

FIFTH SEMESTER FINAL PROJECT REPORT
WEB TECHNOLOGIES LAB (CS-316L)
FALL SESSION, YEAR 2025



SIR SYED UNIVERSITY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

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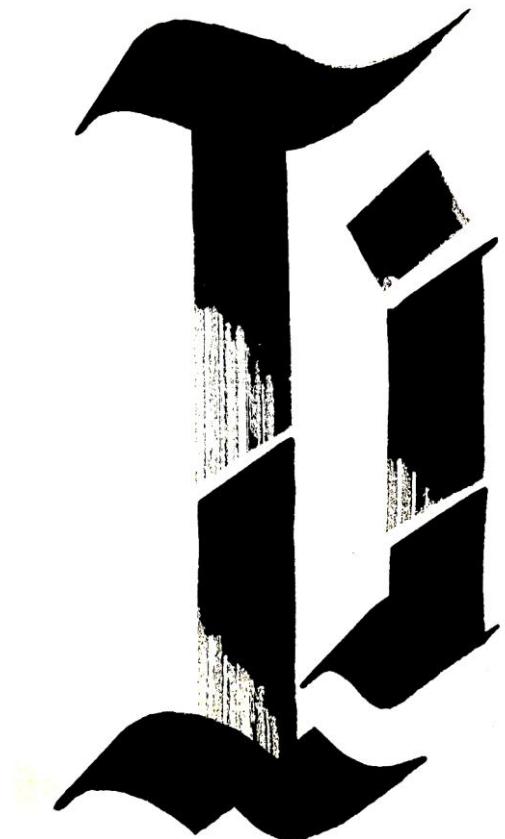
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INVESTORS INN

An online investment platform

INTRODUCTION

Investor Inn is a web-based platform designed to manage and monitor forex investments efficiently. This system allows users to track live forex rates, register investments, analyze returns, and make informed decisions. The application uses MySQL for data storage, PHP for server-side scripting, HTML/CSS for frontend design, and supports a structured, secure environment for financial data management.

OBJECTIVES

- To build a dynamic and secure web application for forex investment tracking.
- To manage user portfolios and forex market data in a relational database.
- To implement CRUD operations for user investments.
- To visualize forex trends and investment performance.
- To ensure data integrity, authentication, and protection against common web vulnerabilities.

PROGRAM FLOW

1. User Registration/Login
2. Dashboard View
 - Live Forex Rates
 - Personal Portfolio Summary
3. Investment Management
 - Add/Edit/Delete Investment Entries
4. Reports and Analysis
 - Returns Over Time
 - Currency Pair Performance

SYSTEM DESIGN

Front-end Design:

The frontend of "Investor Inn" is built using HTML, CSS, and optionally JavaScript. It ensures responsive design, user-friendly navigation, and interactive features to guide users through the application smoothly.

PAGE FEATURES

Login Page:

1. Input fields for username/email password.
2. "Forgot Password?" link.
3. Secure login authentication via PHP and MySQL.
4. Redirects to dashboard on successful login authentication.

Registration Page:

- o User sign-up form including username, email, password, and confirmation.
- o Server-side validation and user creation in the user's table.
- o Confirmation message and redirection to login page.

Homepage Navigation Bar:

- o Menu items: Home, Stocks, Indexes, Forex, About Us
- o A Logout button styled with gradient and hover effects.

Main Branding Area:

- o Central logo with the brand name "INVESTORS INN".
- o Consistent color scheme using deep blue and white for a trustworthy financial theme.

Content Cards:

-  Stocks: Brief description of stock investment benefits.
-  Forex: Overview of forex trading and its opportunities.
-  Indexes: Information about market indexes like S&P 500 or Dow Jones.

About Us Page:

- Details about the Investor Inn team or vision.
- Explains platform purpose, security policies, and technology stack used.
- Styled layout using CSS grid/flex with icons or team section (optional).

Popular & Trending Forex:

- Sections on the homepage (or individual pages).
- Tables or card-style components for visual engagement.

User Dashboard (After login):

- Summary of user investments.
- Live forex rates (optional via external API or mock data).
- Options to Add/Edit/Delete investments.

Payment Page:

- For mock payments or subscription models.
- HTML form with basic payment info (non-functional in current version).
- Could use placeholder or link to secure payment gateway in future.

Back-end Design:

- PHP: Handles logic, form processing, data validation, and communication with the database.

IMPLEMENTATION

- User authentication with hashed passwords using `password_hash()`.
- SQL queries for inserting, updating, and retrieving user investments.
- PHP-based session management.
- Forms for user input, with validation checks.
- Dynamic tables for displaying investment data.
- Currency rates pulled or manual update form (in development/testing phase).

SECURITY MEASURES

- Passwords stored using PHP's `password_hash()` and verified using `password_verify()`.
- SQL Injection prevention through prepared statements.
- Session management to avoid unauthorized access.
- Input validation on both client and server sides.
- HTTPS recommended deployment to encrypt data in transit.

TESTING AND RESULTS

- Functional Testing: All modules tested using manual input scenarios to ensure CRUD operations function correctly.
- Usability Testing: Conducted with a sample group for interface clarity and navigation.
- Security Testing: Basic testing for SQL injection and session hijacking.

Results:

- Successful user account creation, login/logout.
- Accurate investment tracking and real-time data update.
- Responsive and user-friendly UI.

CONCLUSION

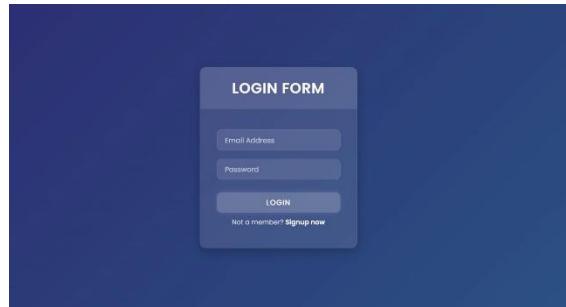
The *Investor Inn* project successfully demonstrates the design and implementation of a secure, dynamic, and user-friendly web-based platform for forex investment tracking. By integrating PHP, MySQL, and HTML/CSS, the system effectively manages user authentication, investment records, and portfolio analysis within a structured relational database environment. The application meets its core objectives by providing reliable CRUD functionality, clear data visualization, and an intuitive dashboard that supports informed investment decisions.

The implementation of essential security measures—such as password hashing, prepared SQL statements, and session management—ensures data integrity and protection against common web vulnerabilities. Testing results confirm that the system performs as expected, with accurate investment tracking, smooth navigation, and responsive design across different user interactions.

Overall, *Investor Inn* serves as a strong foundation for a real-world financial application. With future enhancements such as real-time API-based forex data, advanced analytics, and secure payment gateway integration, the platform can be further scaled into a comprehensive investment management solution.

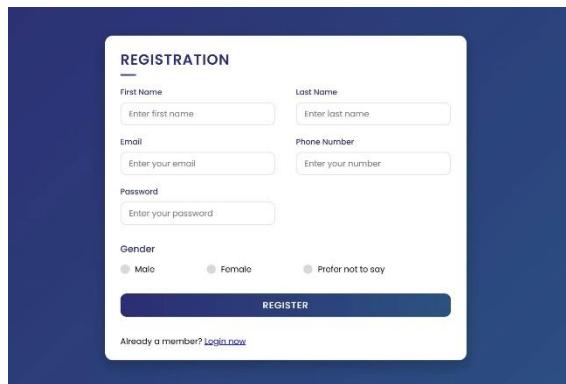
GRAPHICAL REPRESENTATION

Login Page:



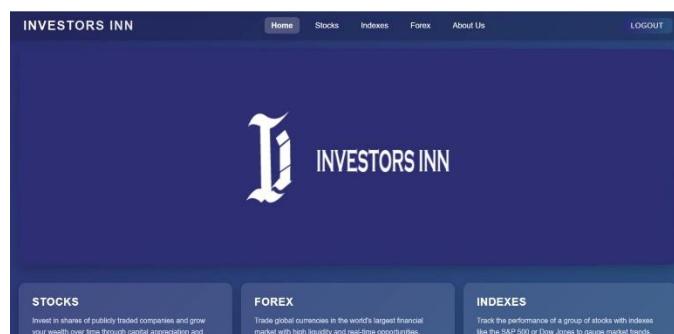
A screenshot of a login page with a dark blue background. In the center, there is a light blue rounded rectangle containing a "LOGIN FORM". The form includes fields for "Email Address" and "Password", a "LOGIN" button, and a link "Not a member? [Signup now](#)".

Registration Page:



A screenshot of a registration page with a dark blue background. It features a white rounded rectangle titled "REGISTRATION". Inside, there are fields for "First Name" and "Last Name", "Email" and "Phone Number", and "Password". Below these are gender options ("Male", "Female", "Prefer not to say") and a "REGISTER" button. At the bottom, it says "Already a member? [Login now](#)".

Dashboard:



A screenshot of a dashboard for "INVESTORS INN". The top navigation bar includes links for "Home", "Stocks", "Indexes", "Forex", "About Us", and "LOGOUT". The main header features a stylized logo and the text "INVESTORS INN". Below the header, there are three main categories: "STOCKS", "FOREX", and "INDEXES". Each category has a brief description and a small image.

- STOCKS**: Invest in shares of publicly traded companies and grow your wealth over time through capital appreciation and
- FOREX**: Trade global currencies in the world's largest financial market with high liquidity and real-time opportunities.
- INDEXES**: Track the performance of a group of stocks with indexes like the S&P 500 or Dow Jones to gauge market trends.

Stocks:

The screenshot shows the 'Featured Stocks' section of the Investors Inn website. It features three cards with company logos and details:

- Apple Inc. (AAPL)**: \$175.34. Description: World's most valuable technology company, known for iPhone, Mac, and services. Buttons: Buy (green), Sell (red).
- Microsoft Corp. (MSFT)**: \$338.45. Description: Leading software and cloud computing company. Buttons: Buy (green), Sell (red).
- Tesla Inc. (TSLA)**: \$248.50. Description: Electric vehicle and clean energy company. Buttons: Buy (green), Sell (red).

Forex:

The screenshot shows the 'Forex Trading' section of the Investors Inn website. It features three currency pairs with flags and details:

- EUR/USD**: 1.0945. Description: Euro vs US Dollar - The world's most traded currency pair. Buttons: Buy (green), Sell (red).
- GBP/USD**: 1.2734. Description: British Pound vs US Dollar - Also known as 'Cable'. Buttons: Buy (green), Sell (red).
- USD/JPY**: 142.34. Description: US Dollar vs Japanese Yen - Major pair in Asian markets. Buttons: Buy (green), Sell (red).

Indices

The screenshot shows the 'Market Indexes' section of the Investors Inn website. It features three major market benchmarks with logos and details:

- S&P 500**: 4,783.45. Description: Tracks 500 large US companies, widely considered the best gauge of large-cap US stocks. Buttons: Buy (green), Sell (red).
- Dow Jones Industrial Average**: 37,654.32. Description: Tracks 30 prominent companies listed on US stock exchanges. Buttons: Buy (green), Sell (red).
- NASDAQ Composite**: 15,245.67. Description: Includes all stocks listed on the NASDAQ stock market. Buttons: Buy (green), Sell (red).

DATABASE DESIGN

Bank Details:

#	Name	Type	Collation	Attributes	Null	Default	Comments
1	id	int(11)		No	None		
2	transaction_id	int(11)		No	None		
3	bank_name	varchar(255)	utf8mb4_general_ci	No	None		
4	account_number	varchar(50)	utf8mb4_general_ci	No	None		
5	ifsc_code	varchar(20)	utf8mb4_general_ci	No	None		
6	account_holder_name	varchar(255)	utf8mb4_general_ci	No	None		
7	status	varchar(20)	utf8mb4_general_ci	No	None		

Payment Details:

#	Name	Type	Collation	Attributes	Null	Default	Comments
1	id	int(11)		No	None		
2	transaction_id	int(11)		Yes	NULL		
3	payment_method	enum('credit_card', 'debit_card', 'bank_transfer')	utf8mb4_general_ci	Yes	NULL		
4	card_number	varchar(255)	utf8mb4_general_ci	Yes	NULL		
5	expiry_date	int(7)		Yes	NULL		
6	cvv	varchar(3)	utf8mb4_general_ci	Yes	NULL		
7	status	enum('pending', 'completed', 'failed')	utf8mb4_general_ci	Yes	NULL		

Registration:

#	Name	Type	Collation	Attributes	Null	Default	Comments
1	email	varchar(255)	utf8mb4_general_ci	No	None		
2	firstName	varchar(255)	utf8mb4_general_ci	Yes	NULL		
3	lastName	varchar(255)	utf8mb4_general_ci	Yes	NULL		
4	number	int(20)		Yes	NULL		
5	password	varchar(255)	utf8mb4_general_ci	Yes	NULL		
6	gender	varchar(10)	utf8mb4_general_ci	Yes	NULL		

Transactions:

#	Name	Type	Collation	Attributes	Null	Default	Comments
1	id	int(11)		No	None		
2	user_email	varchar(255)	utf8mb4_general_ci	No	None		
3	transaction_type	varchar(10)	utf8mb4_general_ci	No	None		
4	item_type	varchar(50)	utf8mb4_general_ci	No	None		
5	item_symbol	varchar(50)	utf8mb4_general_ci	No	None		
6	quantity	decimal(10,2)		No	None		
7	price_per_unit	decimal(10,2)		No	None		
8	total_amount	decimal(10,2)		No	None		
9	status	varchar(20)	utf8mb4_general_ci	No	None		
10	transaction_date	timestamp		No	current_timestamp()		

User Holdings:

#	Name	Type	Collation	Attributes	Null	Default	Comments
1	id 	int(11)		No	None		
2	user_email	varchar(255)	utf8mb4_general_ci	Yes	NULL		
3	item_type	enum('stock', 'forex', 'index')	utf8mb4_general_ci	Yes	NULL		
4	item_symbol	varchar(20)	utf8mb4_general_ci	Yes	NULL		
5	quantity	decimal(10,2)		Yes	NULL		
6	purchase_price	decimal(10,2)		Yes	NULL		

Technology Stack:



HTML, CSS & JS



PHP Programming Language



MySQL



XAMPP



VsCode