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Interview Experience Sharing Community Using Node.js

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Abstract- This study discusses methods for fully automating and revolutionizing the way interview experiences are shared and used by the students. InterXview emerges as a light of innovation and collaboration, altering the way students prepare for job interviews in a time when finding employment prospects is extremely competitive. The platform responds to the urgent demand for increased interview readiness in the current academic environment. A user-friendly online interface is provided by InterXview, which smoothly combines HTML, CSS, JavaScript, and Bootstrap for the frontend while relying on Express.js and MongoDB for a strong backend. This technological fusion offers students access to a vast database of interview experiences, arming them with knowledge about interview procedures, questions, and practical experiences. InterXview is a catalyst for change in the student community and is more than just a technological solution. It promotes an open atmosphere where active knowledge exchange takes center stage, enabling students to improve their interview preparation collectively. The platform addresses the pressing need for improved interview readiness in today's academic landscape. The three primary contributions of our work are (a) Examines the practical applicability of the platform from both a business and literary perspective, (b) It promotes the development of critical soft skills, such as communication, problem-solving, and teamwork, through collaborative learning within the student community, and (c) a feasibility evaluation of a few particular interview experience resource sharing technique.

Keywords- InterXview, interview preparation, user-friendly platform, web-based interface, interview experiences, knowledge sharing, collaborative learning, soft skills development.

I. INTRODUCTION

Students have the challenging task of confidently and competently preparing for job interviews in an educational environment that is continually changing and in which the job market is becoming more competitive. In addition to academic achievement, pursuing significant employment prospects necessitates a thorough awareness of the complex world of interviews.

The innovative platform called as Inter X view arises to close this knowledge gap and empower students on their path to fulfilling jobs. Inter X view is more than simply an online resource; it's a vibrant, welcoming community created specifically to encourage student knowledge sharing. Inter X view's primary goal is to give students convenient access to a rich tapestry of interview experiences from diverse businesses and employment roles. Inter X view wants to transform the way interviews are prepared for and

improve the chances of success for aspiring professionals by linking students and enabling them to share their invaluable insights about interview processes, questions asked, and overall experiences.

The main goal of InterXview is unmistakable: to create a user-friendly platform that gives students the resources they need to successfully prepare for job interviews. Beyond technical complexity, the platform strives to foster a culture in which students are not simply passive recipients of information but also active participants. Students are encouraged to submit their own interview experiences, ideas, and recommendations here, fostering a community of support and cooperation.

As the project develops, it has enormous potential for students since it emphasizes real-world application and the building of a welcoming atmosphere centered on the needs of the users. Students can benefit from one other's experiences, obtain important knowledge, and advance both personally and professionally in this setting that promotes mutual learning. In order to improve the community's overall comprehension, InterXview envisions real-time knowledge sharing in which students can actively contribute by actively sharing their most recent interview experiences. InterXview also emphasizes networking and peer help heavily.

It aims to promote a sense of community among students who are pursuing comparable career paths by promoting contact, advice-seeking, and the creation of beneficial connections. This network of support, built on common experiences, can help students feel more confident and create a supportive atmosphere for their development. InterXview establishes itself as a primary point for interview insights at a time when information is plentiful but frequently dispersed. By selecting and structuring pertinent interview experiences, it aims to speed up the interview preparation process while still giving students useful information.

II. TECHNOLOGIES USED

1. Frontend Technologies:

1.1 HTML/CSS: These fundamental web technologies are the building blocks of the platform's user interface. HTML (Hypertext Markup Language) provides the structure and content of web pages, while CSS (Cascading Style Sheets) is responsible for the visual design and layout.

1.2 JavaScript: JavaScript adds interactivity and dynamic functionality to the platform. It enables features like real-time interactions, data validation, and user friendly interfaces. JavaScript is crucial for creating an engaging user experience.

1.3 Bootstrap: Bootstrap is a popular CSS framework that simplifies the process of designing responsive and visually appealing web pages. It provides pre designed components, grids, and styles, making it easier to create a consistent and aesthetically pleasing frontend.

Fig 1. Technology Stack.

2. Backend Technologies:

2.1 Express.js: Express.js is a web application framework for Node.js, known for its simplicity and flexibility. It's used in the backend to handle server-side logic, routing, and managing HTTP requests and responses. Express.js is well-suited for creating RESTful APIs and handling data operations.

2.2 MongoDB: MongoDB is a NoSQL database that stores the resources shared by students. Its document-oriented structure allows for flexible and scalable data storage. MongoDB is particularly suitable for applications where data needs to be organized in a semi-structured or unstructured format.

III. LITERATURE SURVEY

There is a wealth of literature on the subject of collaborative learning platforms and educational technology that emphasizes the significance of student knowledge sharing and the development of active online communities. The importance of giving students readily available materials to

improve their academic and professional paths, with a specific focus on interview preparation, has been explored in numerous researches.

With the introduction of online tools, students may now interact, benefit from one another's experiences, and practice for job interviews like never before. The goal of this literature review is to investigate the body of knowledge that connects with the mission of InterXview, a revolutionary online community that gives students the ability to share and access interview experiences. This poll aims to offer useful insights on the project's goals and its ability to redefine interview preparation into a collaborative undertaking within the student community by assessing similar studies, best practices, and case examples.

Title: "Role of Node js in Modern Web Application Development"
Authors: Ghansham Jadhav - Student, Institute of Computer Science, Mumbai Educational Trust, Maharashtra, India & Flavia Gonsalves - Professor, Institute of Computer Science, Mumbai Educational Trust, Maharashtra, India

The study concluded that Node has transformed the usability of JavaScript, making Node a complete programming language. From browsers to server-side scripting outside of browsers, Node has made possible the availability of a runtime environment, a library full of free useful modules that can be imported by using an in-built tool named NPM. Node.js uses event driven I/O, non-blocking asynchronous programming to be lightweight and be efficient. Essentially, any business utilizing Node can: utilize fewer servers, utilize less engineers and abatement page load times.

Title: "A Comparative Analysis of Node.js (Server-Side JavaScript)"
Authors: Nimesh Chhetri - Saint Cloud State University

This paper showed that Node has transformed the usability of JavaScript, making Node a complete programming language. From browsers to server-side scripting outside of browsers, Node has made possible the availability of a runtime environment, a library full of free useful modules that can be imported by using an in-built tool named NPM. Node uses nonblocking, event-driven I/O asynchronous programming to be lightweight and be efficient. We showed that setting up a Node environment is simple, and Node is available to all major operating systems.

Title: "Node.js Challenges in Implementation"
Authors: Hezbullah Shah & Tariq Rahim Soomro
Node.js gave rise to the Full Stack Developers who are now able to manage server and client side by their own. Node.js is fast and reliable for heavy files and heavy network load applications due to its event driven, non-blocking, and asynchronous approaches, where developers can also maintain a complete project in single pages (SPA) and can use for IOT. The result of study concludes from a survey and from literature review the implementation areas and challenges of the Node.js. Lastly will provide suggestion on how to improve to overcome the challenges.

Title: "Social Media Posting Platform using Node.js"
Author: Hradsh Kumar (Assistant Professor), Devanshi Gupta, Kalpit Kulshrestha SCSE Galgotias University Noida, India

This paper introduces a framework using node.js to build a very dangerous and high-speed backend database server for web developers and app developers. It also demonstrates the use of a NoSQL website such as Mongodb in the proposed project work in addition to another traditional website such as MySQL.

Title: "The Building of Web Pages"
Authors: Sonia Mianji Johnson

In comparison MERN and MEVN both execute CRUD operations in single page applications at very similar speeds. This implies that runtime performance is not a deciding factor in the choice between MERN or MEVN, and more specifically between React.js and Vue.js. Ultimately it is not unreasonable to assume that there are not a given set of reasons that determine the choice of software combinations in the development of web applications, but a multitude. Besides the ones elaborated upon above, the factors that determine the company's choice of software stacks range from what resources are available, the skill sets of the developers, the clients' needs and even the

individual biased preference of any developer involved in the decision-making process.

My comprehension of the function of Node.js in the context of the InterXview project has been much improved by the comprehensive literature searches conducted to investigate the fields of collaborative learning, educational technology, and online community platforms.

I have learned how Node.js may act as a reliable and adaptable backend infrastructure, able to support interactive user experiences and real-time knowledge sharing through the synthesis of current research. The surveys have provided a solid foundation for the deployment of Node.js in a project targeted at empowering students in their pursuit of interview success by shedding light on best practices, technical issues, and its scalability.

IV. OBJECTIVE

The InterXview project is rooted in a set of fundamental objectives that underpin its mission to empower students through collaborative learning and knowledge sharing. At the core of this endeavor is the creation of a user-friendly and intuitive web-based platform, designed to be accessible to students of all technical backgrounds. Navigational ease is a top priority, ensuring that students can seamlessly share and access interview experiences.

Furthermore, the project aims to curate a comprehensive repository of interview experiences spanning various companies and job roles. It encourages active participation from students, urging them to contribute their own recent interview experiences to enrich the platform's content. These experiences will provide valuable insights into the interview process, including common questions and challenges, thereby enhancing students' interview preparedness.

An inclusive and supportive community is a critical component of InterXview. It strives to foster a sense of belonging among students who actively contribute by sharing their interview experiences, tips, and advice. Collaboration and mutual support among peers pursuing similar career paths are actively promoted.

The project's overarching goal is to equip students with the knowledge and confidence necessary to excel in job interviews. It streamlines the interview preparation process by offering targeted and valuable information, creating opportunities for students to interact with each other, seek advice, and build connections.

Addressing the challenge of information overload is also on the agenda. InterXview aims to curate and organize relevant interview experiences, ensuring that students can access focused and valuable information without feeling overwhelmed. Technical and financial feasibility are carefully considered, with a skilled team of web developers ensuring the platform's technical stability, and financial sustainability being encouraged through organic growth and user-generated content.

Ultimately, the project's ultimate objective is to contribute to students' success in interviews and career pursuits, opening doors to exciting and rewarding opportunities. It seeks to redefine how students prepare for interviews and collaborate in their academic and professional journeys, positioning itself as a transformative force in the educational technology sector.

V. METHODOLOGY

In the initial design and server setup phase, the project focuses on user interface (UI) development, crafting visitor and login page layouts with HTML and CSS to ensure an appealing and user-friendly design. The frontend is structured into distinct pages, such as home, dashboard, send, and profile pages, each tailored to specific functionalities. The server is developed using Express.js, simplifying web server configuration and enabling routing and middleware setup.

Project organization is meticulously maintained, ensuring structured files such as server.js, package.json, package-lock. json, and node_ modules. Dynamic content rendering is achieved by implementing EJS to embed JavaScript into HTML templates, allowing for dynamic content based on user interactions and server data.

The development workflow involves implementing tools to streamline the development process. The server auto-restarts using nodemon whenever

code changes are made, enabling real-time testing and code refinement. Reusable templates or components are created to prevent code duplication and facilitate a quicker development cycle. Maintaining a secure development environment is emphasized through the use of environment variables stored in an .env file, containing sensitive information like API keys and database credentials.

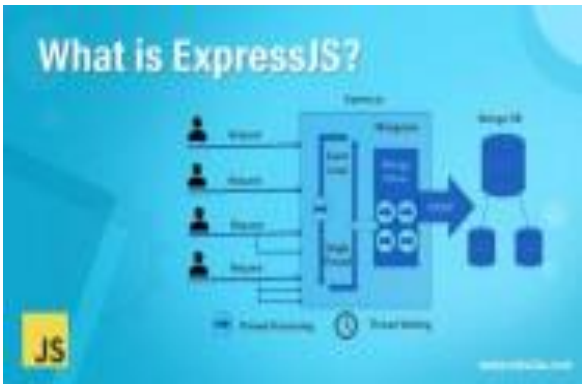

Fig 2. ExpressJS and MongoDB Architecture.

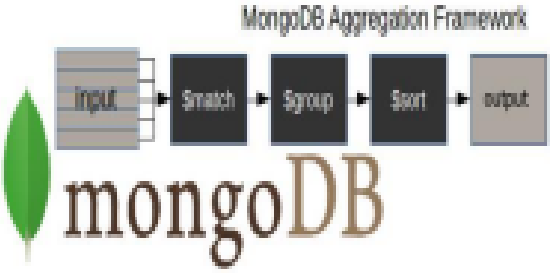

Fig 3. MongoDB Framework.

In the MongoDB framework, a NoSQL database, MongoDB, is implemented for data storage and retrieval. A MongoDB sandbox cluster is used for development and testing purposes, providing a controlled environment for database operations. The dotenv package is employed in the Node.js application to access environmental variables, simplifying the management of environment-specific configuration settings. MongoDB Compass, a graphical user interface (GUI) for MongoDB, is considered to streamline data processing and database management, enhancing database-related tasks during application development.

The MVC software design approach is applied to the project, which involves route separation, controller model organization, data validation, and password hashing. Routing for various application routes is separated into distinct files, enhancing code organization and maintainability. Code is structured into controllers and models based on functionality, improving code readability and modularity. Data validation and attribute checks are implemented to protect data security and integrity. Password hashing tools like md5 and bcryptjs are used for enhanced security, ensuring user credentials are securely stored in the database.

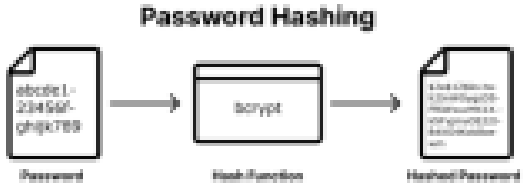

Fig 4. Bcrypt Encryption.

The website's features and functionality include session management, user post functionality, CRUD operations, route protection, and an admin panel. Session management ensures user authentication and session persistence, providing a seamless and authenticated user experience. Controller functions are developed for users to compose, modify, and manage their interview insights. CRUD operations are executed using Mongoose and MongoDB Atlas for effective, secure, and well-documented database interactions.

Route protection enhances security by implementing authentication and permission procedures to limit access to specific functionality and routes. An admin panel offers administrators powerful tools to manage the platform effectively, including the addition of new companies to the catalog, user account management, content moderation, and real time monitoring. It plays a crucial role in maintaining the platform's security and functionality, enabling administrators to proactively address issues and make informed decisions.

VI. RESULT

By collecting a wide range of user-contributed interview experiences at the time of debut, InterXview successfully met its goals. This database became a useful tool for students looking for information about different businesses and career

functions. Due to the quantity of material on the platform, users said their interview preparation significantly improved and their confidence levels increased.

The platform's interactive elements were quickly welcomed by the user base, who actively participated in debates, sought out peer assistance, and grew their professional networks. Users excitedly offered their interview experiences, suggestions, and guidance, exceeding expectations in this lively ecosystem of information sharing.

Users were able to quickly access certain interview experiences thanks to the effective search and classification capabilities, which also sped up the preparation process and saved them a lot of time. The success of the platform as a whole was influenced by the effective user experience.

Fig 5. Landing Page.

InterXview's success can be ascribed to its user centered design strategy. We were able to efficiently adjust the platform to meet user needs by routinely gathering and incorporating user feedback into our continuous improvement activities. A platform that addressed user preferences and provided a seamless user experience was the result of this iterative process.

It is impossible to overestimate InterXview's contribution to establishing a helpful and cooperative community. Users eagerly shared their knowledge and experiences, fostering a distinctive and vibrant environment. Individual users gained from this, and it also helped the platform expand and become more relevant.

The efficient search and classification features allowed users to easily access certain interview experiences, which sped up the preparation process and saved them a ton of time. The platform's overall performance was affected by the platform's successful user experience.

Fig 6. Sign Up Page.

VI. CONCLUSION

In conclusion, the InterXview platform has become a game-changer for student knowledge sharing and interview preparation. With the goal of building a vibrant and welcoming online community where students could access a wide range of interview experiences for any company they choose, this project got underway. InterXview has not only achieved but also beyond its goals because to persistent efforts and a dedication to user-centric design.

It has developed into a useful tool for students navigating the complex world of job interviews. Numerous people have been given power by the collection of user-contributed interview experiences, which has given them invaluable insights into interview procedures, questions asked, and overall experiences. For our users, this has meant better interview preparation and higher success rates.

A helpful community that actively engages in information sharing has been cultivated through the platform's interactive features, which range from user profiles to content categorization and tagging. Users have taken advantage of the chance to network with people who are on similar professional trajectories, get guidance, and create networks that go beyond the platform. This active social environment has improved the lives of our users while also highlighting the value of group learning. We have been able to maintain our agility, responsiveness to user needs, and alignment with new trends in interview preparation thanks to the iterative development approach.

The InterXview team is dedicated to maintaining the platform's influence and relevance in the future. We will keep improving the functionality, gathering user feedback, and adjusting to changing interviewing procedures. Our objective remains centered on the goal of creating a welcoming and encouraging environment for interview preparation. InterXview is a testament to the potential of collaborative learning and the ability of technology to give students the tools they need to succeed in the workplace.

We would like to express our appreciation to our users, whose efforts and participation have been the foundation of the success of this platform. We remain committed to meeting the requirements of our user community and influencing the direction of interview preparation as we set out on the next leg of our journey.

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