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Stack64

Question-and-answer Web-based Platform

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Introduction

What is Stack64?

Stack64 is a question-and-answer web-based platform that users in perplexity may seek solutions to their programming questions from other users. Users may also share their programming questions by posting it within the platform.

Why Stack64?

Choosing the right platform name is a significant process for it represents the entire system. In order to achieve this, relevant terminologies must be observed.

A "stack" refers to a data structure that stores and manages a collection of items. Stacks are widely used in computer science and have various applications in algorithms, memory management, and parsing.

As for where 64 came from, 64-bit technology has become the standard for modern computing due to its ability to handle larger amounts of memory and perform more complex calculations. This represents improved performance and compatibility with modern software applications, making it a fundamental part of contemporary computer systems.

With that being said, Stack64 is a representation of fast management for collection of information.

What is the objective of Stack64?

Stack64 will serve as the bridge that will connect you to other users so that you will be able to not only find solutions to your programming questions but as well as be able to impart your knowledge to other users.

Stack64's goal is to provide authentic source of programming related information to all users as much as possible.

How will the developers address the authenticity of programming related information to all users?

Providing authentic source of information will be the major challenge for the developers since the developers has no full control to user's activity online. In order to address this issue, the developers will implement a system for all users called Reputation.

What is Reputation system in Stack64?

Reputation is a system in Stack64 that will determine user's behavior within the platform and in the community. Users can achieve good reputation by mainly gaining points from providing relevant and helpful solutions to the questions posted by users.

Users can gain certain points as follows:

- Achieving approves will give user's account +20 points
- Approved reports will give the reporter +15 points
- Commenting answer to a query will give user's account +15 points
- Posting a query will give user's account +10 points
- Purchasing items in the shop will give user's account +5 points
-

User who violates rules and regulations will cause their account to lose points as follow:

- Any violations (report) will deduct user's account reputation by 45 points
- Disapproves will deduct user's account reputation by 20 points

Certain accumulated points will unlock features and titles as follows:

- Reaching 10,000 points will allow users to report posts or comments and will be awarded with a Beginner title
- Users reaching 20,000 points will allow users to approve an answer and will be awarded with a bronze title
- Users reaching 40,000 points will allow users to post or take part to commissions and will be awarded with a silver title
- Points gained from approves will be doubled for all users over 70,000 points and will be awarded with a gold title
- Top 3 users reaching over 110,000 points will be included in the leaderboards (Learn from the best section) and will be awarded with a Stacked title

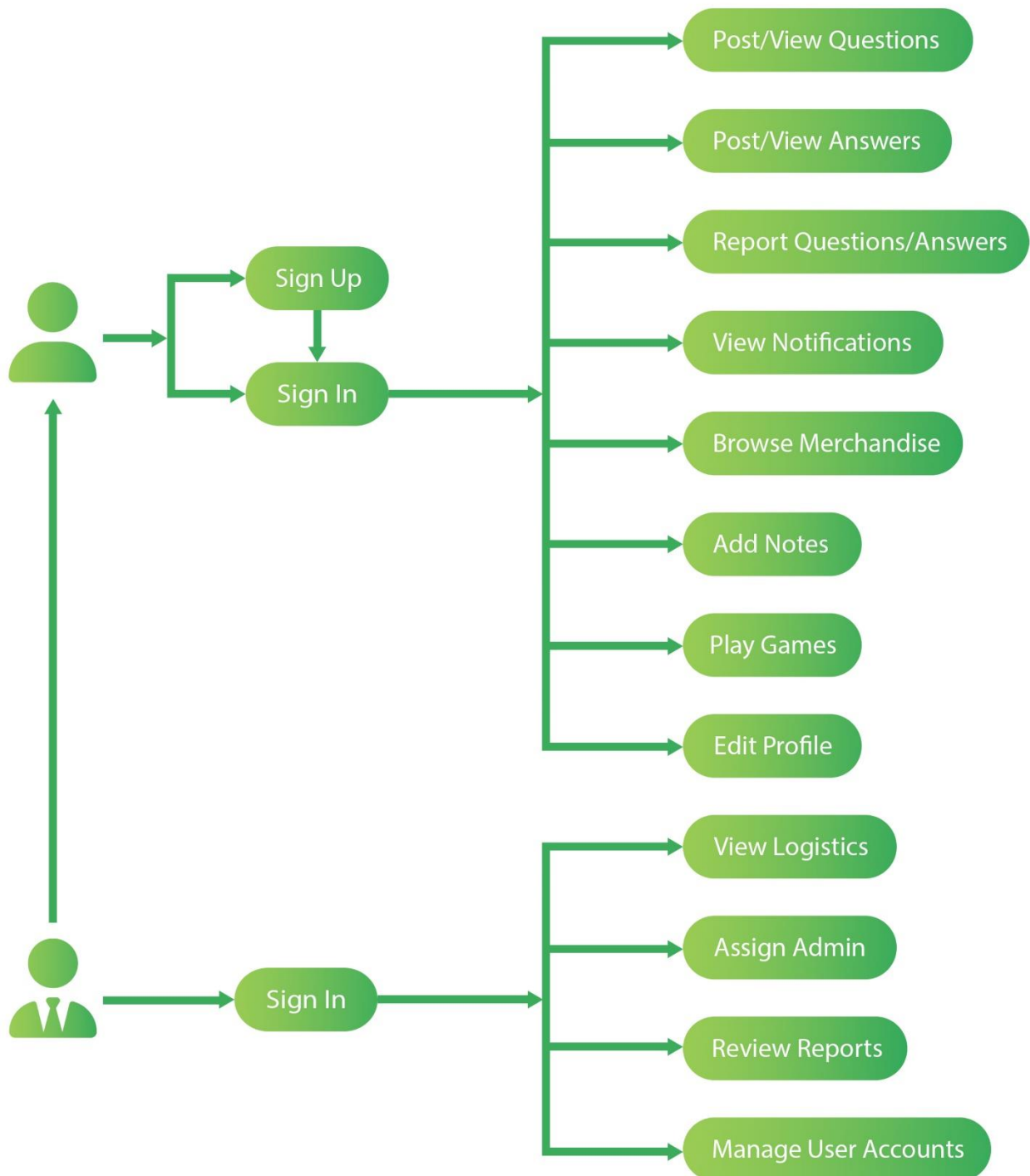
With this kind of system, authenticity of the information and a healthy and strong community will be assured.

Scope and Limitations of Stack64

This study will provide a platform to those users, especially among students, who are in perplexity.

The study includes in its scope such as asking and submitting questions and providing answer to a question but does not involve those private/direct messages and replies to answers.

Stack64 Use Case Diagram



Functional Requirements

Requirement	Description
Account Authentication	This part of the system allows user to create their own account and sign in within the platform.
Submitting Post and Answers	This section of the system allows user to ask and submit their programming related questions.
Reporting Posts and Answers	This part of the system allows user to submit a question or answer report in regards to the rules and violations of the platform.
User Account Management	This section of the system allows user to change their profile and account information.
Merchandising	This part of the system allows user to buy exclusive Stack64 products and Stackcoins (Website currency).
Study Space	This section of the system allows user to take down notes and check daily short quizzes.
Game	This part of the system allows user play games prepared by the developers of Stack64.
Reputation System	Reputation is a system in Stack64 that will determine user's behavior within the platform. Users can achieve good reputation by mainly gaining points from providing relevant and helpful solutions to the questions posted by users.
Admin Account Assignment	This part of the system allows admin to assign (create) new account for a Stack64 employee.
Review Reports	This section of the system allows admin to approve and disapprove reports submitted by the users.
Account Management	This part of the system allows admin to deactivate, activate, and delete user accounts.

List of Modules

Stack64 provides various of functionalities, these includes:

Admin & User:

1. Account authentication

User:

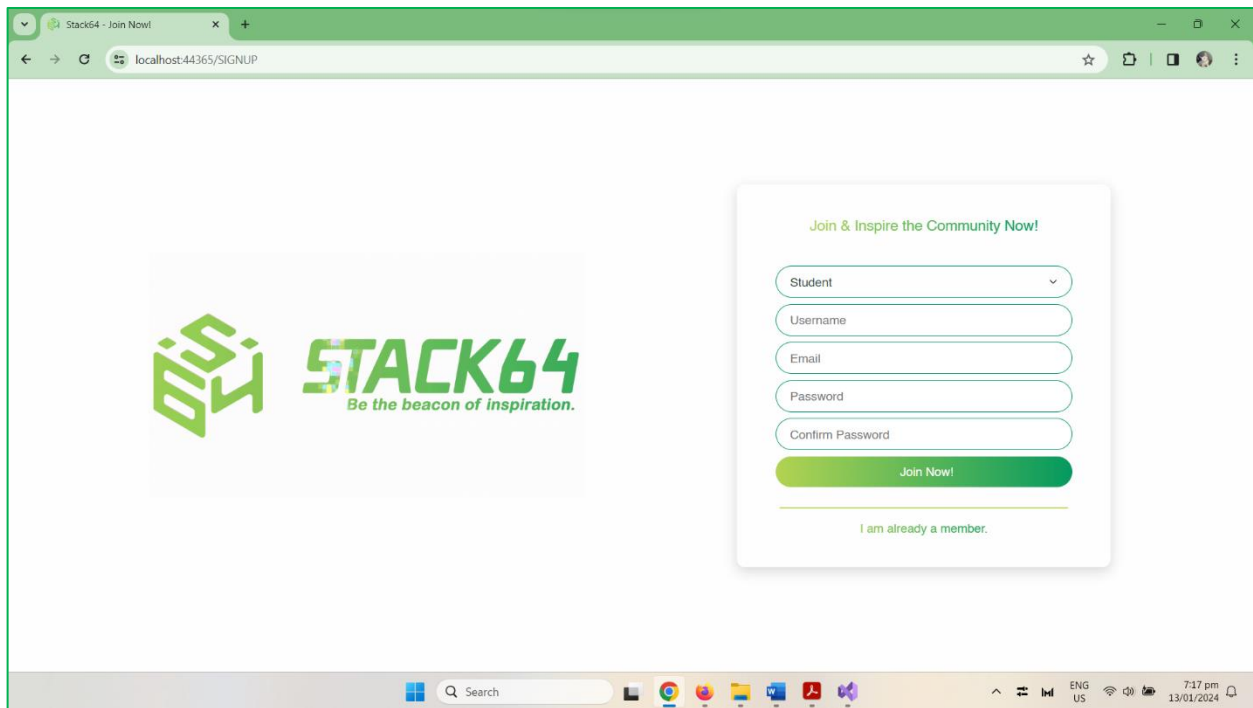
1. Users are able to see online accounts
2. Users are able to submit and answer questions.
3. Users are able to report questions and answers
4. User account management
5. Merchandising
6. Study Space
7. Game (Bird Flew)
8. Reputation System

Admin:

1. Activate/assign user admin
2. Manage accounts (Delete/deactivate user account)
3. Review and filter reports

Output of the Study

Figure 1. Account Authentication (Sign Up)

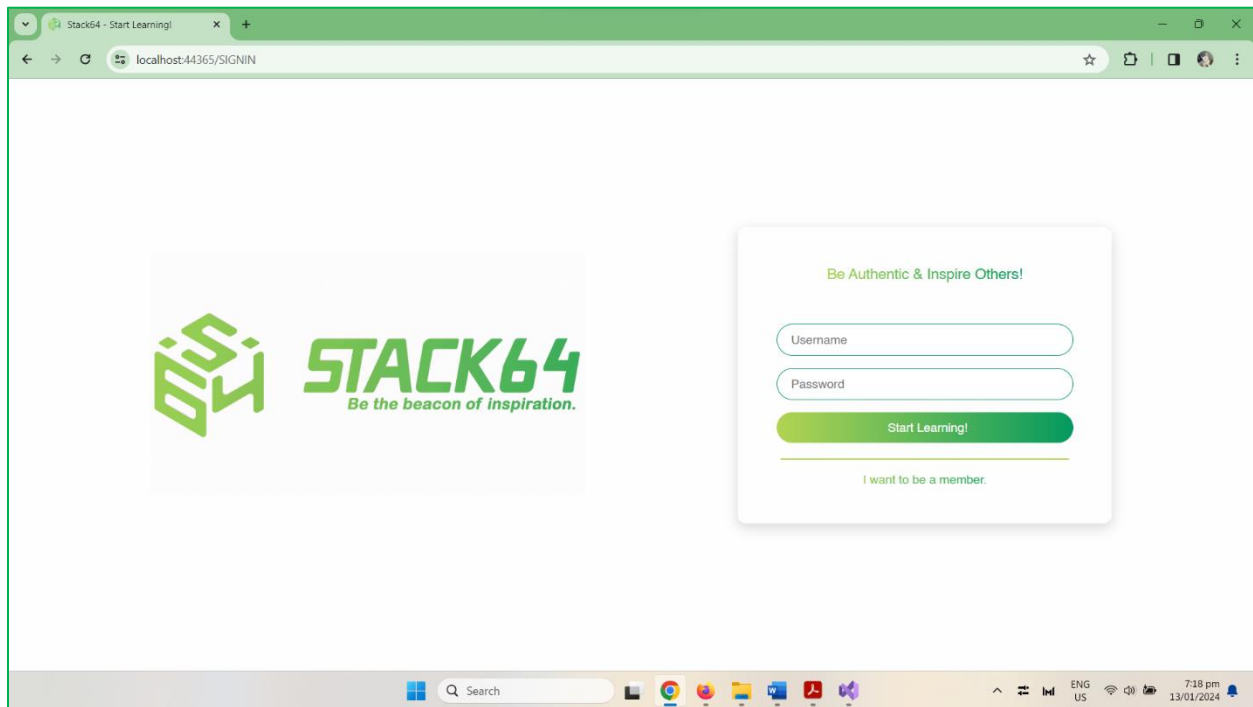


The screenshot shows a web browser window with the title 'Stack64 - Join Now!'. The address bar displays 'localhost:44365/SIGNUP'. The page features the Stack64 logo on the left, which consists of a green geometric icon and the text 'STACK64 Be the beacon of inspiration.' On the right, there is a sign-up form with the heading 'Join & Inspire the Community Now!'. The form includes a dropdown menu for 'Student', followed by input fields for 'Username', 'Email', 'Password', and 'Confirm Password'. A green 'Join Now!' button is positioned below these fields. At the bottom of the form, there is a link that says 'I am already a member.' The browser's taskbar at the bottom shows various application icons, a search bar, and system status indicators including language (ENG US), time (7:17 pm), and date (13/01/2024).

This part of the system allows user to create their own account to use within the platform.

Output of the Study (Cont.)

Figure 2. Account Authentication (Sign In)

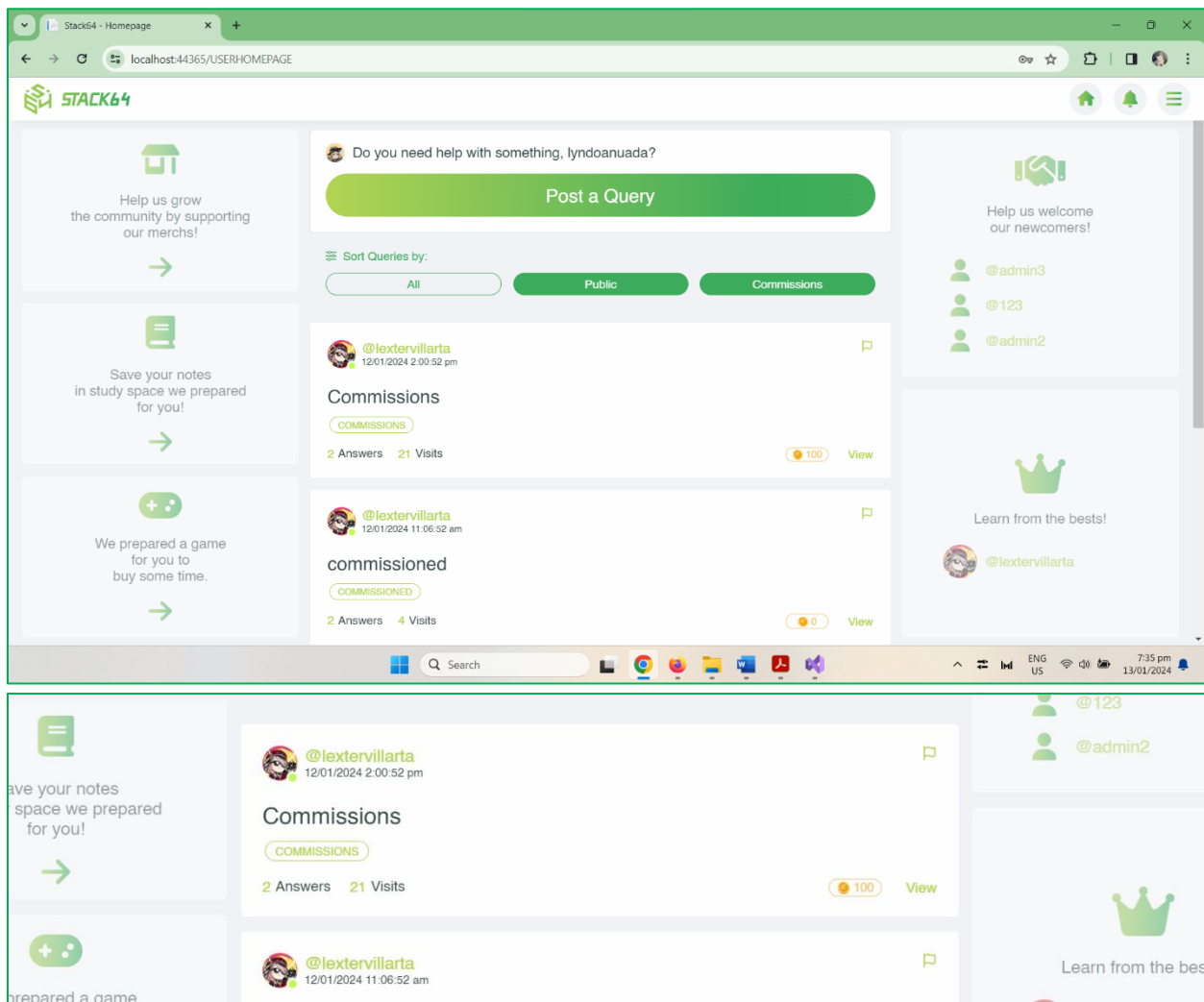


The screenshot displays a web browser window with the address bar showing 'localhost:44365/SIGNIN'. The page features the Stack64 logo on the left, which includes a green cube icon and the text 'STACK64 Be the beacon of inspiration.' On the right, there is a sign-in form with the heading 'Be Authentic & Inspire Others!'. The form contains two input fields labeled 'Username' and 'Password', followed by a green 'Start Learning!' button. Below the button is a link that says 'I want to be a member.' The browser's taskbar at the bottom shows various application icons and the system clock indicating 7:18 pm on 13/01/2024.

This section allows user to sign in their account within the platform.

Output of the Study (Cont.)

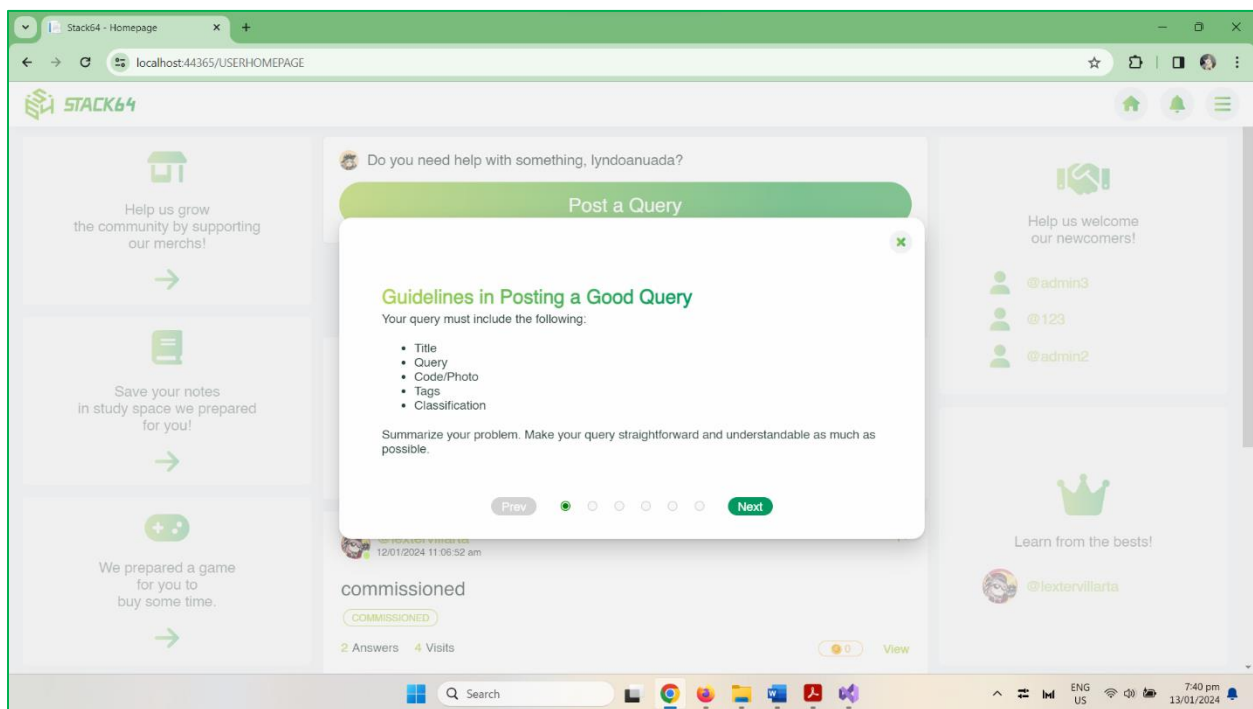
Figure 3. Homepage



This part of the system allows user to go to different part of the platform, and enables user to see other user accounts being online.

Output of the Study (Cont.)

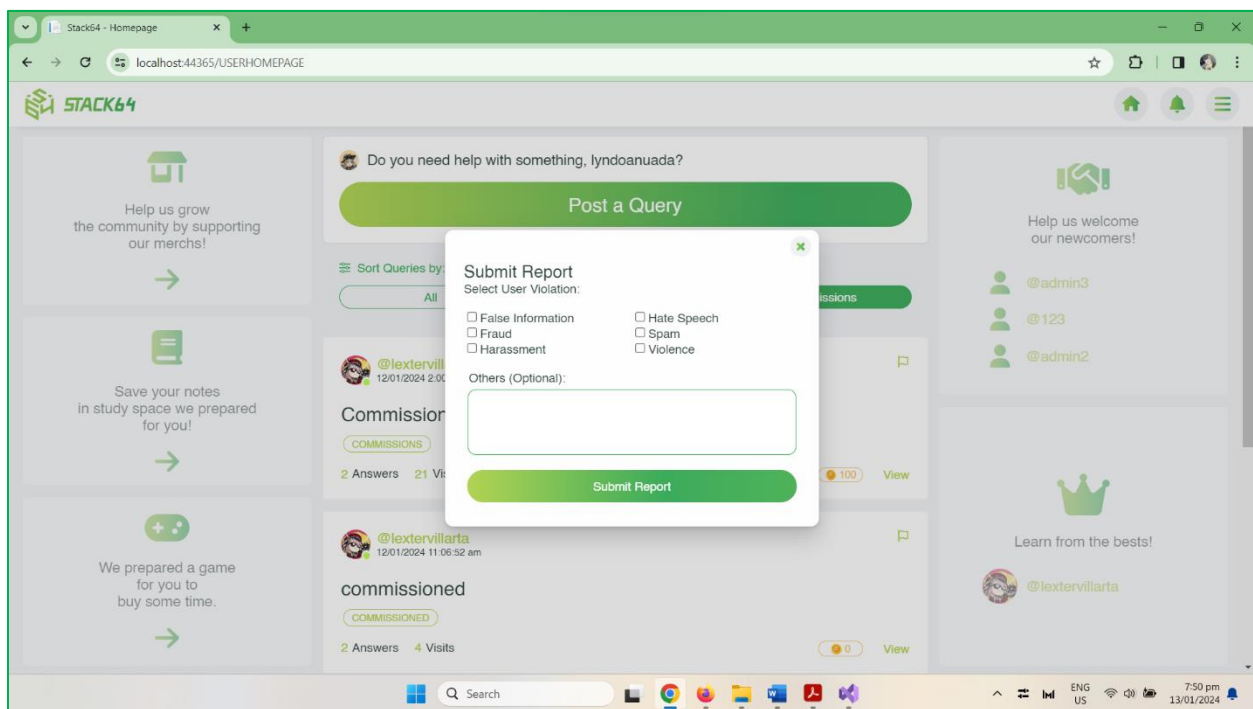
Figure 4. Post a Query Window



This section of the system allows user to ask and submit their programming related questions.

Output of the Study (Cont.)

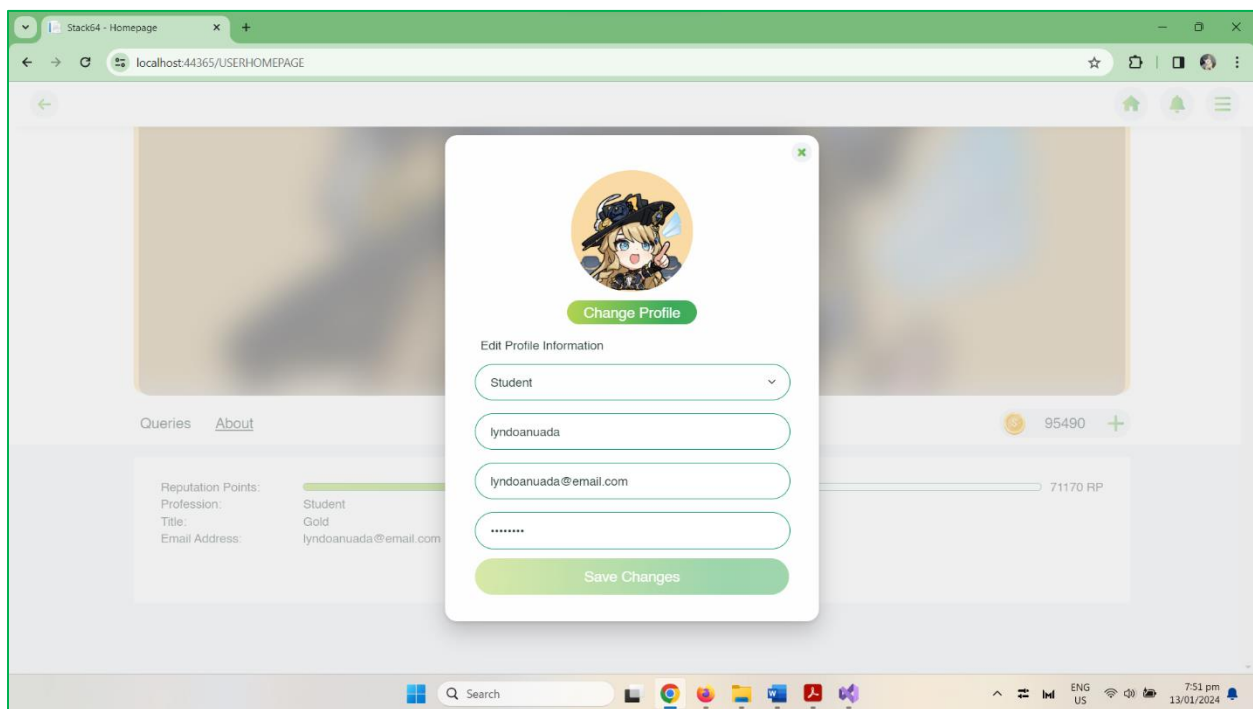
Figure 5. Submit Report Window



This part of the system allows user to submit a question or answer report in regards to the rules and violations of the platform.

Output of the Study (Cont.)

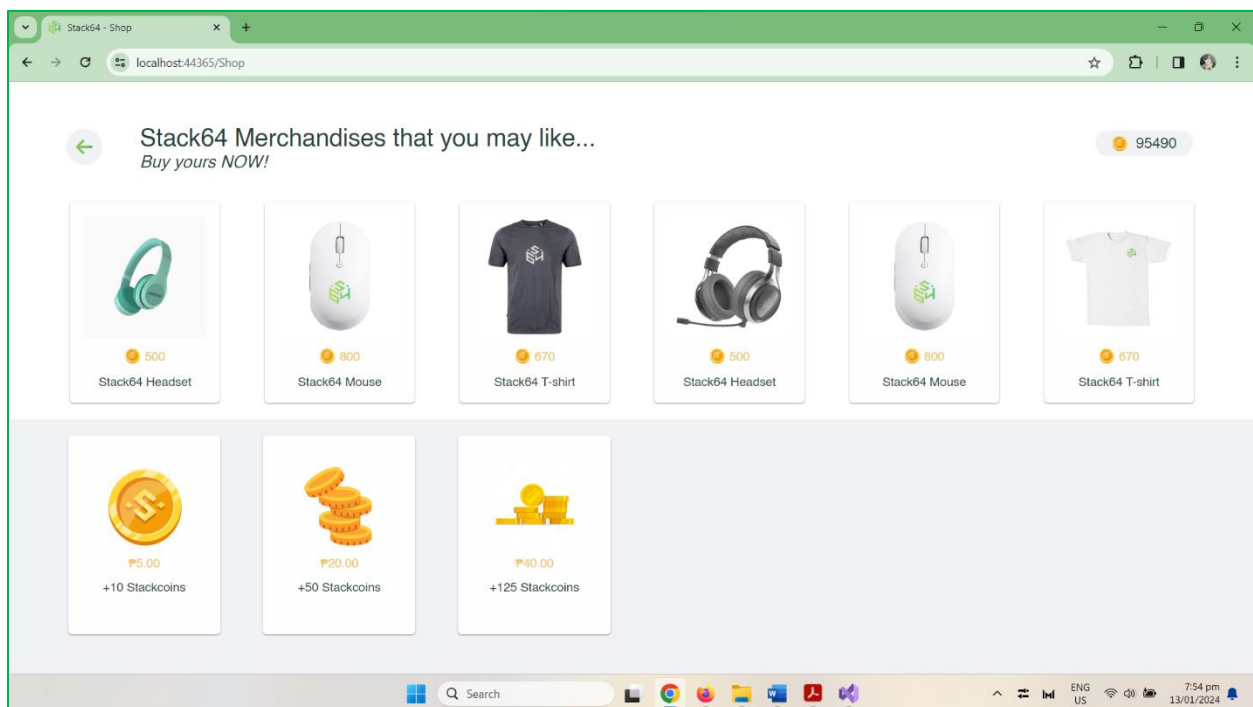
Figure 6. User Account Management Window



This section of the system allows user to change their profile and account information.

Output of the Study (Cont.)

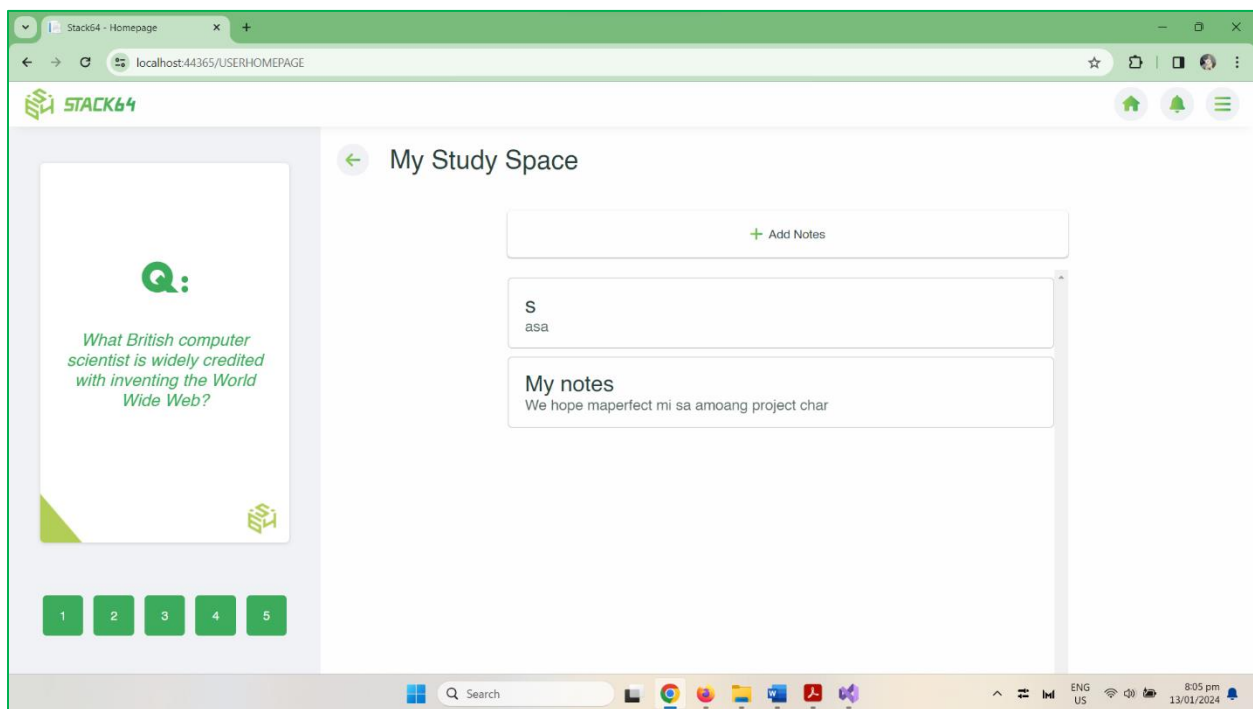
Figure 7. Merchandising



This part of the system allows user to buy exclusive Stack64 products and Stackcoins (Website currency).

Output of the Study (Cont.)

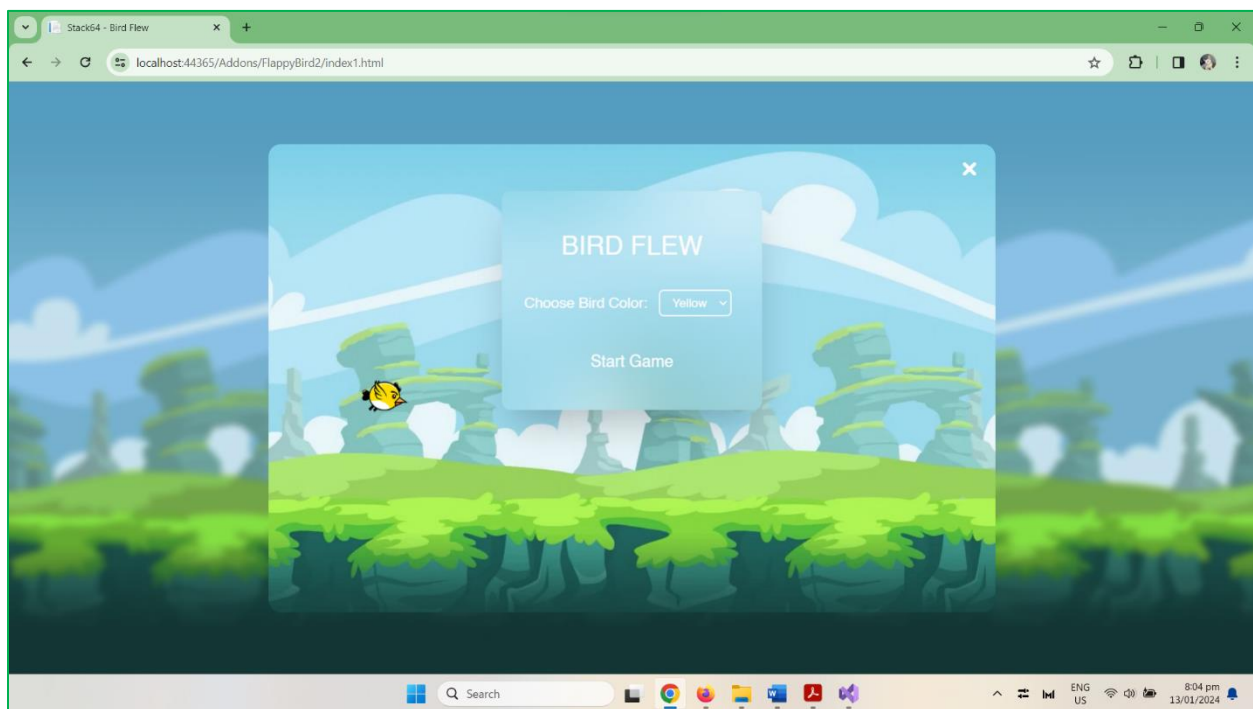
Figure 8. Study Space



This section of the system allows user to take down notes and check daily short quizzes.

Output of the Study (Cont.)

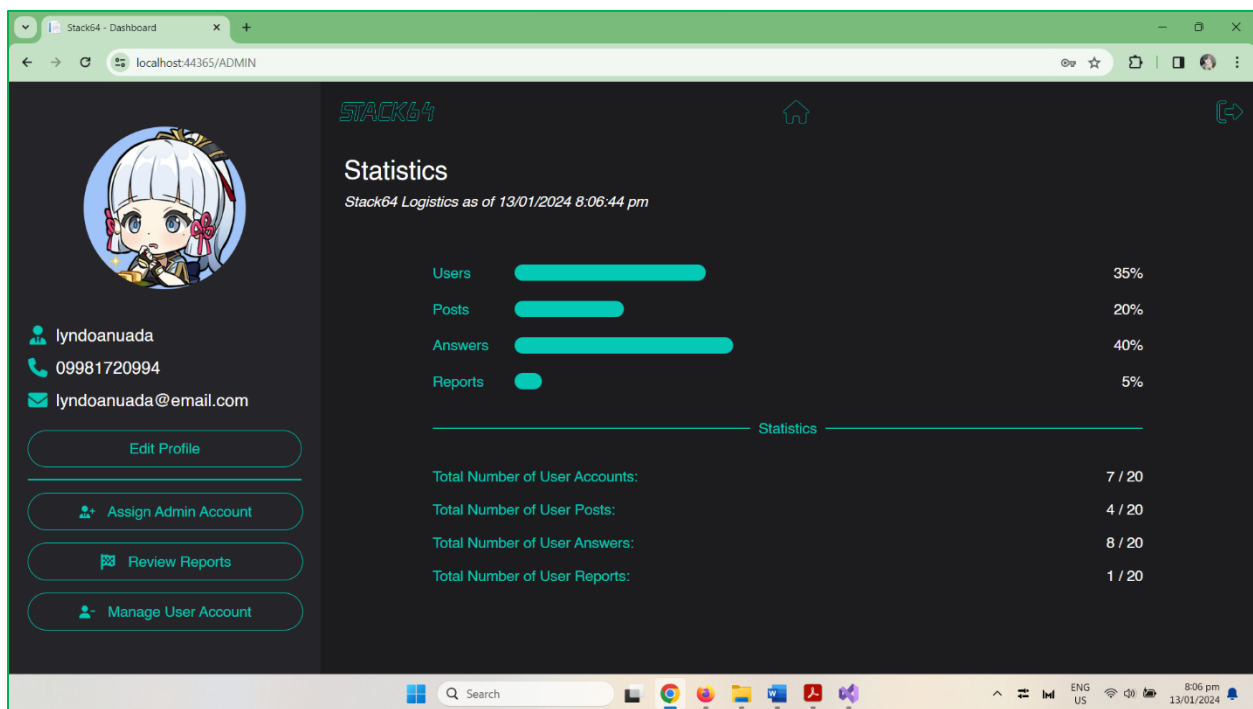
Figure 9. Games (Bird Flew)



This part of the system allows user play games prepared by the developers of Stack64.

Output of the Study (Cont.)

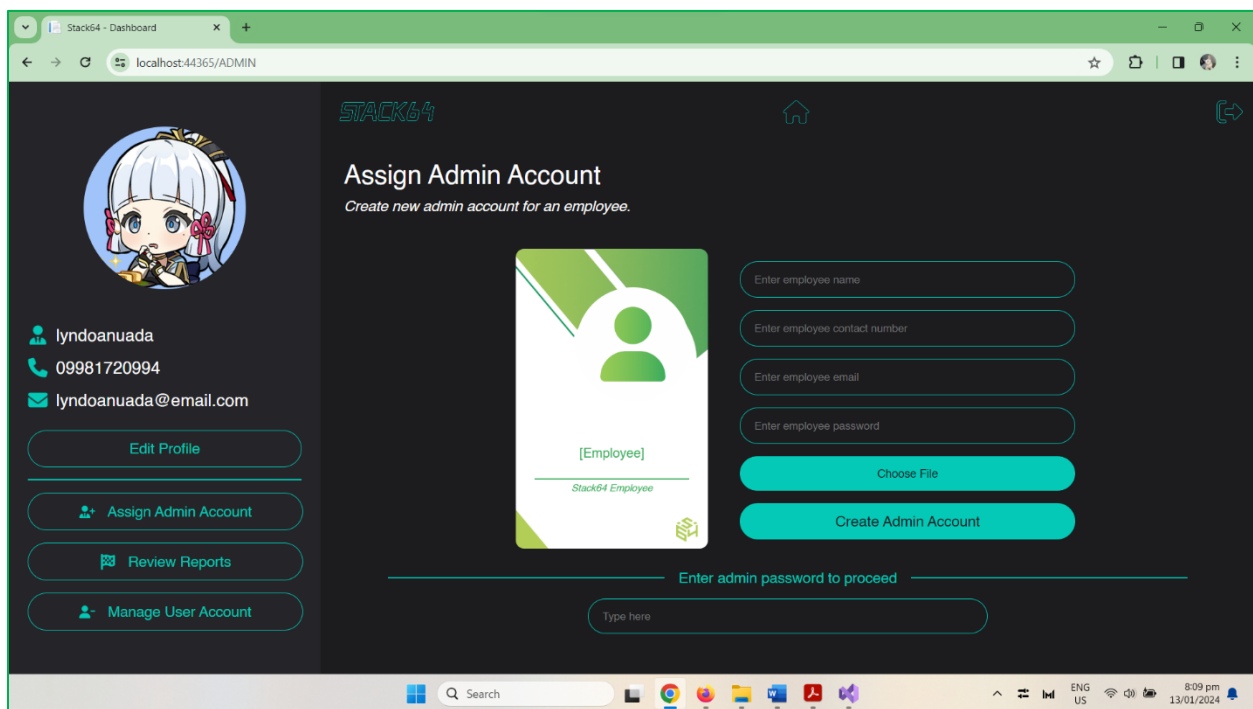
Figure 10. Admin Dashboard



This section of the system allows admin to monitor Stack64 average logistics.

Output of the Study (Cont.)

Figure 11. Admin Account Assignment

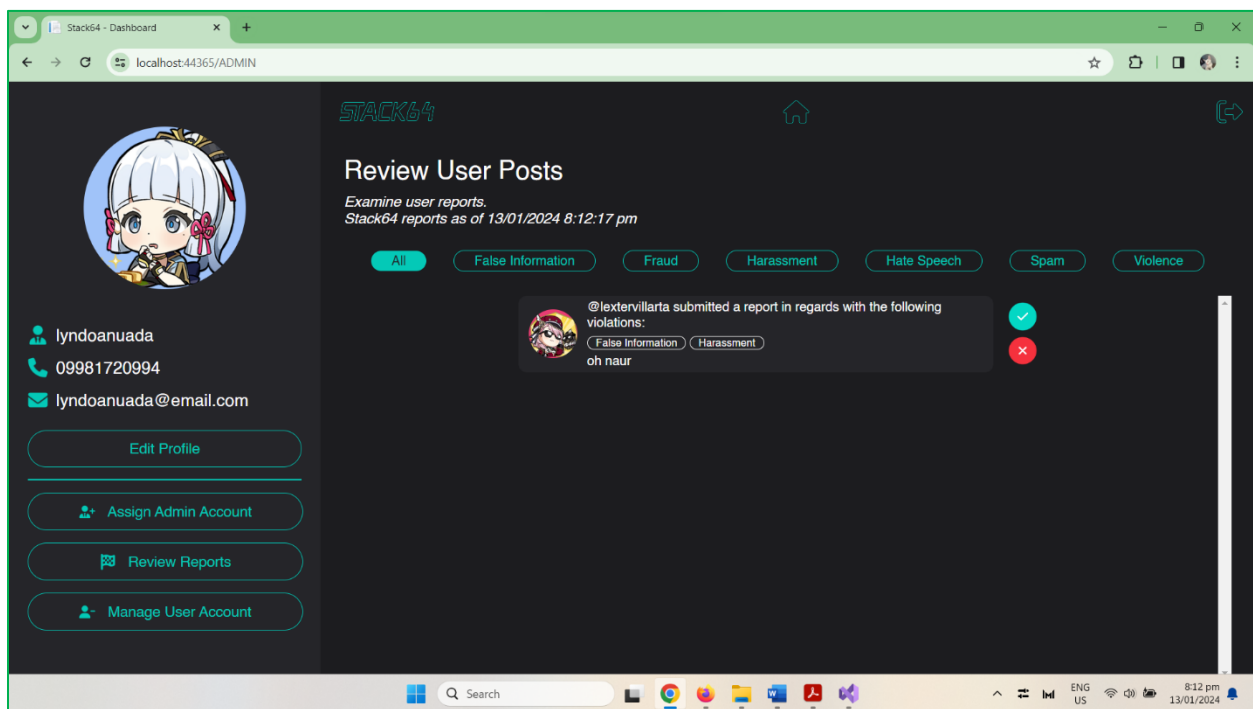


The screenshot displays the 'Assign Admin Account' interface within the Stack64 application. The browser address bar shows 'localhost:44365/ADMIN'. The left sidebar contains the user profile for 'lyndoanuada' with contact details and navigation links: 'Edit Profile', 'Assign Admin Account' (highlighted), 'Review Reports', and 'Manage User Account'. The main content area features the 'Assign Admin Account' title and subtitle 'Create new admin account for an employee.' Below this is a form for employee information with fields for name, contact number, email, and password, followed by 'Choose File' and 'Create Admin Account' buttons. A central graphic shows a placeholder for an employee ID card. At the bottom, a section prompts the user to 'Enter admin password to proceed' with a 'Type here' input field. The Windows taskbar at the bottom indicates the time is 8:09 pm on 13/01/2024.

This part of the system allows admin to assign (create) new account for a Stack64 employee.

Output of the Study (Cont.)

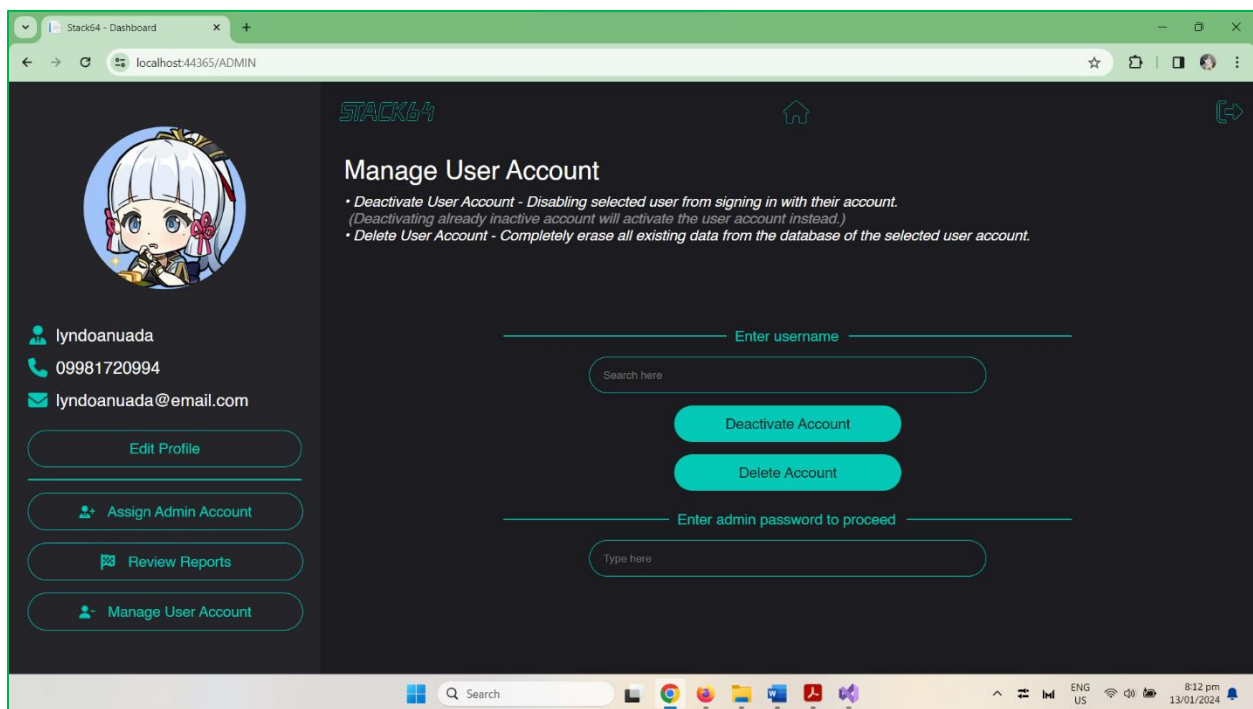
Figure 12. Review Reports



This section of the system allows admin to approve and disapprove reports submitted by the users.

Output of the Study (Cont.)

Figure 13. Account Management



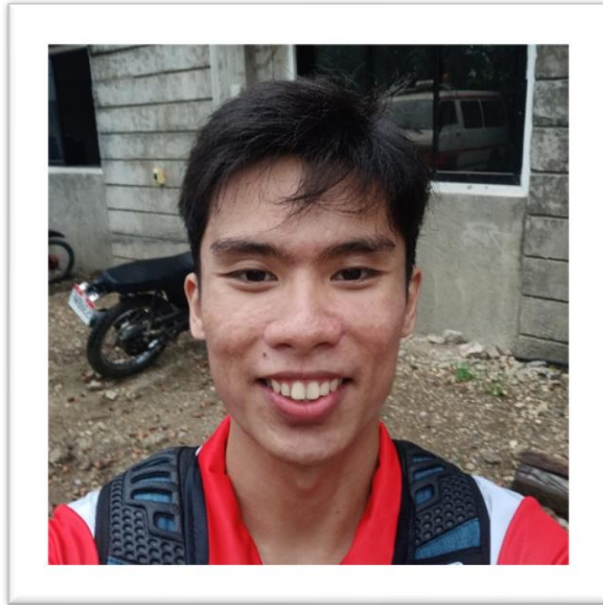
This part of the system allows admin to deactivate, activate, and delete user accounts.

References

Prosus. (2008, September, 15). Stack Overflow. <https://stackoverflow.co/>

OpenAI. (2022, November, 30). ChatGPT. <https://openai.com/chatgpt>

Developer's Profiles



Developer: John Lyndo Vero Anuada

Age: 21

Address: Sabang, Sibonga, Cebu

Email Address: anuadajohnlyndo@gmail.com

Facebook Profile: Lyndo Anuada

Website: N/A

Tiktok: @kelvininstinct

Hobbies: Playing FPS (First Person Shooter), Playing MOBA (Multiplayer Online Battle Arena), and Editing Videos.

Skills: Keen to Digital Arts (Adobe Photoshop, Adobe Premiere Pro)

Developer's Profiles (Cont.)



Developer: Lexter Cavan Villarta

Age: 22

Address: P. Burgos Street, Carcar City, Cebu

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Facebook Profile: Lexter Villarta

Website: N/A

Hobbies: Online Games

Skills: Can any take role in Online Games

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List of members:
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First Semester
Academic Year 2023-2024

PC 316 – Systems Integration and Architecture 1