account types.

Shugavaneshwar

- Dashboard
- Account
- Clients
- Accounts
- Finances
- Advanced Modules
- Transactions History
- Financial Reports
- Log Out

Deposits

[Dashboard](#) / [iBank Finances](#) / [Deposits](#)

Select on any account to deposit money

Show 10 entries

Search:

#	Name	Account No.	Rate	Acc. Type	Acc. Owner	Action
1	Christine Moore	421873905	20%	Current account	Christine Moore	Deposit Money
2	Harry M Den	357146928	20%	Savings	Harry Den	Deposit Money
3	Amanda Stiefel	287359614	20%	Savings	Amanda Stiefel	Deposit Money
4	Johnnie Reyes	705239816	10%	Retirement	Johnnie J. Reyes	Deposit Money
5	Liam M. Moore	719360482	20%	Savings	Liam Moore	Deposit Money
6	Johnny M. Doen	724310586	40%	Fixed Deposit Account	John Doe	Deposit Money
7	man	172053869	20%	Savings	man	Deposit Money
8	abv	187534092	%	Select Any Account types	Liam victor	Deposit Money

Fig 6.4 Staff can deposit money through the clients

KF Kavad Finance

Naren M.B

Dashboard

Account

iBank Accounts

Finances

Advanced Modules

Transactions History

Financial Reports

Log Out

Naren M.B Profile

Dashboard / Manage / Naren M.B

Naren M.B

Client @iBanking

ID No.: 12345

Email: admin@mail.com

Phone: 9025770851

ClientNo: iBank-CLIENT-5276

Update Profile

Change Password

NameNaren M.B

Emailadmin@mail.com

Contact9025770851

National ID Number12345

AddressChennai

Profile PictureChoose fileBrowse

Update Account

Fig 6.5 Client side portal

KF Kavad Finance

Naren M.B

Dashboard

Account

iBank Accounts

Finances

Advanced Modules

Transactions History

Financial Reports

Log Out

My Accounts

Dashboard / iBank Accounts / My Accounts

iBanking Accounts

Show 10 entriesSearch:

#	Name	Account No.	Rate	Acc. Type	Acc. Owner	Date Opened
1	Naren	902675348	20%	Savings	Naren M.B	11-May-2024

Showing 1 to 1 of 1 entriesPrevious1Next

Fig 6.6 Client side account management.

CHAPTER 7

CONCLUSION

In conclusion, the development of our financial website represents a significant milestone in our mission to modernize account management practices within the finance sector. Through the utilization of HTML, CSS, PHP, and other cutting-edge technologies, we have successfully created a robust and user-friendly platform that empowers users with convenient, secure, and seamless access to their financial accounts. The user-centric design of our website, coupled with intuitive navigation and accessibility features, ensures that users of all levels of technical proficiency can interact with ease and confidence. By providing distinct login portals and role-specific functionalities for administrators, users, and staff members, we have streamlined account access and management processes, enhancing efficiency and productivity for both users and finance company personnel. Furthermore, our commitment to security is reflected in the implementation of robust security measures, including encryption techniques, authentication mechanisms, and adherence to industry standards and regulations. These measures ensure the confidentiality, integrity, and security of user data, safeguarding against potential threats and vulnerabilities. Looking ahead, we recognize the importance of continuous improvement and innovation to meet the evolving needs and expectations of users and stakeholders. We remain committed to soliciting user feedback, evaluating emerging technologies, and implementing enhancements to further enhance the user experience, security, and functionality of our financial website.

In conclusion, our financial website project exemplifies our dedication to excellence, innovation, and customer satisfaction in the realm of financial technology. We are confident that our website will serve as a valuable asset for our finance company, empowering users with greater control, convenience, and confidence in managing their financial affairs.

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