



e-ISSN: 2319-8753 | p-ISSN: 2347-6710

IJIRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 12, Special Issue 2, April 2023

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

 9940 572 462

 6381 907 438

 ijirset@gmail.com

 www.ijirset.com

Interviewed – Automated Interview Application

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ABSTRACT: The interview scheduling application is a web-based platform that streamlines the hiring process by allowing hiring managers to schedule interviews for candidates and manage their interviews. This application enables hiring managers to view a list of candidates scheduled for interviews and send automated emails to candidates via Simple Email Service. Candidates can attend online interviews by logging into the application using their credentials. The application records the candidate's interview, and the recorded file is stored in the S3 bucket. This system provides a user-friendly interface that simplifies the interview scheduling process, saves time and effort for hiring managers, and ensures a more efficient and organized hiring process. The use of automated email service and the ability to record and store interviews enhances the efficiency and effectiveness of the hiring process while providing a seamless experience for both hiring managers and candidates.

KEYWORDS: hiring managers, candidates, automated email, recruitment process, S3 Bucket, email notifications, interview recording.

I. INTRODUCTION

The interview scheduling application is a web-based software that allows hiring managers to schedule job interviews for candidates easily and efficiently. With this application, hiring managers can input the candidate's name, email address, and login credentials to schedule their interview. Once scheduled, the application sends an automated email to the candidate with the details of their interview, including the date and time. Candidates can attend the online interview using their login credentials and the application records the entire interview process. The recorded file is then stored in an S3 bucket, providing a secure and easily accessible location for hiring managers to review the interview process. This application streamlines the hiring process, making it faster and more efficient for both the hiring manager and the candidate. The automated email system ensures that candidates receive the necessary information in a timely and professional manner, and the online interview feature provides a more convenient option for candidates who may not be able to attend an in-person interview. The S3 bucket feature also ensures that the recorded interview files are secure and easily accessible for future reference. Overall, the interview scheduling application is a valuable tool for any organization looking to streamline their hiring process and improve the candidate experience.

II. RELATED WORK

The use of technology for interview scheduling has been gaining popularity in recent years due to its potential to streamline the hiring process and reduce the time and cost associated with traditional in-person interviews. Several research studies have been conducted in this area, with some focusing on the development of similar interview scheduling applications[5].

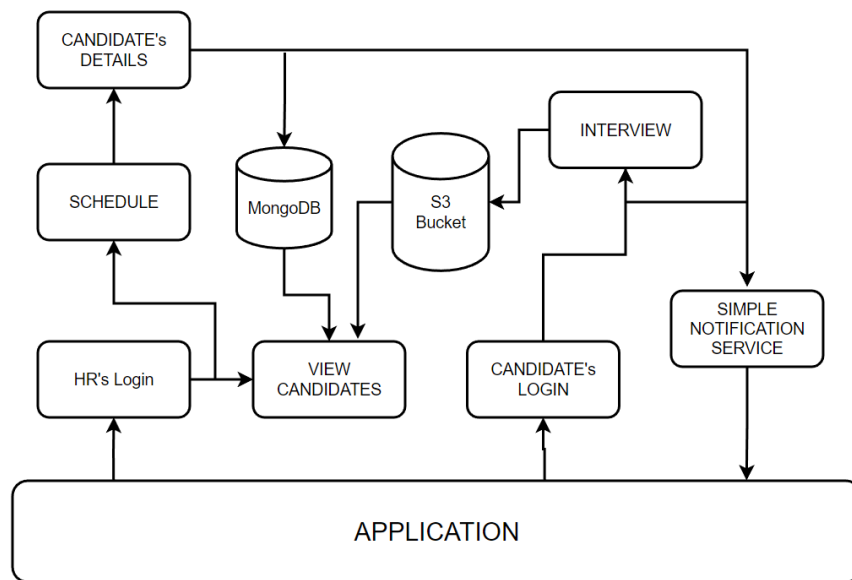
For example, S. Sivagnanam and S. Srinivasan proposed an online interview scheduling and management system using cloud computing in their paper published in the International Journal of Scientific and Engineering Research. The proposed system utilized cloud computing for scalability, reliability, and cost-effectiveness[8]. Similarly, Y. Liu, C. Li,



and H. Li proposed a web-based interview management system that can be accessed by both hiring managers and candidates. The system also provides a notification service and automatic reminders for scheduled interviews. These related works demonstrate the potential of technology in enhancing the hiring process by improving efficiency, accessibility, and candidate skills. However, there is still a need for research on the effectiveness and user satisfaction of such systems, particularly in the context of the specific needs and preferences of organizations and candidates.

III. METHODOLOGY

The design and implementation of the Interview Scheduling Application consists of several parts, each responsible for performing specific tasks. The system architecture includes a client-side application for candidates, a server-side application for hiring managers, and a database to store candidate and interview information.



The interview scheduling application was designed and implemented to streamline the recruitment process for companies by allowing hiring managers to schedule and manage candidate interviews[6]. The system is built using the MERN stack, which includes MongoDB as the database, Express.js as the web application framework, React.js as the front-end framework, and Node.js as the back-end runtime environment. The application allows hiring managers to enter the candidate's name, email address, and other relevant details into the system, which automatically sends an email to the candidate containing details of the scheduled interview[2].

The system records the candidate's interview and stores it in an S3 bucket. This allows the hiring manager to review the interview at a later time and make an informed decision about the candidate. The system also features a dashboard that provides hiring managers with an overview of all scheduled interviews, including the candidate's name, interview time and date, and interview status. The dashboard allows managers to easily track the progress of the recruitment process and make any necessary adjustments to the interview schedule. To ensure the security of candidate data, the system implements various security measures such as user authentication and authorization, data encryption, and regular security audits[4]. Additionally, the system is designed to be scalable, making it suitable for use by small and large organizations alike.

In summary, the interview scheduling application provides a streamlined and efficient solution for managing the recruitment process, from scheduling and conducting interviews to storing and reviewing candidate interviews. Its user-friendly interface and robust features make it an ideal choice for organizations looking to streamline their recruitment process and make informed hiring decisions.



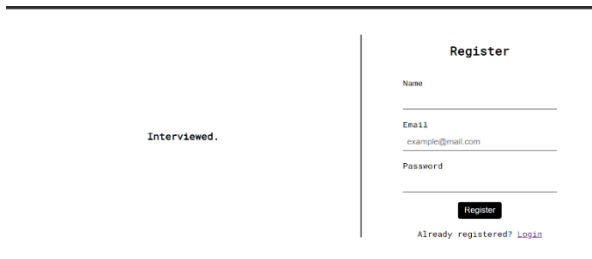
IV. FUTURE SCOPE

The interview scheduling application described above is already leveraging several AWS services such as Amazon S3, Amazon SES, and AWS EC2. However, there are several areas where further improvements and enhancements can be made using other AWS services. One such area is the use of Amazon Transcribe and Amazon Comprehend to automatically transcribe and analyze the recorded interviews[1]. Additionally, Amazon Translate could be used to translate the transcribed interviews into different languages, making the application more accessible to a global audience. Furthermore, the application can be enhanced by integrating with Amazon Rekognition to perform facial recognition and sentiment analysis on the recorded interviews, which can provide valuable insights on the candidate's nonverbal cues during the interview.

Overall, the future work of the interview scheduling application using AWS services includes the integration with other HR management systems, the use of Amazon Transcribe and Comprehend for interview analysis, and the use of Amazon Rekognition for facial recognition and sentiment analysis. These enhancements can provide valuable insights to the hiring managers and improve the overall effectiveness of the application.

V. EXPERIMENTAL RESULTS

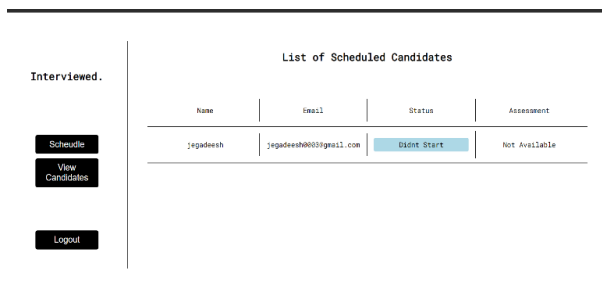
Figures 2(a), 2(b), 2(c), 2(d), 2(e) and 2(f) shows the webpages of the Interview Application in which 2(a) shows the Register page, 2(b) shows the Login page, 2(c) shows the list of scheduled candidates, 2(d) is the page for scheduling, 2(e) shows the home page for the candidates and 2(f) shows the response page.



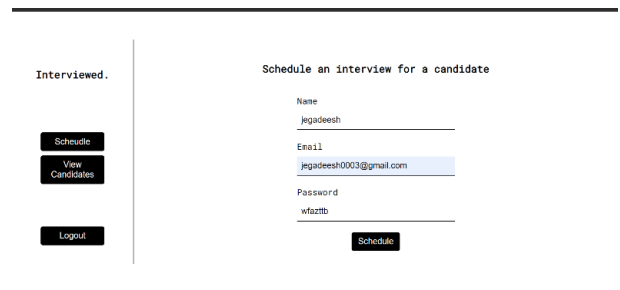
2(a)



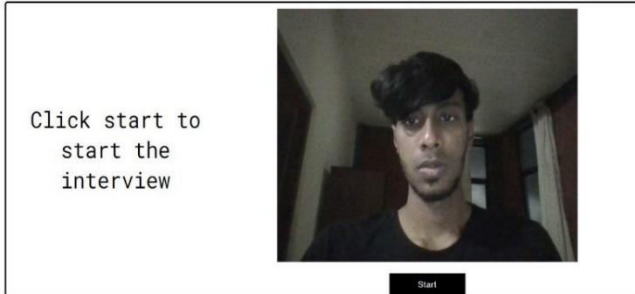
2(b)



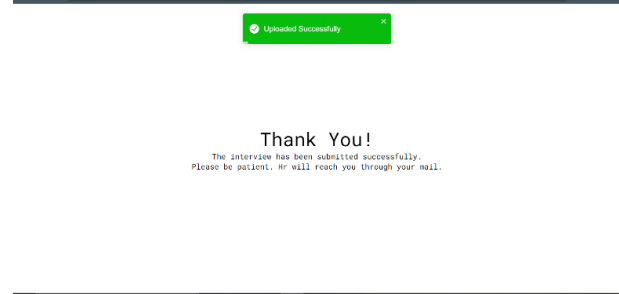
2(c)



2(d)



2(e)



2(f)

VI. CONCLUSION

The interview scheduling application allows hiring managers to schedule interviews and view scheduled candidates. Automated emails are sent to candidates via AWS Simple Email Service, and interviews can be conducted online. Recorded video files of the interviews are stored securely in an S3 bucket. The application is scalable and provides an efficient way to manage the hiring process, improving the candidate experience. It helps organizations to attract and hire top talent.

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