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AI Enabled News Reader App

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ABSTRACT:

In today's rapidly evolving information age, staying updated with current news is essential. Traditional news consumption methods often lack personalization and can be overwhelming due to the vast amount of available content. This project aims to address these challenges by developing an AI-based News Reader App that utilizes cutting-edge artificial intelligence techniques to personalize news delivery for users. Newspapers have been a constant source of news and information for us for about 400 years now. Many technological advancements led to newer ways of delivering news and information about various aspects. Since the advent of technological developments such as Artificial Intelligence, researchers and developers have tried to make use of Artificial Intelligence in various fields. This research project is an effort to make news reading more fun and interactive using the ALAN voice assistant. The web app is completely interactive and the user is able to get news from any topic of interest just by speaking.

Keywords: Artificial Intelligence, Voice assistant, Alan AI, React, News API

I. INTRODUCTION

In an era defined by an incessant flow of information, staying informed in a personalized, timely, and efficient manner is a growing challenge. Traditional news consumption often inundates users with a barrage of unfiltered content, making it challenging to sift through and find relevant information aligned with individual preferences. This project introduces an innovative solution: an AI-enabled News Reader App designed to revolutionize how users access and interact with the news. Harnessing the power of Artificial Intelligence (AI), this project seeks to address the shortcomings of conventional news platforms by integrating cutting-edge technologies such as Natural Language Processing (NLP) and Machine Learning (ML). The AI-enabled News Reader App is tailored to offer a personalized news consumption experience, leveraging algorithms that adapt and learn from user behavior, preferences, and interactions within the app. This project represents a culmination of efforts to create a sophisticated platform that not only aggregates news from diverse sources but also employs AI-driven techniques to curate, categorize, and deliver content aligned with individual user interests. By combining the strengths of AI and NLP, this News Reader App aims to provide users with a curated, relevant, and easily accessible news experience, redefining the way individuals engage with and consume news in today's fast-paced world.

II. METHODOLOGY

AI enabled News Reader App works in a way that the user first provides a voice input to the web application. The application then sends the signal to the speech to text service. The speech to text service then converts the voice signal and then converts it into text. This text is then sent for keyword matching. If the keywords are matched then the functionality that the keyword is related to is performed but if the keyword is not matched then an error message is sent to the web app and then to the user. After the task is done, the results are then shared to the web app which then replies to the user with a voice reply.

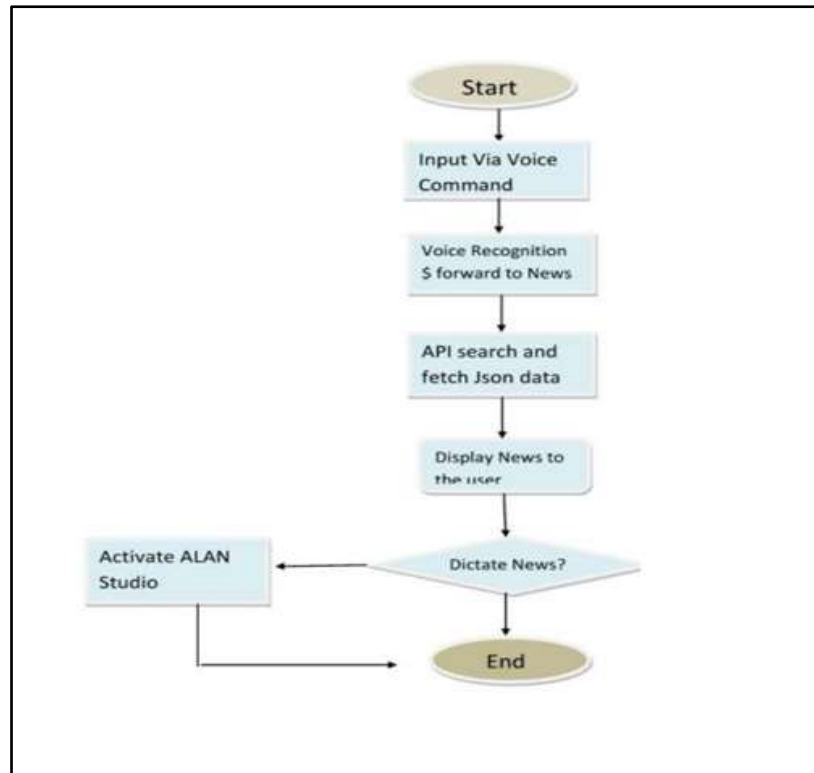


Fig. 1 Flowchart

A. TOOLS USED

1. Alan

Alan represents an advanced Conversational Voice AI Platform, empowering the seamless integration of a voice assistant into any existing application. Its comprehensive functionalities enhance user interaction and accessibility.

2. Material-UI

Material-UI serves as a versatile library enabling the import and utilization of diverse components to craft sophisticated user interfaces within React applications. It streamlines the process of interface creation and ensures a visually appealing design.

3. News API

News API stands out as an easily navigable REST API that furnishes JSON search results encompassing the latest news. Its user-friendly nature simplifies the retrieval of current news updates.

4. React

React, an open-source front-end library, facilitates the creation of dynamic and responsive user interfaces based on modular UI components. Its flexibility allows for efficient development and seamless data manipulation without the need for page reloading.

5. HTML

HTML, the fundamental building block of the Web, dictates the structure and semantic meaning of web content. It provides the foundation upon which web pages are constructed.

6. Cascading Style Sheets (CSS)

CSS is a language that defines the presentation and aesthetic layout of web documents written in markup languages like HTML. It enables the styling and visual appeal of web pages.

7. JavaScript

JavaScript, a lightweight and interpreted programming language, facilitates interactive and dynamic functionality on web pages.

B. IMPLEMENTATION

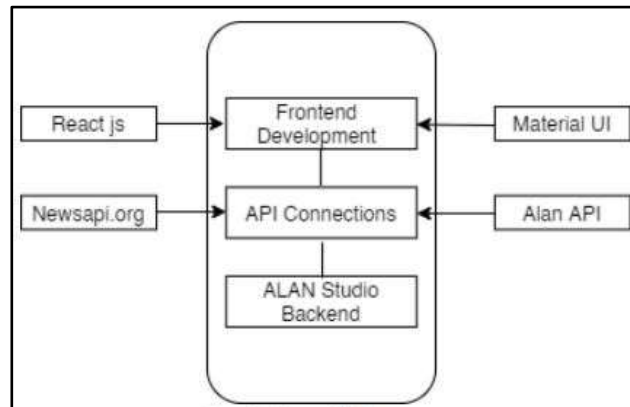


Fig. 2 Implementation

The project implementation spans across three core segments

1. Front-end Development

Developed using ReactJS and Material UI, leveraging Reacts capacity for managing extensive data and enabling dynamic updates without page reloads.

Material UI, a renowned React UI framework, expedites development through its extensive library of readily available components.

2. API Integration with Front-end

APIs serve as the intermediaries between the user's requests and the system's responses. Employed three distinct APIs: News API, and Alan AI. News API enables seamless retrieval of current global news. API offers comprehensive weather data worldwide. Alan AI's conversational platform enhances application functionality with easy-to-integrate SDK and JavaScript scripting, customizable via Alan Studio to align with application requirements.

3. Back-end Programming in Alan AI Studio

Alan AI Studio facilitates robust back-end support, allowing customization of Alan AI to seamlessly align with specific application needs

III. LITERATURE SURVEY

Certainly! A literature survey for an AI-based news reader app involves exploring existing studies, research papers, and relevant works that delve into the integration of AI, machine learning, natural language processing (NLP), and related technologies in the context of news consumption and content curation. Here's an overview of key findings and contributions in this field. In today's world voice recognition plays a vital role in everyone's day-to-day life using a smart phone or a smart device. It has limitless scope and can be used in different ways.

IV. EXPERIMENTAL RESULT



Fig. 3 User Interface



Fig. 3 News Page

V. CONCLUSION

Reading newspapers takes up a lot of time and the reader usually spends reading about articles in which they are not interested. By using this project, the user can get to hear about all the important headlines of their chosen topic on the go, in just 5 minutes. The project is capable of reading all the headlines of the news articles and can open the source article for more in-depth reading if required by the user. Alan voice assistant can be integrated into many more applications in the field of health-care, business, banking, and e-commerce applications. As far as news applications are concerned, we suggest that the integration of voice assistants in news applications will not only enhance the user experience but also make news more engaging in the near future. We hereby have successfully completed our project and conclude our research.

REFERENCES

- [1] "React – A JavaScript library for building user interfaces", Reactjs.org. [Online]. Available: <https://reactjs.org/>.
- [2] "Material-UI: A popular React UI framework", Materialui.com. [Online]. Available: <https://material-ui.com/>.
- [3]"React Card component - Material-UI", Material-ui.com. [Online]. Available:<https://materialui.com/components/cards/>.
- [4] "Documentation - News API", Newsapi.org. [Online]. Available: <https://newsapi.org/docs>.