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AI Mock Interview Platform

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Abstract - The demand for effective interview preparation solutions has surged as job seekers seek comprehensive and interactive ways to enhance their readiness. The Full Stack AI Mock Interview App leverages cutting-edge technologies, including Next.js, Drizzle ORM, and AI integration, to provide a robust platform for dynamic interview practice. By integrating GPT-3 for question and answer generation, users receive personalized and adaptive interview experiences tailored to various job roles and industries.

The app's ability to allow users to record their answers via webcam and microphone simulates a realistic interview environment, enhancing the learning experience and engagement. Coupled with AI-generated feedback, users gain valuable insights into their performance, helping them refine their communication skills and confidence.

A well-defined database schema managed by Drizzle ORM ensures seamless data handling and retrieval, while the app's deployment on Vercel allows for efficient scalability and quick updates. This combination of modern web technologies and AI creates an innovative solution for aspiring professionals, setting a new standard in the realm of mock interview preparation.

1.INTRODUCTION

Ace your next interview with confidence.
Our AI-powered mock interview platform is designed to help job seekers prepare smarter and faster. Using advanced natural language processing and real-time feedback, we simulate realistic interview scenarios tailored to your target role, industry, and experience level.

Whether you're preparing for your first job, transitioning careers, or aiming for your dream company, our platform provides personalized insights, question analysis, and performance tips — all powered by cutting-edge artificial intelligence.

Practice anytime, get actionable feedback instantly, and walk into your next interview ready to impress.

2. Body of Paper

1.Overview

Eyewitness accounts are vital for law enforcement and security, but they are often inaccurate due to memory limitations.

This project aims to improve eyewitness identification accuracy by leveraging AI, specifically deep learning techniques.

We will create a system that translates verbal eyewitness descriptions into accurate facial representations. Traditional methods struggle to overcome the subjectivity and variability inherent in eyewitness accounts.

Factors like stress, time, and individual differences in perception can heavily influence the accuracy of descriptions.
We propose a novel approach that integrates deep learning algorithms with existing databases to automatically generate and match facial depictions.

This system will:
1. Analyze real-time data from eyewitness descriptions.
2. Generate accurate facial depictions.
3. Match these depictions against existing databases to enhance identification speed and accuracy. Provide a robust solution for improving eyewitness identification methods.

1.1 Motivation

Existing methods for eyewitness identification are unreliable and can lead to wrongful accusations. There is a pressing need for systems that accurately convert eyewitness descriptions into facial representations.
Our project is driven by the need to improve the accuracy and efficiency of identification processes, especially in light of growing public safety concerns.

2. Technical Approach and Implementation

2.1 Tools and Technologies

- **NEXT.JS : -** Next.js is a powerful React framework that enables developers to build fast, scalable web applications with features like server-side rendering (SSR), static site generation (SSG), and client side rendering (CSR). It offers a file-based routing system, automatic code-splitting, and optimized performance out-of-the-box. Next.js supports API routes for backend logic and integrates seamlessly with CSS, SCSS, and various databases. It also offers Incremental Static Regeneration (ISR), allowing pages to be updated without a full rebuild. With built-in support for Vercel deployment, Next.js simplifies the process of taking applications from development to production, making it an ideal choice for modern web development.

- **React:** - for front-end development.

- **PostgreSQL or MongoDB: -** for Data Storage and Schema creation.

- **Zilta and Huru:-** transforming how users prepare for interview.

• **Drizzle ORM :-**for setup.

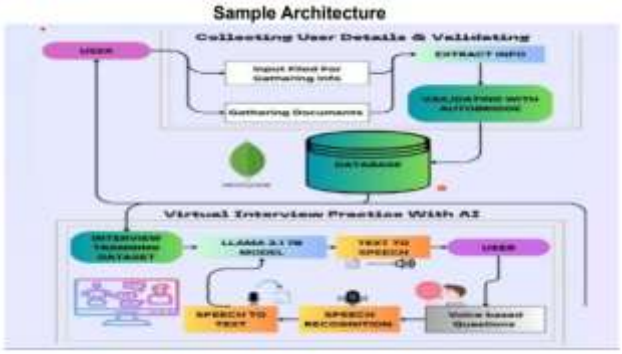
• **Gemini Ai & clerk Api:-** AI Api for Application.

• **HTML: -** It is used for giving eye catching look to the website. And also providing easy to use GUI.

• **CSS: -** CSS is cascading style sheet which is used to give designer look to HTML using the external file.

• **Java script: -** Java script is used for client side scripting which can help in using validation on the website and many more other functions.

3.SYSTEM ARCHITECTURE



3.1 Module

This software package can be readily used by non-programming personal avoiding human handled chance of error. This project is used by two types of users, i.Students, ii.Employ. This application allows users to create mock interviews based on their resume and skills. The application then uses AI to generate questions and provide feedback on
the user's answers.

3.2 Data Flow Diagram

In Data Flow Diagram, we Show that flow of data in our system in DFD0 we show that base DFD in which rectangle present input as well as output and circle show our system, In DFD1 we show actual input and actual output of system input of our system is text or image and output is rumor detected like wise in DFD 2 we present operation of user as well as admin.

Figure 3.2: Data Flows (0) diagram

Figure 3.2: Data Flow (1) diagram

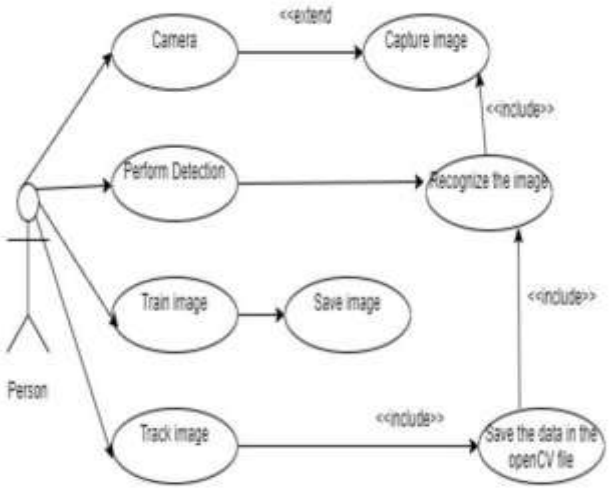
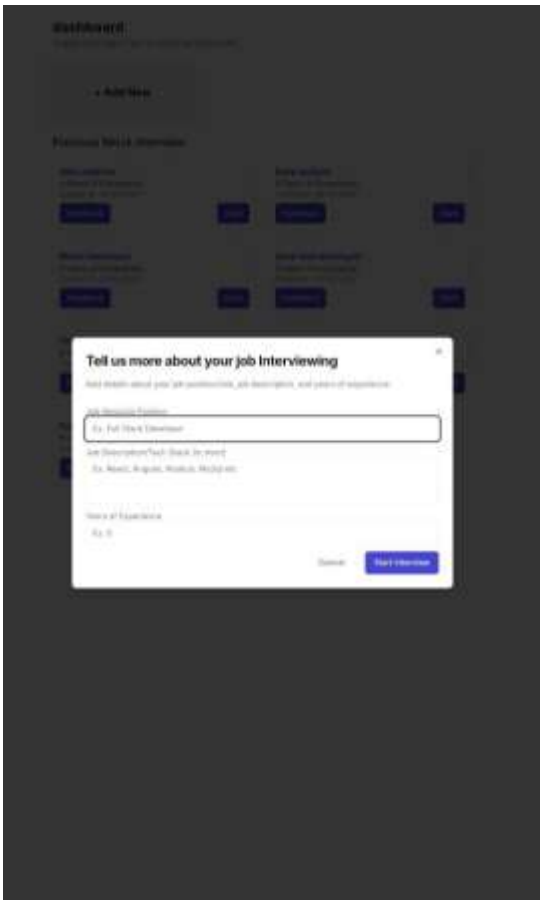
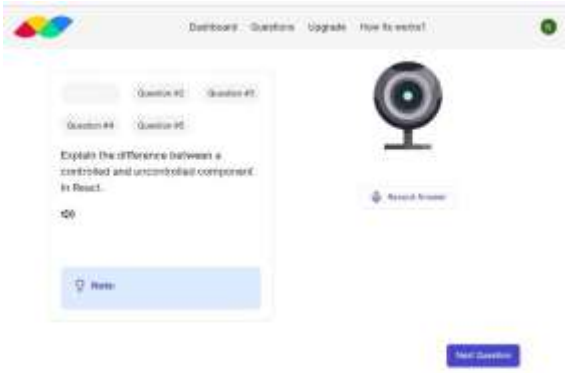


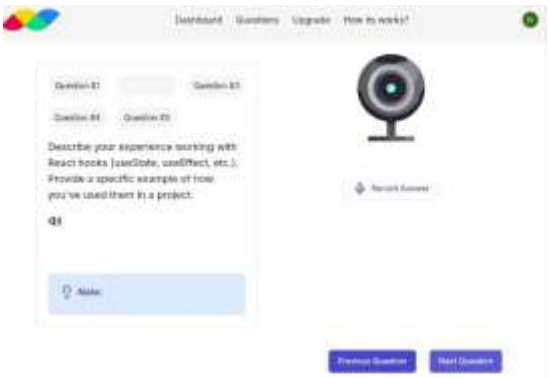
Figure 3.2: Use case Diagram

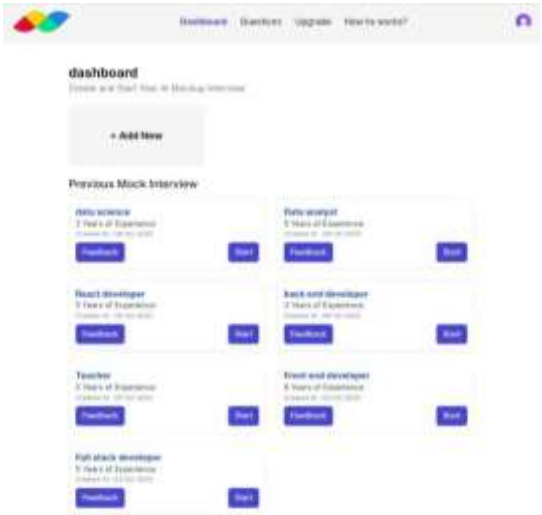
4.Application Screenshots:-


Your Personal AI Interview Coach
Double your chances of landing that job offer with AI-powered interview prep


Tell us more about your job Interviewing







3. CONCLUSIONS

The present study examines technical trends related to AI-based interview services that are growing rapidly and presents the results of AI-based interview system development and application to an employment process. This study is significant because it contributes to enterprises, job seekers, and the society. Specifically, regarding each of these three perspectives, first in the perspective of enterprises, it provides a high validity method that improves the limitations and problems of the existing employment methods. It also saves time and expenses Development of an AI-Based Interview System for Remote Hiring for offline interviews, provides more applicants with interview opportunities, and improves interviews' effectiveness, with bias reduced. Second, from the job seekers' perspective, sufficient opportunities are given to all job seekers with the sense of relative deprivation addressed. In addition, such online interviews in a video conference format can be conducted with no limitation of time and place and save time/expense while the focus is on applicants' competencies. Finally, in the perspective of society, as the existing custom of employment that focuses on documentation-based qualifications is changing into the practice of performance-based employment, social costs are reduced in the preparation and activity of employment for both enterprises and job seekers. In addition, fair opportunities and evaluations are secured. AI-based job interviews were developed to support the reasonable selection of outstanding candidates and the decision-making aspect in the employment process. It is expected that the design specifications and solution application results presented by the present study can be utilized widely in support of the existing document screening process that estimates applicants' future performance based on each applicant's resume and self-introduction but with only limited validity, written examinations whose relevance to actual performance is relatively low, and aptitude tests as well.
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