

BUBT Gamers Zone

(BUBTGZ)



Department of Computer Science & Engineering
Bangladesh University of Business & Technology (BUBT)
Dhaka-1216

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BUBT Gamers Zone

(BUBTGZ)

A Project

submitted to the department of Computer Science and Engineering

in partial fulfillment of the requirements

for the degree of

Bachelor of Science in Computer Science & Engineering

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Acknowledgement

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Abstract

The BUBT Gamers Zone is an online community where gamers from around the BUBT can connect, share their experiences, and engage in meaningful discussions about their favorite games and genres. This project report aims to explore the various features and functions of gaming forums, including user profiles, discussion threads, replies and comments, moderation, search functions, gaming news and reviews, and private messaging. By examining these features and their role in the gaming community, this report seeks to provide a comprehensive understanding of the gaming zone and its importance in modern entertainment culture. Through an analysis of existing gaming forums, this report will also highlight some of the key trends and challenges facing the gaming industry today, including the rise of mobile gaming, the impact of social media on gaming communities, and the role of gaming in promoting social inclusion and diversity. Overall, this project report will offer insights into the evolving landscape of the gaming zone and its potential to shape the future of gaming culture.

Declaration

We hereby declare that the Project on **BUBT Gamers Zone** studies on Software Engineering Lab submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology (BUBT) is our own work and that it contains no material which has been accepted for the award to the candidate(s) of any other degree or diploma, except where due reference is made in the text of the project. To the best of our knowledge, it contains no materials previously published or written by any other person except where due reference is made in the project.

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Dedication

*Dedicated to our parents, teachers, friends and who loved us for all their love
and inspiration.*

Certificate

This is to certify that Copyright by Tunazzinur Rahman Kabbo (ID: 19202103268), Md. Hasan Nayem (ID: 19202103274), Afrina Akter Mim (ID: 19202103310) and Sagor Kumar Saha (ID: 19202103423) were belong to the department of Computer Science and Engineering, have completed their Project on BUBT Gamers Zone satisfactorily in partial fulfillment for the requirement of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology in the year 2022.

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Acronyms List

DB = Database

PK = Primary Key

FK = Foreign Key

MD5 = Message-Digest Algorithm

VPNs = Virtual Private Network

URL = Uniform Resource Locator

CPU = Central Processing Unit

GPU = Graphics Processing Unit

Contents

<i>Acknowledgement</i>	i
<i>Abstract</i>	ii
<i>Declaration</i>	iii
<i>Copyright</i>	iv
<i>Dedication</i>	v
<i>Certificate</i>	vi
<i>Acronyms List</i>	viii
<i>List of Figures</i>	viii
<i>List of Tables</i>	viii
1 Introduction	1
1.1 Introduction	1
1.2 Problem Statement	1
1.3 Motivation	2
1.4 Objectives	3
1.5 Contributions	3
2 Existing System	5
2.1 Introduction	5

2.2	Existing System	5
2.3	Existing Literature	6
2.4	Analysis of Existing System	6
2.5	Conclusion	6
3	Proposed Model	7
3.1	Introduction	7
3.2	Feasibility Study	7
3.2.1	Operational Feasibility	7
3.2.2	Technical Feasibility	7
3.2.3	Economic Feasibility	8
3.3	Requirement Analysis	8
3.3.1	Functional Requirements:	8
3.3.2	Non-functional Requirements:	8
3.4	System Design	9
3.4.1	ER Diagram	9
3.4.2	Data Flow Diagram	10
3.4.3	Database Design	11
3.5	Implementation	11
3.6	Conclusions	12
4	Experimental Results	13
4.1	Introduction	13
4.2	Result Analysis	13
4.3	Applications	14
4.4	Conclusions	14
5	User Manual	15
5.1	Introduction	15
5.2	System Requirements	15
5.2.1	Hardware Requirements	15
5.2.2	Software Requirements	16

5.3	User Interface	16
5.3.1	General Pages	16
5.3.2	Admin Corner	18
5.3.3	User Corner	21
5.4	Conclusions	24
6	Conclusion	25
6.1	Conclusion	25
6.2	Future Scope In This Sector	25

List of Figures

3.1	Entity Relationship Diagram	9
3.2	Data Flow Diagram	10
3.3	Database Diagram	11
5.1	Hardware Devices	15
5.2	Web Browsers	16
5.3	Home page	16
5.4	About Us	17
5.5	Sign Up	17
5.6	Admin login	18
5.7	Admin Dashboard	18
5.8	User Management	19
5.9	Admin News Management	19
5.10	Buyable game adding form	20
5.11	Chatroom management	20
5.12	User Login	21
5.13	User Dashboard	21
5.14	Play Games	22
5.15	Buying Games	22
5.16	Chatroom	23
5.17	News showing	23

Chapter 1

Introduction

1.1 Introduction

BUBT Gamers Zone, a dedicated online community for gamers and game enthusiasts. It's aims to provide an overview of the forum, including its objectives, features, strengths, limitations, and potential areas for improvement. The report is structured into several sections, beginning with an introduction to the forum and its purpose. BUBT Gamers Zone provides a platform for gamers to connect with each other, share their experiences and knowledge, and stay up-to-date with the latest news and trends in the gaming world. The forum serves as a hub for discussion and information sharing about all aspects of gaming, including new releases, gaming platforms, gaming news, and trends. The report will examine the forum's objectives, including its efforts to build a community of gamers, provide a space for discussion and information sharing, promote a positive and inclusive gaming culture, provide opportunities for networking and collaboration, and keep members informed about the latest gaming news and trends.

1.2 Problem Statement

The gaming industry is growing rapidly, with millions of gamers worldwide playing and discussing their favorite games online. However, despite the availability of several online gaming communities, many gamers still struggle to find a platform where they can connect with like-minded individuals and engage in meaningful discussions about their favorite games.

The problem is that the existing gaming forums often lack active participation, relevant content, and a positive and inclusive environment. Many gaming forums have become outdated and fail to offer the features and functionality that modern gamers demand. Moreover, the gaming community is diverse, with a wide range of interests and preferences, making it challenging to create a gaming forum that caters to everyone's needs.

Therefore, the goal of this project is to create a new and innovative gaming forum that addresses these challenges and provides a platform for gamers to connect, engage in meaningful discussions, and learn from one another. The project aims to create a community-driven gaming forum that is modern, user-friendly, and offers a wide range of features and functionality to meet the diverse needs of the gaming community. By addressing these challenges, the project seeks to create a valuable resource for gamers worldwide and provide a platform for gaming enthusiasts to connect, learn, and share their experiences.

1.3 Motivation

The motivation behind this gaming forum project is to provide a platform for gamers to connect and engage in meaningful discussions about their favorite games. The gaming industry is growing at an unprecedented rate, and there is a vast community of gamers worldwide who are passionate about gaming and eager to connect with like-minded individuals. However, the existing gaming forums often fail to provide a positive and inclusive environment for gamers to engage in discussions, share their experiences, and learn from one another.

Therefore, the motivation behind this project is to create a new and innovative gaming forum that addresses these challenges and provides a platform for gamers to connect, share their experiences, and learn from one another. The project seeks to create a community-driven gaming forum that is modern, user-friendly, and offers a wide range of features and functionality to meet the diverse needs of the gaming community.

By creating this gaming forum, we aim to provide a valuable resource for gamers worldwide and foster a sense of community and camaraderie among gaming enthusiasts. We believe that a positive and inclusive gaming forum can have a significant impact on the gaming community and provide a platform for gamers to connect, learn, and share their experiences.

1.4 Objectives

The objectives of this gaming forum project are:

- To create a modern, user-friendly gaming forum that caters to the diverse needs of the gaming community.
- To provide a platform for gamers to connect, engage in discussions, and share their experiences about their favorite games.
- To foster a positive and inclusive environment on the gaming forum that encourages participation and respectful discourse.
- To create a community-driven gaming forum that is continuously updated with new features and functionality based on user feedback.
- To promote the gaming forum and attract a diverse range of users to foster a vibrant and active community.
- To ensure the gaming forum is secure and protects the privacy of its users.
- To create and enforce guidelines for forum moderators to ensure that discussions remain on-topic and respectful.
- To provide resources and information to gamers to help them improve their gaming skills and knowledge.

1.5 Contributions

- Help moderate the forum: As a moderator, you can help keep the forum organized and free of spam, trolling, and other disruptive behavior. You can also help ensure that forum users are following the rules and guidelines.
- Share your knowledge: If you are an experienced gamer, you can share your knowledge with others on the forum. You can create helpful guides, answer questions, and participate in discussions about different games.

-
- Report bugs and suggest improvements: If you notice any bugs or issues with the forum, report them to the project team so they can be fixed. You can also suggest improvements and new features that would make the forum more useful and user-friendly.
 - Contribute to open-source gaming projects: If you have programming or game design skills, you can contribute to open-source gaming projects. This can include developing new features, fixing bugs, or providing feedback on existing projects.
 - Engage with the community: Finally, it's important to engage with the community on the gaming forum project. Participate in discussions, share your opinions, and connect with other gamers who share your interests. By being an active member of the community, you can help make the forum a more vibrant and welcoming place for everyone.

Chapter 2

Existing System

2.1 Introduction

The existing system is an gamers zone has become a significant part of the gaming industry and has revolutionized the way gamers interact and enjoy their passion for gaming.

2.2 Existing System

Here are some features :

- User profiles: Users can create a profile that displays their username, avatar, and other information.
- Discussion boards: Forum users can create new discussion threads and reply to existing threads. These threads are typically organized by topic, such as specific games or gaming platforms.
- Private messaging: Users can send private messages to each other to communicate one-on-one.
- Moderation tools: Moderators can monitor the forum for inappropriate content, and can delete or edit posts as necessary.
- Reputation system: Some forums have a reputation system that allows users to upvote

or downvote other users' posts. This can help identify helpful contributors and limit the visibility of disruptive users.

- Search function: Users can search for specific threads or posts within the forum.
- Mobile compatibility: Many forums are designed to be mobile-friendly, so users can access them from their smartphones or tablets.

2.3 Existing Literature

There are many gaming forums available online where they can discuss various topics related to gaming, such as game reviews, walkthroughs, and tips for gameplay. The forum also features sections on different gaming platforms such as PC, console, and mobile gaming. Users can interact with each other by posting threads and comments, and the forum moderators ensure that the forum stays organized and respectful.

2.4 Analysis of Existing System

An existing online gaming forum/zone is a digital platform where gamers can engage in discussions, share experiences, seek assistance, and participate in gaming-related events. Such platforms allow gamers to connect with like-minded individuals across the globe and create a sense of community. The functionality of an online gaming forum/zone includes features such as discussion boards, private messaging, user profiles, event calendars, and user-generated content. The success of these platforms depends on the level of engagement and participation of the community members, as well as the moderation and management by the forum administrators.

2.5 Conclusion

To conclude, the existing system provides a valuable platform for gaming enthusiasts to connect and share their interests, and with some enhancements, it has the potential to further improve the user experience.

Chapter 3

Proposed Model

3.1 Introduction

This proposed model is a conceptual design of "BUBT Gamers Zone" that outlines the main components, functionalities, and features.

3.2 Feasibility Study

Feasibility study is a preliminary analysis of a proposed project to determine its viability. It helps identify potential problems and provide solutions before the project is implemented.

3.2.1 Operational Feasibility

The operational feasibility will depend on various factors such as the technology infrastructure needed to host the website, the availability of skilled staff to manage the website and community, the financial resources required to run and maintain the website, and the regulatory and legal requirements that need to be met.

3.2.2 Technical Feasibility

The development of a gaming website requires the use of advanced technology to ensure that the site is functional, user-friendly, and secure. The website would be compatible with different

devices and operating systems, including mobile phones and tablets. The site would also be optimized for fast loading speeds and easy navigation.

3.2.3 Economic Feasibility

The economic feasibility of the website will depend on the cost of development, maintenance, and marketing. The website will require a substantial investment to cover the cost of website hosting, server infrastructure, security measures, and content management.

3.3 Requirement Analysis

Requirement analysis is the process of gathering, documenting, and prioritizing the needs and constraints of stakeholders for a software or system development project.

3.3.1 Functional Requirements:

1. User Registration: The website must allow users to create accounts by providing their name, email address, and password.
2. Tournament news: Show upcoming gaming tournament and their details.
3. Community: Connect and converse option for the users.
4. Games: Few types of games to play in leisure in the website.

3.3.2 Non-functional Requirements:

1. Performance: The website must load quickly and respond to user actions without delay.
2. Security: The website must be secure and protect user data from unauthorized access or attacks.
3. Accessibility: The website must be accessible to users with disabilities, and comply with web accessibility guidelines.

4. Compatibility: The website should be compatible with different devices, browsers, and operating systems.

3.4 System Design

The system design defines the architecture, components, modules, interfaces, and data for the system to satisfy specified requirements.

3.4.1 ER Diagram

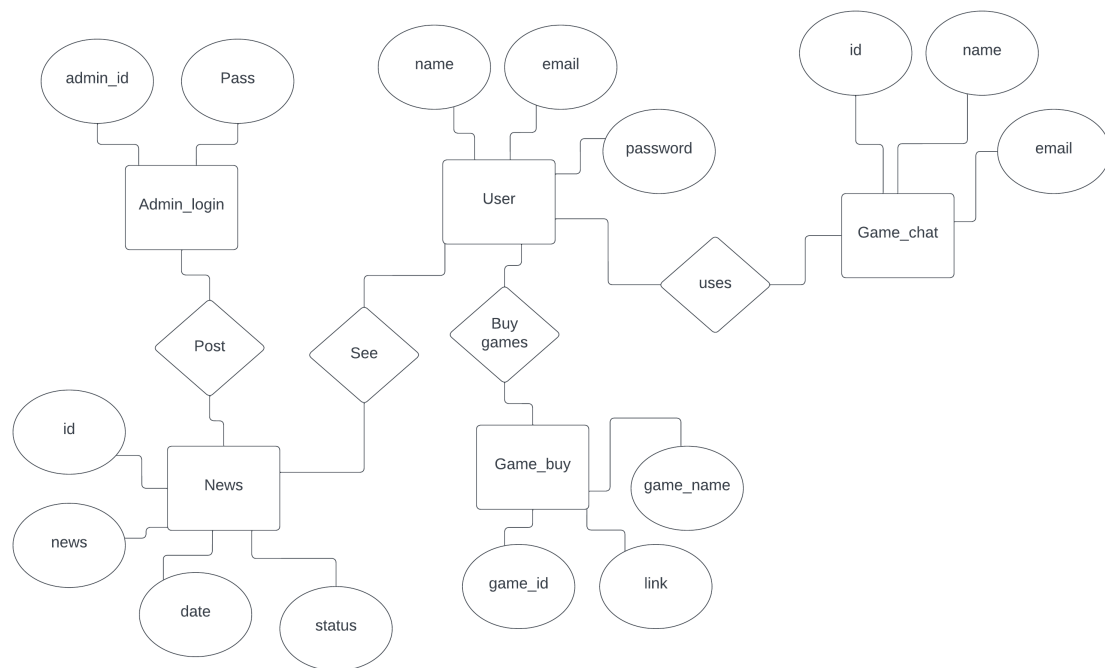


Figure 3.1: Entity Relationship Diagram

3.4.2 Data Flow Diagram

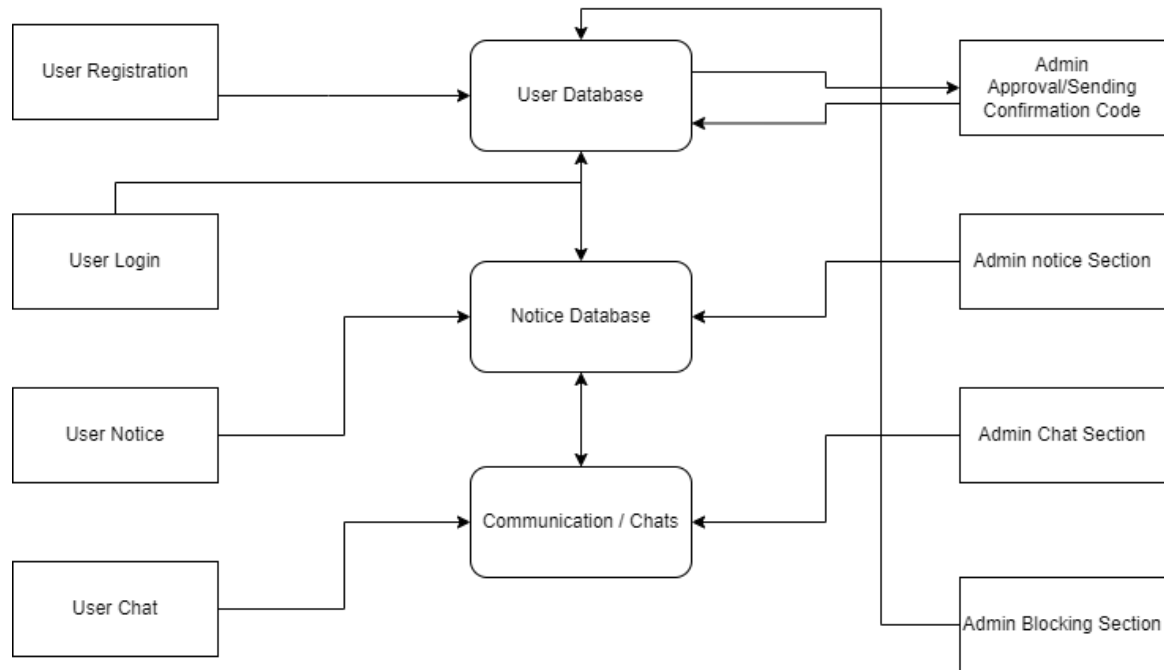


Figure 3.2: Data Flow Diagram

3.4.3 Database Design



Figure 3.3: Database Diagram

3.5 Implementation

1. **Database schema:** Design the database schema to store all the necessary information about users, posts, comments, chats, and notices. Use MySQL to create the database schema, and define the tables, columns, and relationships between the tables.
2. **User interface:** Use HTML and CSS to create the user interface for the gaming forum. The interface should include features such as sign in, sign up, user dashboard, user chats, user notices, admin dashboard, and admin notices.
3. **User registration and login:** Use PHP to implement user registration and login func-

tionality. When a user signs up, their information should be stored in the database. When a user logs in, their login information should be verified against the database, and their user session should be created.

4. **Chat functionality:** Use PHP to implement chat functionality between users. When a user initiates a chat, the chat information should be stored in the database, and the chat should be displayed in the user's chat dashboard. When a user receives a chat, the chat information should also be stored in the database, and the chat should be displayed in the user's chat dashboard.
5. **Admin functionality:** Use PHP to create the functionality for admins to create notices. When an admin creates a notice, the information should be stored in the database, and the notice should be displayed in the admin's notice dashboard. When a user receives a notice, the notice information should be stored in the database, and the notice should be displayed in the user's notice dashboard.
6. **Security measures:** Use PHP to implement security measures such as input validation, password hashing, and protection against SQL injection attacks.
7. **Test and deploy the application:** Test the application thoroughly to ensure that all functionality is working correctly, and there are no bugs or errors. Deploy the application to a web server or cloud platform to make it available to users.

3.6 Conclusions

In conclusion, creating a gaming forum using HTML, CSS, PHP, and MySQL database can be a challenging but rewarding experience. By following the implementation steps outlined above, it is possible to create a fully functional gaming forum with features such as sign in, sign up, user dashboard, user chats, user notices, admin dashboard, and admin notices.

Chapter 4

Experimental Results

4.1 Introduction

Experimental result in this project refers to the data or outcomes obtained from conducting tests and experiments on the proposed solution.

4.2 Result Analysis

- **User engagement:** This metric can be measured by the number of active users on the forum, the frequency of user interactions, and the duration of user sessions.
- **User satisfaction:** This metric can be measured by conducting surveys or gathering feedback from users about their experience using the forum.
- **Forum growth:** This metric can be measured by tracking the growth of the forum over time.
- **Admin efficiency:** This metric can be measured by evaluating the efficiency and effectiveness of the admin dashboard and the ability of admins to manage everything.

4.3 Applications

1. **Business Purpose:** The website can be used for business purpose by selling it to the group of people having a large team of gamers to connect them in one place.
2. **Creating Community:** The website creates a community and helps the user engage with the gaming community.
3. **Advertising and Selling Games:** The website has game selling part where they can add and sell the games.
4. **Spending Leisure:** The gaming part is always free and available for the users to spend their leisure here.

4.4 Conclusions

In conclusion, the gaming zone has become an important aspect of modern entertainment culture, providing gamers with a platform to connect and engage with each other on a global scale. Gaming forums, in particular, have become an essential component of the gaming community, allowing gamers to share their experiences, ask for help, and discuss their favorite games and genres. Through gaming forums, gamers can develop meaningful relationships, discover new games, and stay up-to-date on the latest industry news and trends.

Chapter 5

User Manual

5.1 Introduction

The user manual provide instructions on how to use any service. Here it is written in simple language and include visuals to help users understand the information.

5.2 System Requirements

System requirements are specifications for hardware and software components necessary to run a particular program or application.

5.2.1 Hardware Requirements

Device: A device with a screen, such as a desktop computer, laptop, tablet, or smartphone.

Processor: A processor capable of running modern web browsers, such as Intel Core i3, AMD Ryzen 3, or equivalent.

RAM: At least 4 GB of RAM to ensure smooth browsing experience.

Storage: Sufficient storage to store the web browser and other applications.



Figure 5.1: Hardware Devices

Internet connection: A reliable internet connection with a minimum speed of 3 Mbps to access web content.

5.2.2 Software Requirements

A web browser is a software application used to access and view web pages and other online content on the internet. It is an essential tool for anyone who uses the internet as it enables users to navigate and interact with websites and web applications. Most popular web browsers, such as Google Chrome, Mozilla Firefox, Microsoft Edge, and Apple Safari, are free to download and use. They typically offer features such as tabbed browsing, bookmarking, and password management to enhance the user experience.



Figure 5.2: Web Browsers

5.3 User Interface

5.3.1 General Pages

Home page with navigation bar on the top,

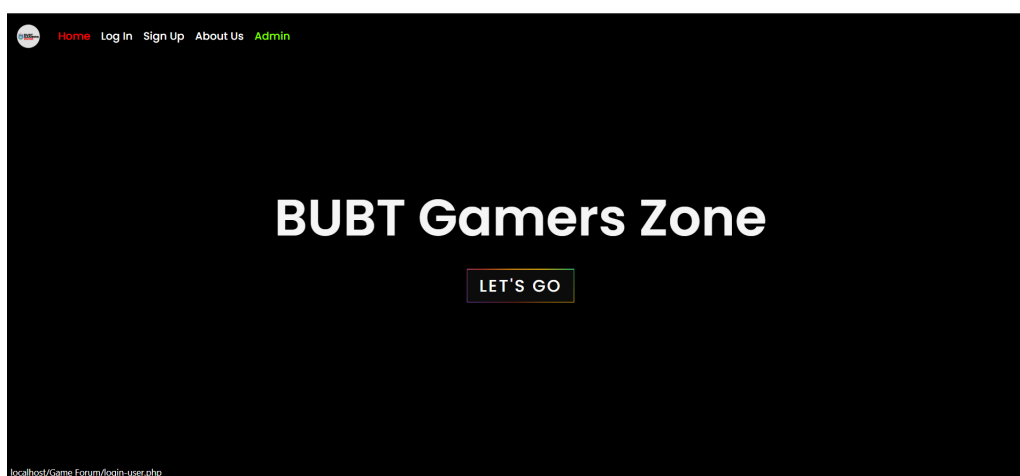


Figure 5.3: Home page

About page that contains the developers information,

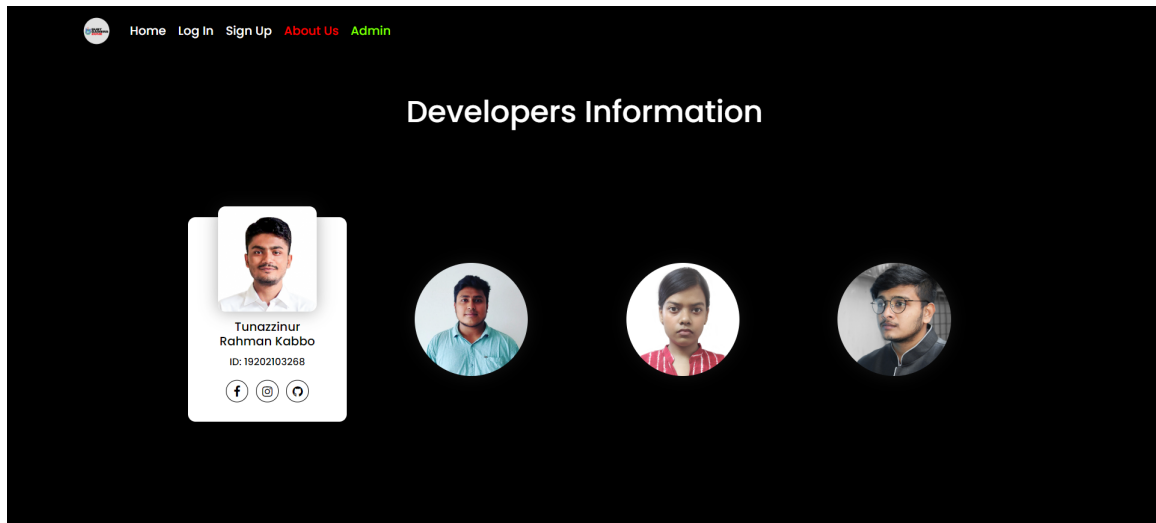


Figure 5.4: About Us

Sign up for the new comers,

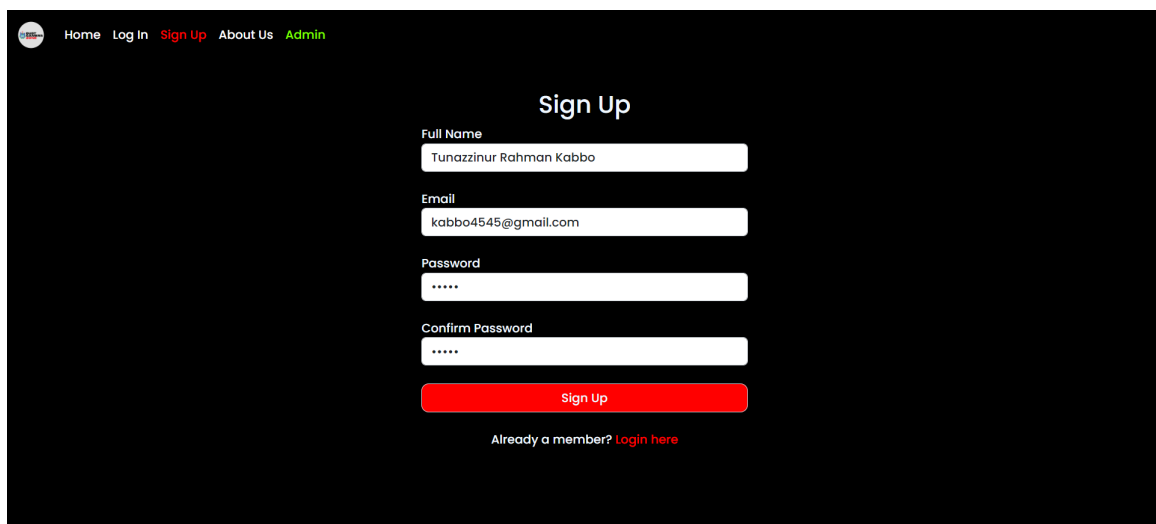


Figure 5.5: Sign Up

5.3.2 Admin Corner

Login page,

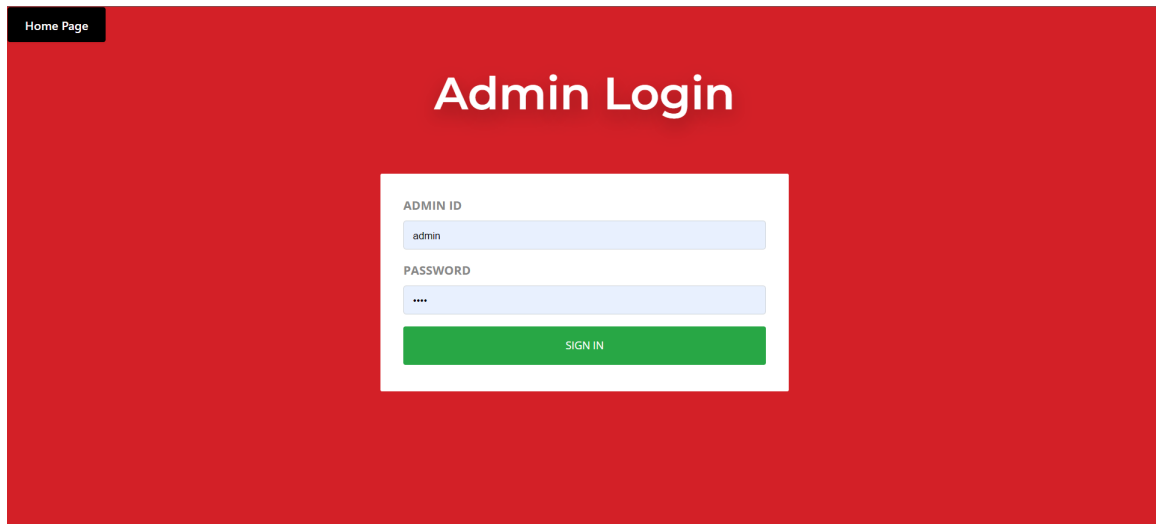


Figure 5.6: Admin login

Dashboard page,

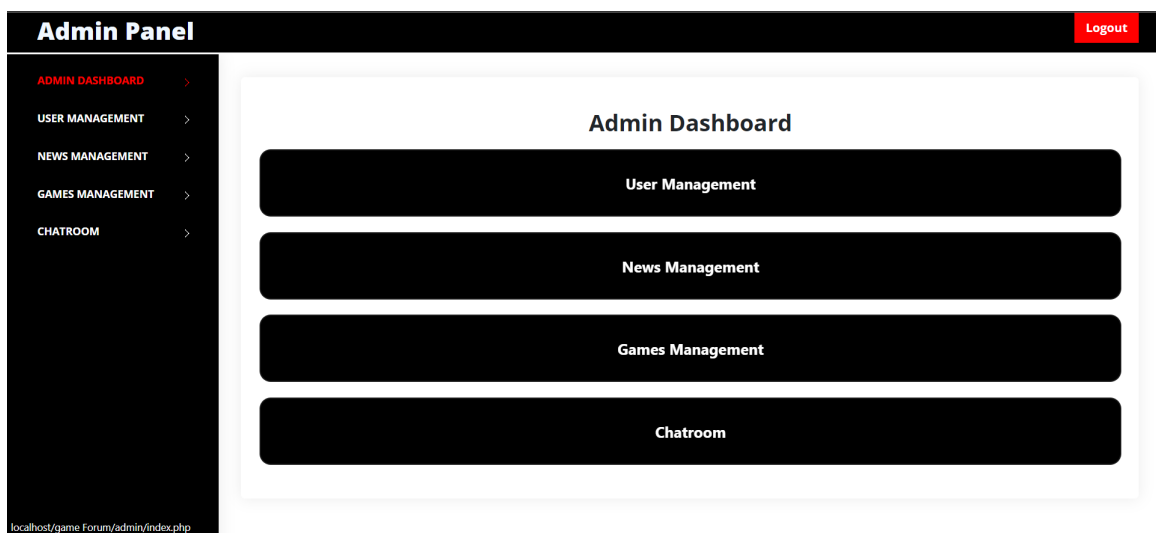


Figure 5.7: Admin Dashboard

User management,

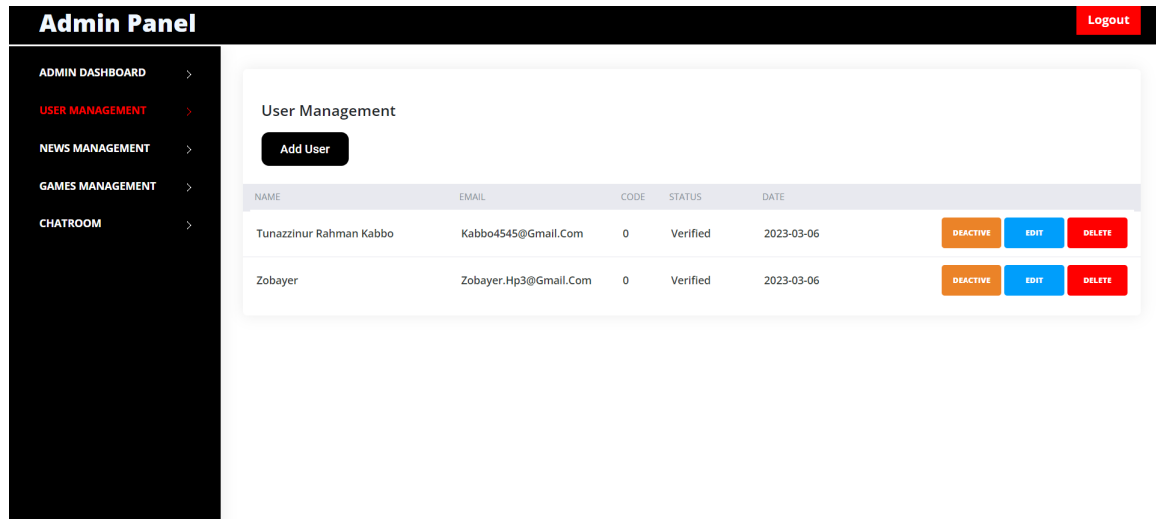


Figure 5.8: User Management

News management,

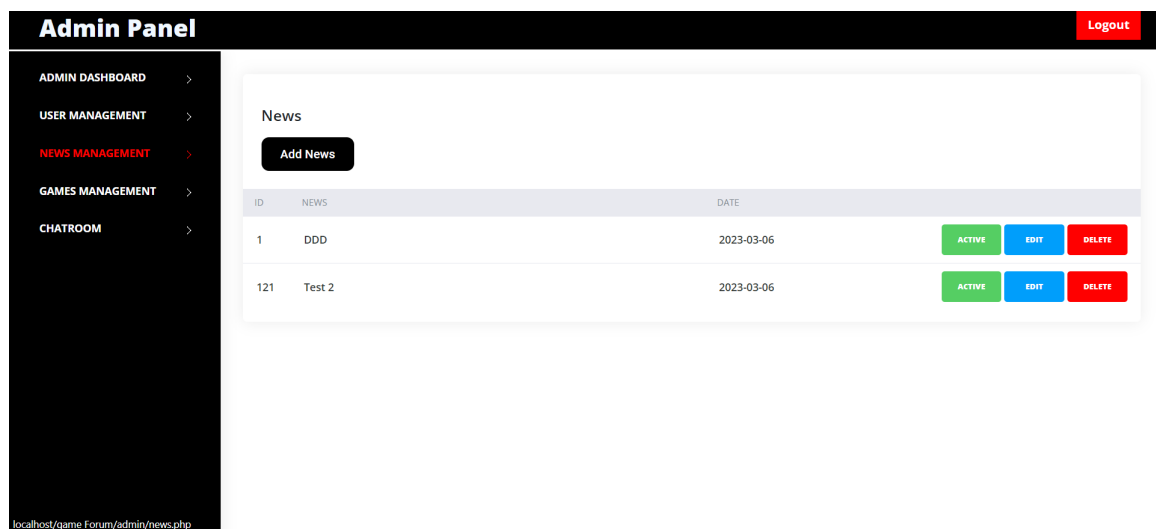
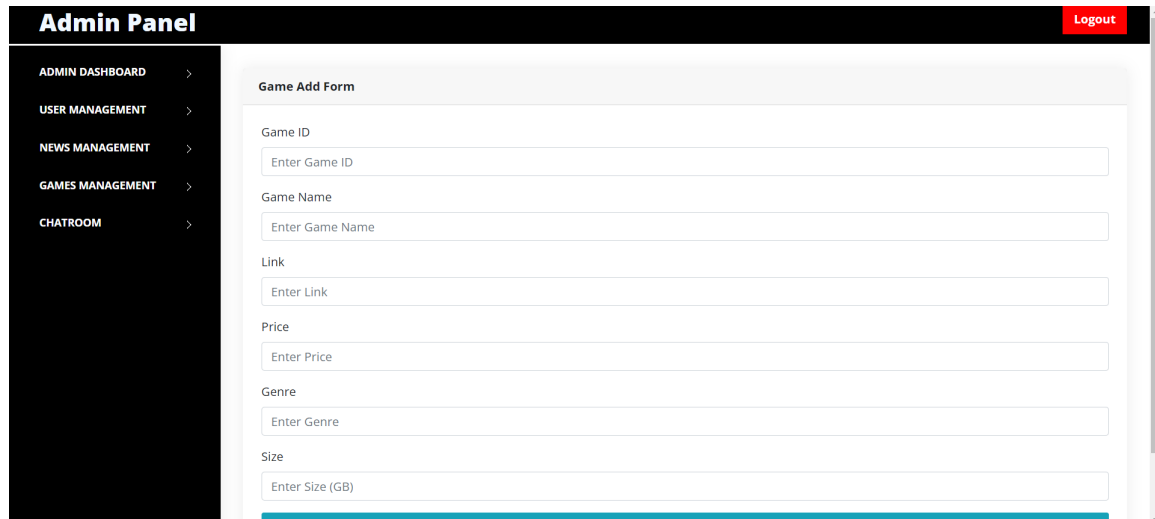


Figure 5.9: Admin News Management

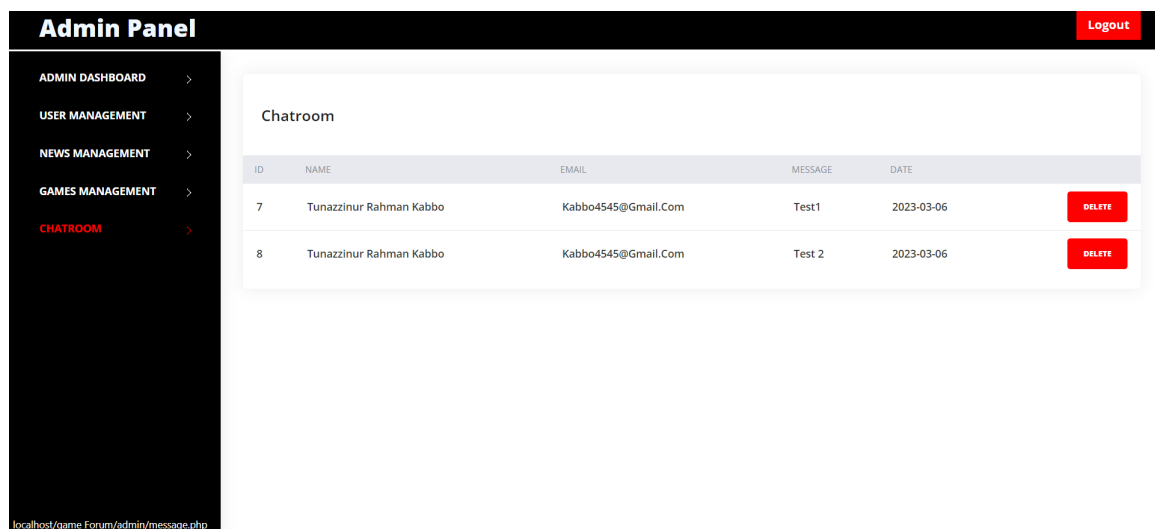
Buyable game adding form,



The screenshot shows the Admin Panel interface. On the left is a dark sidebar with a menu containing: ADMIN DASHBOARD, USER MANAGEMENT, NEWS MANAGEMENT, GAMES MANAGEMENT, and CHATROOM. The main content area is titled "Game Add Form" and contains several input fields: Game ID (with placeholder "Enter Game ID"), Game Name (with placeholder "Enter Game Name"), Link (with placeholder "Enter Link"), Price (with placeholder "Enter Price"), Genre (with placeholder "Enter Genre"), and Size (with placeholder "Enter Size (GB)"). A red "Logout" button is in the top right corner of the header.

Figure 5.10: Buyable game adding form

Chatroom management,



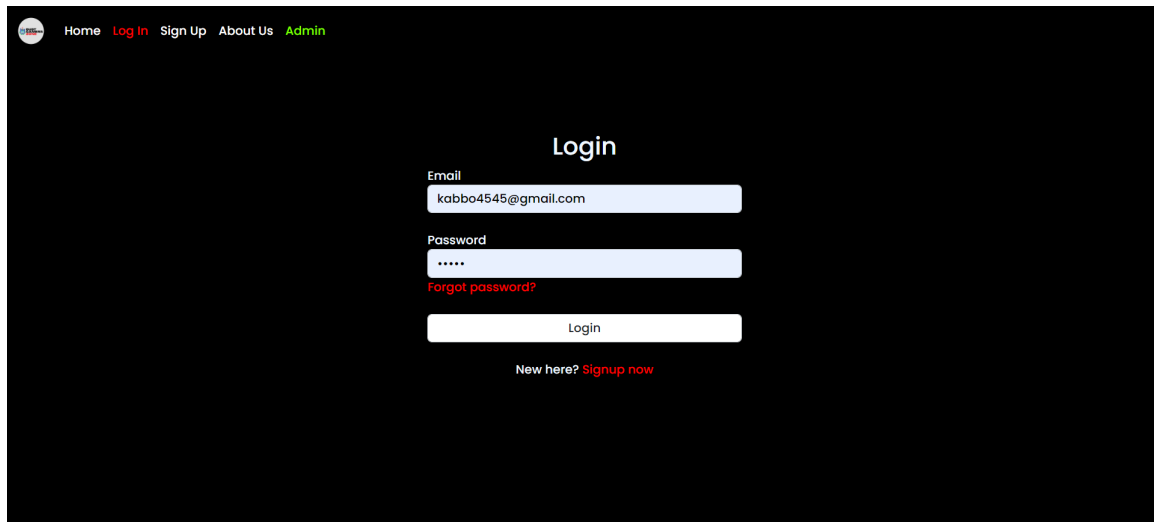
The screenshot shows the Admin Panel interface with the "CHATROOM" menu item highlighted in red in the sidebar. The main content area is titled "Chatroom" and displays a table with chatroom data. Each row has a "DELETE" button. The URL "localhost/game_forum/admin/message.php" is visible at the bottom left.

ID	NAME	EMAIL	MESSAGE	DATE	
7	Tunazzinur Rahman Kabbo	Kabbo4545@Gmail.Com	Test1	2023-03-06	<button>DELETE</button>
8	Tunazzinur Rahman Kabbo	Kabbo4545@Gmail.Com	Test 2	2023-03-06	<button>DELETE</button>

Figure 5.11: Chatroom management

5.3.3 User Corner

Login page,



The screenshot shows a login page with a dark blue background. At the top, there is a navigation bar with links: Home, Log In, Sign Up, About Us, and Admin. The main heading is "Login". Below it, there are two input fields: "Email" with the value "kabbo4545@gmail.com" and "Password" with the value "*****". A link "Forgot password?" is located below the password field. A "Login" button is positioned below the input fields. At the bottom, there is a link "New here? Signup now".

Figure 5.12: User Login

Dashboard,



The screenshot shows a user dashboard with a dark blue header and sidebar. The header displays "Welcome Tunazzinur Rahman Kabbo" and a "Logout" button. The sidebar contains a list of menu items: DASHBOARD, PLAY GAMES, BUY GAMES, CHATROOM, and NEWS. The main content area is titled "Dashboard" and contains four large, dark blue buttons labeled "Play Games", "Buy Games", "Chatroom", and "News". The URL "localhost/Game Forum/user/index.php" is visible in the bottom left corner.

Figure 5.13: User Dashboard

Play games,

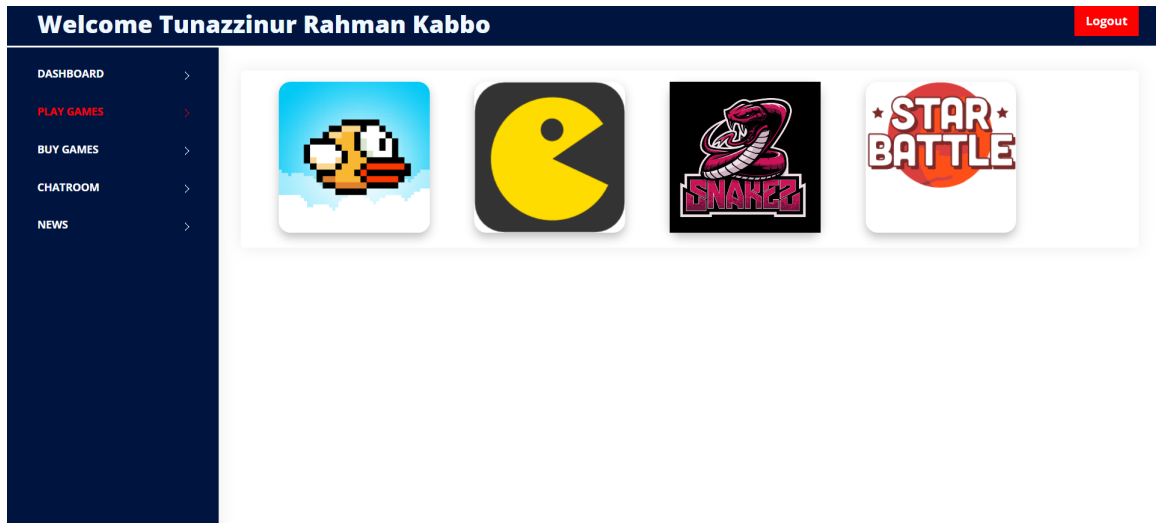


Figure 5.14: Play Games

Buy games,



Figure 5.15: Buying Games

Chatroom,



Figure 5.16: Chatroom

News,



Figure 5.17: News showing

5.4 Conclusions

In conclusion, a user manual serves as a guide for users to navigate and effectively use the website. It included a clear instructions and visuals to enhance user experience and satisfaction. With this manual, users can use the website efficiently.

Chapter 6

Conclusion

6.1 Conclusion

In conclusion, the creation of a gaming forum using HTML, CSS, PHP, and MySQL database can provide a highly functional and engaging platform for gaming enthusiasts to connect and share their experiences. By following the implementation steps outlined in the report, it is possible to create a fully functional gaming forum with features such as user registration and login, post and comment creation, chat functionality, and admin notices.

6.2 Future Scope In This Sector

- **Integration with social media:** Integration with popular social media platforms can help to increase the visibility and reach of the forum, as well as provide new opportunities for user engagement and community building.
- **Expansion of features:** Continuously expanding and improving the features of the forum, such as adding video and audio capabilities, advanced search functionality, and personalized recommendations, can help to attract new users and increase engagement.
- **Gamification:** Incorporating gamification elements such as badges, points, and leaderboards can help to increase user engagement and incentivize participation in the forum.