CODECHEF PRO TRACKER

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ABSTRACT

Our website is a comprehensive platform for retrieving important identification information about individuals participating in competitive programming on Code-chef. With the increasing popularity of coding competitions, it becomes essential to have access to the latest and most accurate information about the participants to evaluate their skills and capabilities. .Our platform provides users with crucial information such as the global rank, country rank, highest rating, and present star of the individual, making it easy to assess their performance and growth over time. What's more, our website allows you to track your friends and known ones' progress on the plat form. The website's user-friendly interface allows you to easily search for a specific user and access their profile with just a few clicks. You can also browse through the rankings to see the top performers in various categories and countries. Additionally, our website allows you to create a personalized dashboard where you can keep track of your friends and loved ones' progress. This feature is particularly useful for recruiters looking to hire the best coding talent or participants looking to measure their progress and benchmark their performance against their peers..With our website, you can easily stay updated on your friends and known ones' Code-chef progress and even celebrate their achievements with them. We understand the importance of building a community in the coding world, and our platform strives to facilitate just that in conclusion, our website provides an efficient and effective way to access the identification information of individuals participating in competitive programming on Code-chef. With accurate and up-to-date data, you can make informed decisions and stay ahead of the competition. What's more, our platform allows you to create a community and track the progress of your friends and known ones. Keywords: Comprehensive platform, Personalized dashboard, Code-chef progress, user-friendly interface, Discrepancies,

Errors, Benefits plans, Cost management, Benefits management.

1. INTRODUCTION

In today's digital age, the world is moving towards automation and advanced technology, and programming is becoming increasingly important in every sector. As a result, the demand for skilled programmers is on the rise, and companies are looking for ways to identify the best talent. This has led to a rise in the popularity of competitive programming platforms such as Code-chef, which provides individuals with a platform to hone their programming skills and showcase their talent. However, with the increasing number of participants on Code-chef, it becomes challenging to keep track of everyone's progress and performance. This is where our website comes in. We provide a platform for retrieving important identification information of individuals participating in competitive programming on Code-chef, making it easy to assess their skills and capabilities. Our website offers users crucial information such as the global rank, country rank, highest rating, and present star of the individual.

The global rank represents the user's overall rank on Code chef, while the country rank represents their position within their country. The highest rating is the highest rating achieved by the user on the platform, and the present star represents their current rating and rank on Code-chef. These metrics provide valuable insights into the user's performance and growth over time The website's user-friendly interface allows users to easily search for a specific user and access their profile in just a few clicks. Users can also browse through the rankings to see the top performers in various categories and countries. This information is valuable for recruiters looking to hire the best coding talent or participants looking to measure their progress and benchmark their performance against their peers. . Our platform is updated frequently, ensuring that users always have access to the most recent information. With accurate and up-to-date data, users can make informed decisions and stay ahead of the competition. Our website is the go-to destination for all your Code-chef identification needs, providing an efficient and effective way to access the identification information of individuals participating in competitive programming on Code-chef.

2. LITERATURE SURVEY

Code-chef Cards is a web-based platform that allows users to track their performance and progress in competitive programming on the Code-chef platform. The system provides a comprehensive view of a user's performance, including their highest rating, country ranking, world ranking, and star rating. In this literature review, we will explore the benefits and limitations of Codechef Cards, as well as its potential impact on the field of competitive programming. Competitive programming has become increasingly popular in recent years, with many companies using it as a tool for recruiting and evaluating candidates. Code-chef is one of the leading platforms for competitive programming, offering a range of challenges and contests that allow users to test their skills and compete with others. Code-chef Cards builds on this platform by providing users with a dashboard that displays their performance data in an easy-to-understand format. One of the key benefits of Code-chef Cards is its ability to track a user's progress over time. By monitoring a user's performance in real-time, Code-chef Cards helps identify areas for improvement and enables users to set and track their own goals. This feature is particularly useful for individual developers looking to improve their skills, as well as companies and educators seeking to track the progress of their teams and students. Another benefit of Code-chef Cards is its intuitive user interface.

The platform is designed to be user-friendly and easy-to-use, with a range of features that allow users to customize their experience. For example, users can set their own targets and goals, track their progress over time, and view detailed performance data for each challenge or contest. However, there are also limitations to the Code-chef Cards platform. One limitation is its dependence on the Code-chef platform itself. While Code-chef is a widely-used platform, it is not the only platform for competitive programming. Therefore, users who do not use Code-chef may not be able to take advantage of Codechef Cards. Additionally, while Code-chef Cards provides users with a range of performance metrics, it does not provide any insights or recommendations for improvement. Therefore, users must interpret their own data and use it to identify areas for improve ment. 3 Despite these limitations, Code-chef Cards has the potential to have a significant impact on the field of competitive programming. By providing users with a comprehensive view

of their performance and progress, Code-chef Cards can help individuals and companies identify areas for improvement and drive better outcomes. Additionally, by making it easy to track performance and progress over time, Codechef Cards can help users stay motivated and engaged in their competitive programming journey.

3. SYSTEM DESIGN

3.1 SYSTEM ARCHITECTURE

In this architecture, the front-end is built using React and is responsible for user interaction and displaying user input and output. The back-end, built using Node.js, retrieves and processes data from the Code-chef API and stores it in the MongoDB database. The API, built using Express.js, communicates with the Code-chef platform and retrieves data about users' rankings and ratings. Other data sources may also be incorporated into the system as needed. This system architecture is designed to be scalable and efficient, with clear separation of responsibilities between the front-end, back-end, and database. The API provides a simple and efficient way to communicate with the Code-chef platform, and the MongoDB database provides a flexible and scalable platform for storing user data
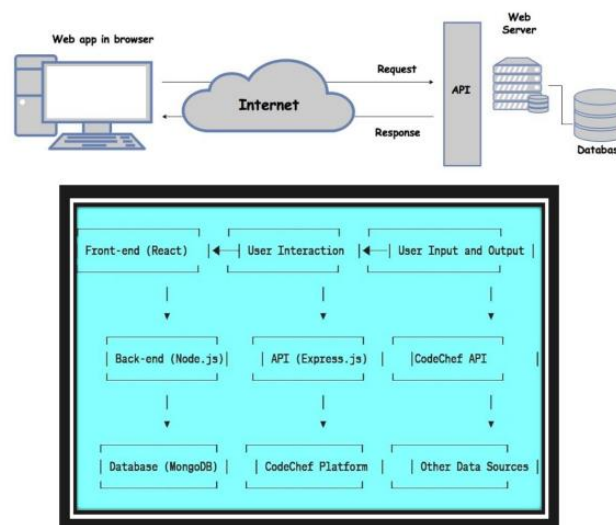

Fig 1 System Architecture

1. User Interaction: This is the first step in the process, where the user interacts with the front-end of the application. The front-end is built using React, HTML, and CSS, and allows the user to input their Code-chef username and view their performance statistics.

2.Front-end: The front-end sends requests to the back-end to retrieve data about the user's performance on Code-chef. This data includes information such as their rating, country ranking, world ranking, and star rating.

3.Back-end (Node.js): The back-end of the application is built using Node.js and is responsible for processing requests from the front-end. The back-end communicates with

the Code-chef API to retrieve data about the user's performance on Code-chef.

4.API (Express.js): The API is built using Express.js and acts as a middle layer between the backend and the Code-chef API. The API handles requests from the back-end and communicates with the Code-chef API to retrieve the requested data.

5.Code-chef API: The Code-chef API is the primary source of data for the application. The API provides data about user performance on the Code-chef platform, including their ratings, rankings, and star ratings.

6.Database (MongoDB): The back-end stores data retrieved from the Code-chef API in a MongoDB database. The database stores user performance data, which can be accessed and analyzed by the front-end to provide the user with insights into their performance on the Code-chef platform.

7. User: Finally, the front-end displays the data retrieved from the backend and database to the user. The user can view their performance statistics and use the insights gained to improve their performance on Code-chef.

ACTIVITY DIAGRAM

Activity Diagrams in UML serve to visually represent dynamic workflows, showcasing the sequence and conditions of activities within a system or business process. The key components include nodes, representing actions or decisions, and transitions, illustrating the flow between these nodes. Initial and final nodes mark the activity's start and end. Control flows connect actions, specifying the order of execution, while decision nodes enable branching based on conditions. Forks and joins manage parallel flows, and swim lanes partition activities among different entities for clarity.

 • Nodes: Represent actions or decisions.

 • Transitions: Illustrate flow between nodes.

 • Initial and Final Nodes: Indicate activity start and end.

 • Control Flows: Connect actions, defining execution order.

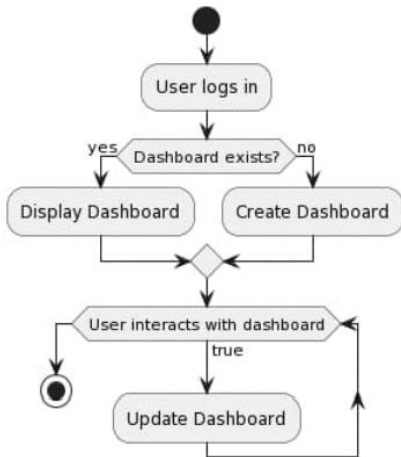 • Decision Nodes: Facilitate branching based on conditions.

Fig 2 Represents Activity Diagram

4.OUTPUT SCREENS

LOGIN PAGE:

Fig 3 Represents Initial User Interface

The output screen represents the basic initial user interface shows all Input boxes that user can enter their data into.

INPUT ENTRY:

Fig 4 Represents User Input Entry

The output screen shows how the user interface is accessed and input is taken.
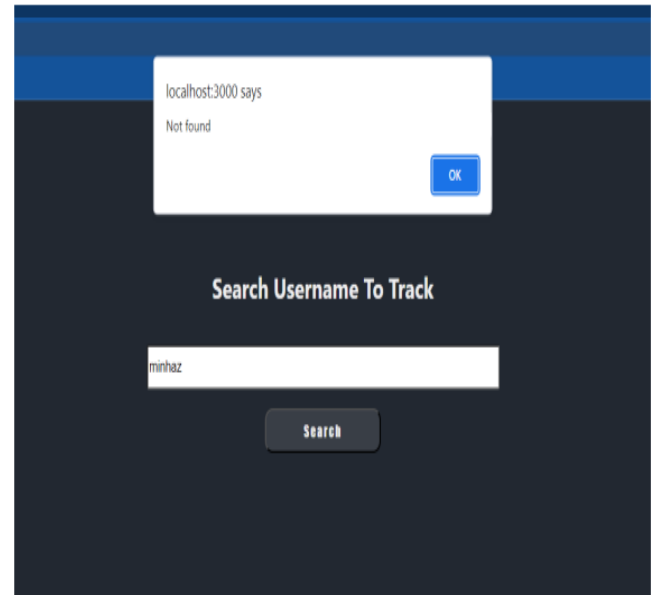
INVALID USERNAME:

Fig 5 Represents Invalid username

5.CONCLUSION

Building a website that shows the ID information of a person from the Codechef competitive programming platform can be a valuable tool for users who are interested in tracking their progress and comparing their rankings to other users. By providing information such as global rank, country rank, highest rating, and present star of the user, this website can help users evaluate their performance and set goals for improvement. Additionally, a website that displays this information can be a useful resource for those who are interested in recruiting talented programmers for job positions or collaborative projects. By using this website to search for high-ranking Code-chef users, employers and project managers can identify candidates with strong programming skills and a proven track record of success. However, it is important to note that this website should be used responsibly and ethically. Users should respect each other's privacy and not use the website to harass or unfairly compete with others. Additionally, the website should only display publicly available information and not infringe on users' rights to privacy or security. Overall, a website that displays ID information from the Code-chef competitive programming platform can be a valuable resource for users, employers, and project managers alike. By providing easy access to key metrics and rankings, this website can help users track their progress and achieve their goals in the competitive programming community.

6.FUTURE ENHANCEMENTS

◦ **Educational Resources:** • Integrate educational resources such as tutorials, articles, and practice problems. This can attract a broader audience, including those who are looking to improve their skills or learn new concepts.

◦ **Code Repository Integration:**

• Allow users to showcase their code repositories or link to their GitHub profiles. This can provide a more comprehensive view of their coding projects and contributions outside of the competitive programming realm.

◦ **Team Collaboration:**

• Introduce features for users to form teams, collaborate on coding challenges, and participate in team-based competitions. This can encourage teamwork and add a social dimension to the platform.

◦ **Predictive Analytics:**

• Develop algorithms or tools that use historical data to provide users with predictions about their future performance, potential rating changes, or upcoming contests. This can add a unique and engaging element to the platform.

◦ **Achievement Badges:**

• Implement a badge system to recognize and reward users for specific achievements or milestones. This can serve as a motivator and add a gamification aspect to the platform.

◦ **Integration with Other Platforms:**

• Explore partnerships or integrations with other coding platforms or programming communities to provide a more comprehensive overview of a user's programming journey across multiple platforms.

◦ **Live Coding Sessions:**

• Incorporate a feature that allows users to host or join live coding sessions, where they can solve problems together in real-time. This fosters a sense of community and collaborative learning.

◦ **Competitive Coding Challenges:**

• Organize and host your own coding competitions on the platform.This can attract more users a nd create a vibrant and active community.

7.REFERENCES

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