Software Systems Development

Semester Project Report

Team Number: 6

Virtual Assistant



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Submitted to:

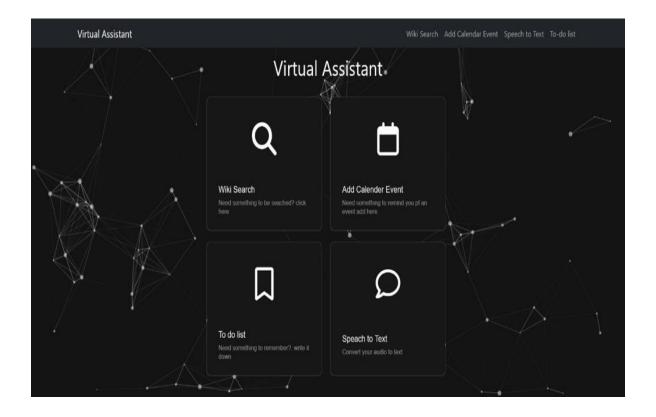
Prof.Charu Sharma

1. Introduction:

Virtual Assistant is a virtual helper(kind of like a remote employee) that offers the following four functionalities.

- Adding an event to the calendar.
- Converts speech to text.
- Wiki Search.
- To-do list.

This virtual assistant is completely built using MERN stack.



2.Explanation of each functionality:

1. Adding an event to the calendar:

Here by using this functionality user can add an event to the calendar.

Each event contains four parts.

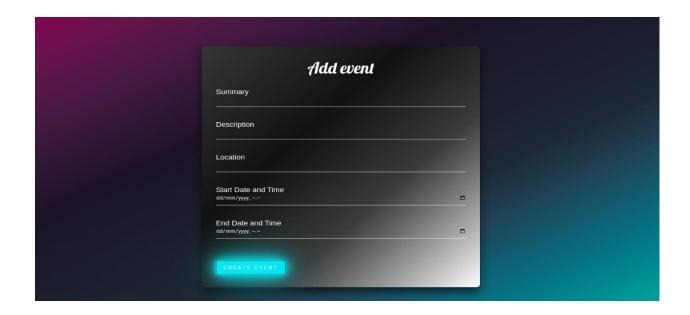
- 1. Summary of an event.
- 2. Description of an event.
- 3. Location.
- 4. Start date and end date of event.

After entering all the details and by clicking the create event button the event is added to the calendar.

A reminder is sent to the user 21 minutes before the starting of the event.

Implementation:

- ->User must sign in before creating an event.
- ->This is implemented using OAuth of google API and express as backend.
- ->If end date > = start date response is added Else nothing is added.

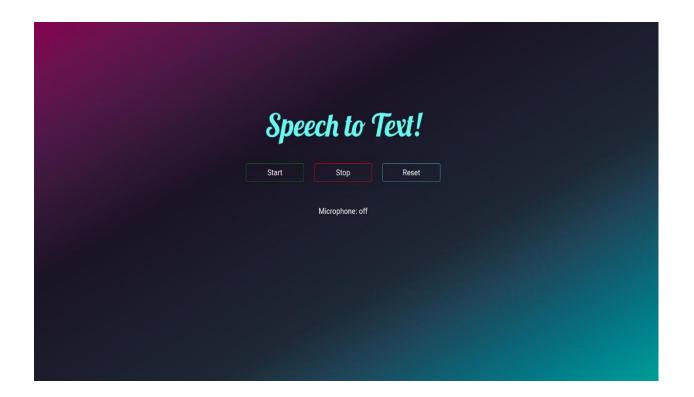


2.Converts Speech to text:-

- ->In speech to text conversion, user is able to convert speech that is recorded using a microphone to text.
- ->It contains three buttons namely start, stop and reset.
- ->Start button is used to start the conversion
- ->By clicking stop button text conversion is stopped.
- ->Reset clears the text that is converted.

Implementation:

- ->Using react speech recognition package to track whether the microphone is on/off.
- ->Then updating conditionally rendered element with the transcript.

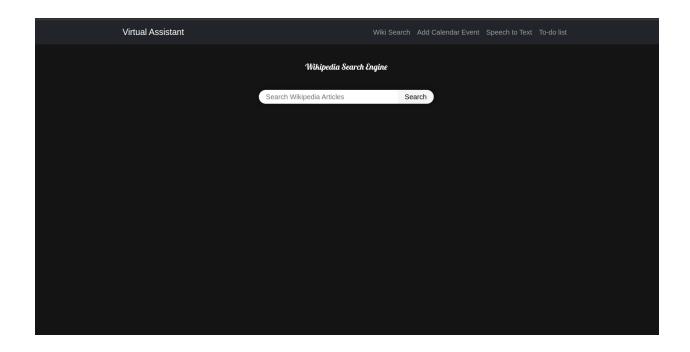


3.Wiki Search:-

Wiki search is a functionality where user is able to search about anything that is limited to Wikipedia and ten results are shown.

Implementation:

Used Wikipedia search API to provide above functionality.



4.To-do list.

- ->To-do list helps user to add events to a list that is to be performed on that particular day.
- ->User can add/delete day specific events.

Implementation:-

->To do list is implemented using regular react js.

->Events can be added, deleted, updated which is implemented using the respective functions/

