

Stock Market Learning Kit

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Abstract: In today's dynamic financial landscape, where investing plays a crucial role in wealth creation, it is important for investors to be well-informed and equipped with the necessary knowledge to make informed decisions. The Stock Market Learning Kit project is an initiative focused on revolutionizing financial education. In a rapidly evolving financial landscape, understanding the complex details of the stock market is necessary. This learning kit strives to bridge the knowledge gap by providing educational experience. The kit employs interactive modules that engage users in an engaging learning environment. By immersing learners in the flow of the stock market, the kit aims to inculcate the ability to understand how the stock market actually works. Learning materials form a comprehensive resource base, covering topics ranging from fundamental analysis to technical indicators. The kit goes beyond theoretical discourse, emphasizing practical insights that empower users to make informed investment decisions. Moreover, it dedicates sections to risk management, an often-neglected aspect critical for sustainable investment strategies. The Stock Market Learning Kit project focuses on making the resource accessible and user-friendly, it endeavors to reach a diverse audience, making a new generation of financially informative individuals. In doing so, the project aligns with the broader societal goal of enhancing financial literacy and empowering individuals to navigate the complexities of the stock market confidently and it is implemented using html, css, javascript.

Keywords: stock market, learning kit, financial literacy, educational experience.

1. Introduction

The stock market is a platform where investors can buy and sell shares of publicly traded companies. It plays a crucial role in the global economy, providing companies with access to capital and allowing investors to participate in their growth. Knowing about stock market and understanding it before entering stock market is necessary. A quiz game and learning site about the stock market can be a valuable educational tool for beginners and experienced investors as well. It could cover various topics, such as stock market basics, investment strategies, financial analysis, and understanding market trends. By using interactive quizzes, users can test their knowledge and reinforce their understanding of complex financial concepts. Such a platform can empower individuals to make more informed investment decisions and help them navigate the complexities of the stock market [1] effectively. Providing learning tool along with quiz will be very helpful making learning process easier.

The motivation behind creating a Stock market Quiz game and learning site is to provide an engaging and interactive platform for individuals to learn about the stock market and investment principles. By combining a quiz game with educational content, the site aims to make learning about the stock market more enjoyable and accessible. The site aims to reach wide audience, including beginners who want to understand the basics of investing and seasoned investors looking to enhance their knowledge and skills. By offering a gamified learning experience, users can test their understanding, track their progress, and receive instant feedback, making the learning process more effective and enjoyable. As for the use of programming language, creating the website would likely involve web development technologies such as HTML [2], CSS [3], and JavaScript [4] to build the front-end user interface. Additionally, back-end programming languages like Python could be used to handle user data, implement quiz logic, and manage user accounts.

By combining technology, education, and gamification, the Stock market Quiz game and learning site can empower individuals with the knowledge and skills they need to navigate the stock market confidently and make informed investment choices.

2. Literature Survey

Paper [5] discusses the development of an Online Quiz application, which is designed to support the education of primary school and underprivileged children. The application automates the selection and registration process for candidates, allowing for both technical and non-technical assessments. The system provides equal opportunities and a second chance for candidates who do not pass the non-technical test.

The literature review briefly mentions the usefulness of Quiz Apps in various contexts and highlights the project's focus on university-level quizzes.

The methodology section outlines the steps involved in using the application, from signing up and logging in to taking tests and checking scores.

The design of the Quiz App includes four panels: Student, Admin, Faculty, and Student Feedback. Users can select their category and log in, with new users required to sign up. The benefits of the Quiz App include time and resource savings for students, as they can take tests digitally and access answer explanations and tutorials. The conclusion emphasizes the

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transition from paper-based testing to digital forms and the ease of obtaining accurate information with the system.

The future scope suggests further enhancements, such as discussion forums, cloud server implementation, multimedia support, and integrating learning materials.

Next research paper [6] discusses the role of quizzes as an effective assessment tool in educational settings. Quizzes are considered a valuable means of assessing students' knowledge and learning outcomes, promoting motivation, and providing quick and informal feedback. The paper explores various aspects of using quizzes in education, including their types (graded and non-graded), their suitability for formative and summative assessment, and their design and implementation. The research also covers different quiz question types and their alignment with learning objectives.

The study acknowledges the positive impact of regular, weekly quizzes on student engagement and learning outcomes. It also highlights the advantages of using online quizzes and collaborative quizzes in group settings.

Additionally, the paper provides recommendations for instructors, emphasizing the importance of aligning quiz content with course learning outcomes and considering the appropriate weightage of quiz scores in the final grading of a course.

In conclusion, this research paper underscores the benefits of quizzes as a versatile assessment tool that can enhance student learning, motivation, and performance when appropriately designed and integrated into educational practices.

Paper [7] seems to be focused on creating an interactive front-end website for hosting quizzes. The technologies mentioned include HTML, CSS, and JavaScript, which are commonly used for front-end web development.

The passage also outlines the deployment method, indicating that the project is hosted on GitHub Pages, making it accessible via a specific URL. It also provides instructions on how to clone and run the project locally, which is helpful for developers who want to work with the project on their own machines.

The credits section acknowledges the sources and tools used in the project's development, such as EmailJS, Bootstrap, and various online resources. The project appears to use external APIs, specifically the Open Trivia Database, to retrieve quiz questions and options. The author also credits the sources of media used in the project, including the hero image and GIFs.

Overall, this passage serves as an informative and instructive document for anyone interested in understanding and working with the author's quiz project, including its technologies, deployment, and credits.

Next paper [8] in this study was conducted to examine the effectiveness of the use of learning kits among students to improve student performance on the topic of Mechanical Design. This study was conducted based on the type of quasi experimental research approach. The population of the study was Sekolah Menengah Kebangsaan Agama (SMKA) Faliahiah in Kelantan. The sample consists of 52 students selected from 4 classes. The researchers divided the samples into two groups namely the control group and the treatment group. The treatment group is taught using a learning kit while the control

group is taught using conventional methods. The instrument used by the researcher in this study is a set of pre and post test questions. When data is obtained, the researchers process the data using SPSS software (Statistical Package for Social Science). T-test analysis is used to compare the difference in pre-test performance and post-test between treatment group and control group. The significance level of the study was determined at $p < 0.05$. The result of the data analysis shows that there were positive and significant differences i.e., 0.024 ($p < 0.05$). Therefore, from the findings, it can be concluded that teaching and learning using kits to students can help to improve student performance especially in technical subjects.

3. Proposed System

The stock market learning kit project aims to provide comprehensive education and practical questions for individuals looking to understand and navigate the complexities of the stock market.

The system will comprise the following key components: Educational Content, Modules and Lessons, Structured modules will cover fundamental and technical analysis, investment strategies, risk management, and market dynamics. Quizzes and Assessments will be included as regular quizzes can reinforce learning and assess progress. Real-world Case Studies, Analysis of historical market event and their impact plays an important role in financial education. Market News Feeds, Integration with financial news sources keep users informed of current events. Explanation of key economic indicators and their influence on the market are also important. All these factors are necessary and should be considered while developing stock market learning kit.

Progress Tracking and Analytics of quiz, tools to assess the success of investment decisions and identify areas for improvement is necessary. Personalized profiles to track individual progress and achievements will be provided. Secure login mechanisms will be used to protect user accounts. Periodic surveys will gather feedback on the effectiveness of the learning kit. Regular updates and improvement can be made based on user suggestions and market changes. Financial Dictionary can also be included, which is a comprehensive glossary to explain financial terms and jargon.

The stock market learning kit project aims to empower users with the knowledge and skills needed to make informed investment decisions, all within a user-friendly and engaging platform.

4. Working

The first step is login, user will have to login to create a unique account in order to save the progress details. After login user will be directed to the home page where user will get various options. Main focus of this learning kit would be quiz and learning modules. On selecting learn about stock market user will get various modules on stock market covering the details required to get idea about the stock market.

If the quiz option is selected then questions will be displayed one by one on the screen, user will select the option which

he/she thinks is more appropriate if the selected option is correct then scored will be increased automatically and if the selected option is incorrect then correct answer will be displayed on the screen. Total of 10 questions will be asked in one quiz game. After 10 questions the quiz will end.

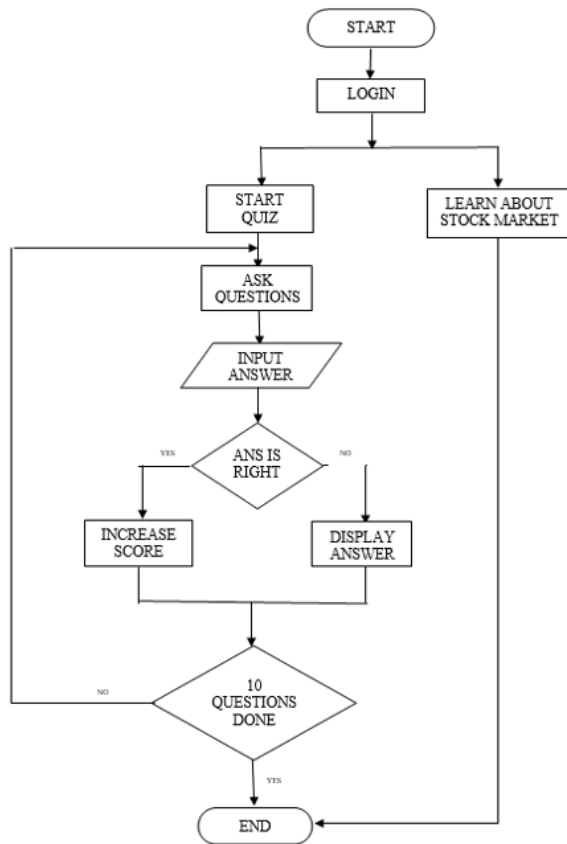


Fig. 1. Working of the website

Fig. 1 shows the working flow of the system, how the website will work after user logs into their account.

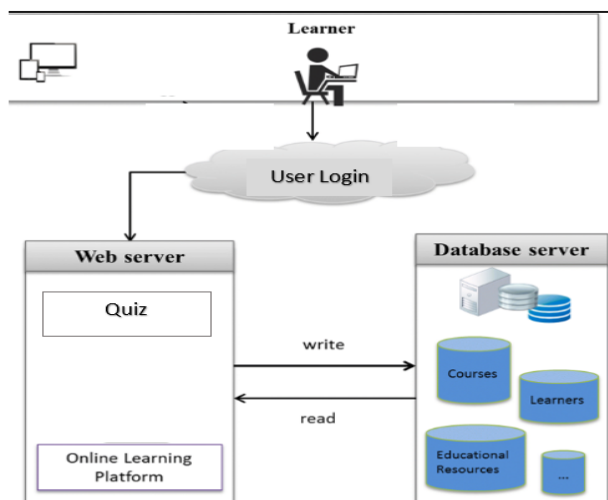


Fig. 2. Architectural diagram

Fig. 2 shows architectural diagram of the website showing the user interface and database. Solution for Mathematical questions will also be present in the database.

Website will basically provide financial education. Learners can access the website which will be implemented using HTML CSS and JavaScript. For storing modules and all other necessary details like login id and password MySQL would be used as database. For backend framework Django would be a good option.

5. Implementation

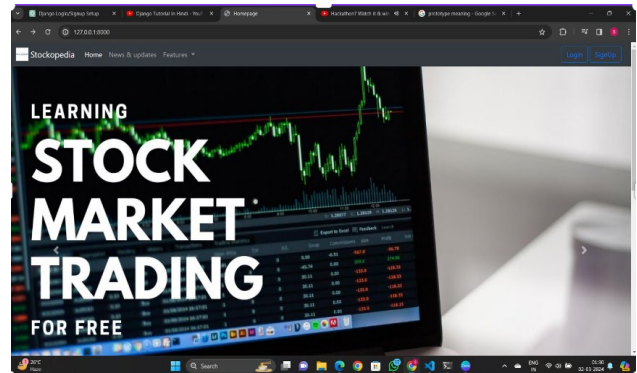


Fig. 3. Homepage

This is the main homepage of the project which includes user login option.

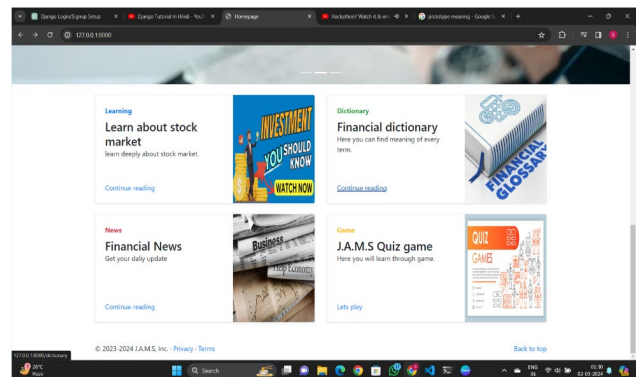


Fig. 4. Content page

Fig. 3 and Fig 4. displays the content of the homepage, the options that will be available are modules and quiz. Financial dictionary and news are also important parts of the learning kit.

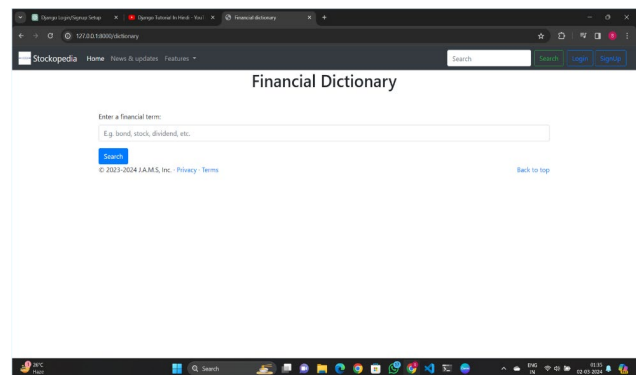


Fig. 5. Financial dictionary

Figure 5 shows the financial dictionary part. One search bar would be made available in which any stock related terms and

jargons can be searched.

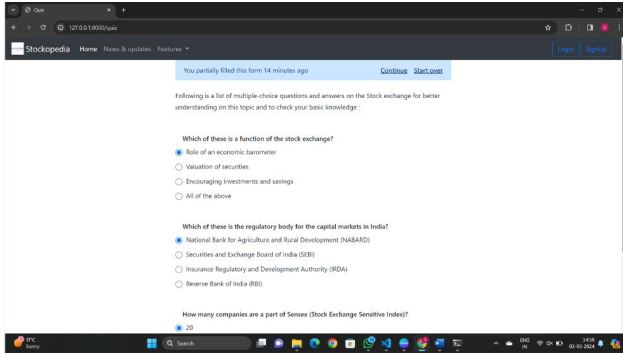


Fig. 6.

This is how the main part, the quiz for self-assessment would be taken. Progress will be stored as each user will have his/her unique login.

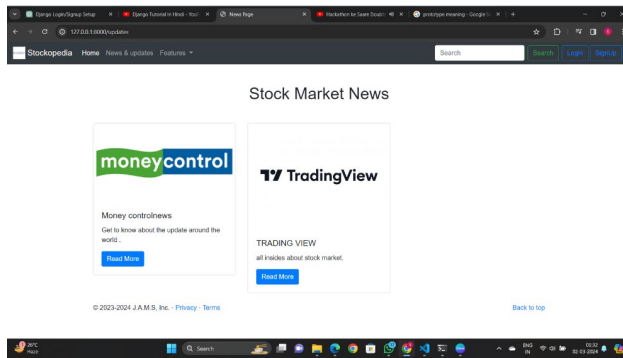


Fig. 7. Stock market news

Fig. 7 shows the news and update part. User can keep themselves up to dated be regularly reading news regarding stock market.

6. Conclusion

The stock market learning kit website development project

aims to provide a comprehensive and user-friendly platform for individuals seeking to enhance their knowledge of stock trading. With a user-centric design, interactive modules, and interesting Quiz, this website aims to empower users with valuable insights and practical knowledge. By fostering an engaging learning environment, the project seeks to build a website which would teach and provide tools they need to navigate the complexities of the stock market with confidence and success. Whether you're a novice investor or an experienced trader, the stock market learning kit offers something for everyone, making it an invaluable resource for anyone looking to master the art of investing. the world of finance, thereby facilitating clearer comprehension of complex topics. The learning modules offer structured lessons that cover a wide range of topics, from basic principles of investing to advanced trading strategies, catering to individuals at different stages of their investment journey. These modules are designed to be accessible and user-friendly, providing a structured learning experience that enables users to progress at their own pace. Furthermore, the integration of real-time news and updates ensures that users stay informed about current market developments and trends, empowering them to make informed investment decisions in a rapidly evolving financial landscape. By staying abreast of market news and events, users can adapt their strategies accordingly and seize opportunities as they arise

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