

VIRTUAL VOICE BASED ASSISTANT FOR THE VISUALLY IMPAIRED – GMAIL, CLASSROOM, DRIVE

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ABSTRACT

This paper illustrates the utilize of computer program that gives dazzle get to to the Web. The development of innovation nowadays is imperative and makes the inconceivable conceivable. In expansion, the concept of Manufactured Insights is moreover developing quickly. Fake insights (AI) implies mirroring human insights in machines planned to think like people and copy their activities. The term can too be utilized in any machine that shows highlights related to the human intellect such as learning and fathoming issues. Numerous online apps can be gotten to with the mouse or console and perused on-screen data as a result of input. In spite of this, most individuals in the community do not have the characteristic capacity to see in an unexpected way from us. The as it were way a dazzle individual can get to the web is, with the offer assistance of a third party who is daze. Hence, it makes recovery troublesome for the outwardly impeded. The innovation underpins them with a few unused highlights like screen perusers and braille shows. Screen perusers perused out loud the data on the screen. There is such a screen perusing program online. In a braille show, dabs are made to speak to data on the screen, which the outwardly impeded can get it by touching a touch. In this manner, in arrange to make strides outwardly disabled individuals in the community, we have come up with a program that gives the client get to to a assortment of administrations. applications like mail, classroom, and drive utilizing voice commands without the reliance on a third individual and without the require to keep in mind console alternate routes and mouse clicks.

Keywords - Outwardly impeded, Voice control, Naturally utilize Application, daze individuals.

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I. INTRODUCTION

In today's world, many transactions can be completed over Internet. Everything from shopping to requesting additional services and tickets can be done online. Almost all online products require an application[1]. Using an app may be a trivial task for most people, but it can be difficult for those with extroversion issues. Today, 285 million people worldwide live with facial dimorphism. Although innovation is increasing, there is still a long way to go in terms of openness, especially in terms of opening the Internet to people with all types of disabilities. The Internet is a communication system that contains special 'barriers' that prevent a variety of uses that are completely different from the open market for the body, such as by introducing wheelchairs or Braille communication platforms. For example, analysts noted that 80% of media outlets had a critical information on the issue, a while 70% of respondents said they were a unable to obtain or manage information. a as per government request [2-4]. So we'll have to find some special way to confuse people. The W3C has guidelines to follow when using Visual Aid, but not all applications follow the most useful guidelines.

Voice offer assistance as it were. Multilingual establishment and setting the fitting discourse speed when playing to the client are vital variables to consider. Shockingly, these screen per users require to keep the app running in intellect something else it will be troublesome to perused information from Google Classroom, Gmail, Drive app. Some screen users work with certain types of programs, others require the client to remember complex commands, so screen users are not a practical solution to existing problems and cannot be used to access the Internet [5]. There are the taking after two common topics that show up in most applications:

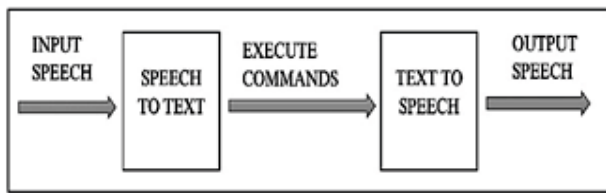


Figure 1 : Stream Graph of Proposed Arrangement

1. The web framework is less open. A few parts are utilized for the outwardly impeded, whereas others do not.
2. Access to another web application has been put off due to app overhauls.
3. Keeping all of the over components in intellect we came up with a visual collaborator arrangement. The primary objective is to near the get to crevice between the normal client and the outwardly impeded individuals almost the web. The Web does not see the dazzle, but in arrange not to make the speaker reasonable, in this paper we show end-to-end program for the dazzle so that they can get to the Web with negligible to pointless weight. The client will give informational they need to perform such as voice input instep of utilizing the console. At this point, the computer program uses dialogue with the content module to transform the input content into content that will be the command to execute. Setup is done using the Selenium web driver. After uninstillation, the client has three options: - Browse the entire content of the application, view a brief description, request an address. The second and third choices are made using machine learning. Once the voice input is accepted and a command is issued, the client will hear the output using the dialog content module [6-8]. As a result, these programs can make the Internet more accessible, faster, and more attractive to people with disabilities. In the picture. Figure 1 shows the general structure and operating principle of the program. The input discourse is visualized using discourse for content, commands, in this step it is recognized and processed using the selenium web driver used in the computerized framework, and the resulting output is played to the client using content for discussion.

This article describes the implementation of a computer program module that robotizes three of the most

commonly used applications by clients to meet the imaginable needs of people with disabilities: Google Lesson Room, Gmail, and Drive.

II. OBJECTIVES

The objective of the project is to build a voice based model of the existing internet applications namely, Gmail, Classroom, and Drive, to provide easier access of these applications to visually challenged people. Users can perform the actions of the particular applications using voice commands[9,10].

III. LITERATURE SURVEY

Voice email for people with disabilities. The author's main goal is to provide a voice-mail program for people with disabilities. Improvements to the G-mail client and related applications have since been proposed to support visually impaired users. This framework allows customers to efficiently enter, send, receive, and view emails. Convert speech to text and convert text to speech using. Net system. Client points of interest are put away on the site. The speech-to-text module is utilized to compose emails and the text-to-speech module is utilized to studied all mail substance and sender e-mail id. This application employments Straightforward Mail Exchange Convention (SMTP) to send emails and Post Office Convention (POP3) to get emails. As a result, outwardly disabled and indeed uneducated individuals advantage significantly from this program. This application is for desktop utilize as it were and requires console input in a few places. Subsequently, future work can be amplified to versatile clients and overhauled to full voice based support[11]. E-VOICE Post for Android Daze Gadgets: This app is based on intelligently voice replying that will offer assistance you send and get emails from their cell phones without having to touch the versatile screen. In the existing framework, we have voice associates such as Google Collaborator and Siri, but these are as it were valuable in getting to the essential highlights of the phone. The existing computer program does not work well in getting to the mail application as mail has a few extra highlights such as CC, BCC. To create

computer programs that advance the web to help people with visual impairments, Ferati et al. emphasize that "one size fits all layouts" without considering visual impedance levels when providing personalized web data is not enough. A plug-in based single device seems very useful for solving external problems without relying too much on console input (QWERTY or Braille)[12-15].

IV. PROGRAM AND PERFORMANCE REVIEW

The existing framework is uncommonly planned for e-mail applications. Amplified to other applications such as lesson and driving. Speech-to-speech highlights and text-to-speech converters are coordinates to perform particular capacities in each application. the client can post send to anybody by essentially voicing the recipient's e-mail id and message. Essentially, the client can reproduce the mail gotten by guideline the program to studied the emails in the inbox [13]. Introductory application activities, such as sending and accepting emails are performed. The client can moreover make a course in the classroom app and see individuals and lesson assignments in the voice utilizing voice commands. He can get to the metadata of each lesson with a special course ID for a specific course he or she has made or subscribed to. APIs and controls are utilized to interface a program to a particular program [14].

V. METHODOLOGY

After turning on their desktop or laptop computer, users first interact with the software's main menu. The software's main menu can be accessed using a built-in voice assistant such as Siri or using predefined keyboard shortcuts, which are the only keyboard interaction required. The main menu interface presents the options available to the user viz. Installed application modules, audio speed, audio tone [15-18]. Each application module includes bulk text-to-speech and text-to-speech, automated Python applications, and application-specific features. For effective voice attention, users are provided with:

In all sections, you can speak when the beep sounds. It creates a sense of editing by instantly minimizing errors by

playing back inputs detected and recognized by the user system to the user, allowing the user to confirm the intended input. Below are the procedures for using the three modules and the main menu: G-mail, Class, and Drive.

4.1. Main Menu

The main menu starts when a computer program begins to open. When using the Python text-to-speech (pytts) module, a set of user-provided description options appears first. The program uses Google's speech-to-text module to capture customer input over the phone. At this time, the slogan is extracted from the word and the correction response is used. Customers are also free to change the rhythm and tone of their voice to suit them best.

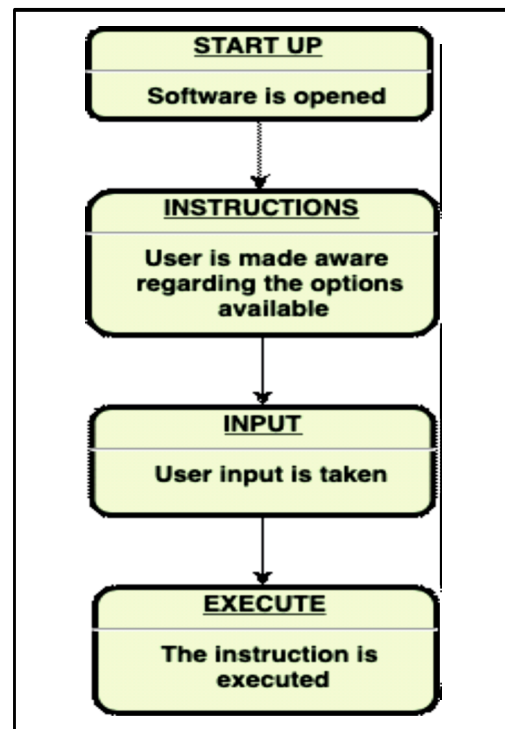


Figure 2 : Flow Diagram for Main Menu

4.2. Build a voice-based email application:

A voice-based email application is designed to send emails by voice commands. Also, emails in the inbox can be read by following the instructions. The advanced system provides facilities to send and download attachments.

4.3. Creating a voice-based google classroom application:

The module involves developing the teacher role of the Google classroom application. The teacher can create a

course and get the enrollment code of the course which is used by the students for enrolling in the particular course. The teacher can also view the metadata of the course and create and assignments.

4.4. Building the-based Google drive application:

In this module, a voice-based Google drive application is created such that the user can upload, download and delete files from the drive. The user can upload files to specific folders in the drive by mentioning the folder name. He/ She can also create and delete folders.

RESULT

Text-to-speech (pyttsx3) and text-to-speech (Google Discourse Library) modules built through Python provide incredible accuracy and a quick and easy way to modify content. Identify words from text to speech with 96.25% accuracy using four speech tests. Let's take a look at the graph.



Figure 3 : A. Main Menu

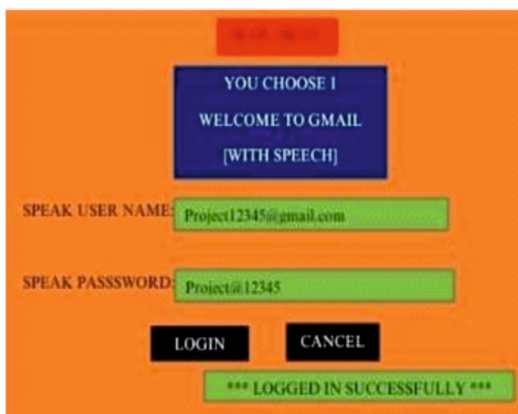


Figure 4 : B. Gmail Menu



Figure 5 : C. Classroom Menu



Figure 6 : D. Drive Menu

VI. APPLICATION

An application with 20 different inputs in a simple and calm environment. We found that we were able to launch the program from the three most common locations: Gmail, Classroom, and Drive. The programs were run independently in each case. Computer programs can use client training to send emails effectively. We were in this manner able to test and create program that would make the Application more available, quicker and more compelling for the outwardly disabled. Visual Right hand serves as a awesome bolster for individuals with inabilities by recognizing that they have web get to any browser as our computer program is autonomous. They can get to the Web utilizing their discourse and can explore the app utilizing voice commands. The computer program will examined to the client the substance of the application in this way making the Application effortlessly open. This include will not as it were offer assistance the outwardly disabled but too permit other individuals to effectively get to the web and dispose of the utilize of keyboard-like hardware. Virtual Collaborator moreover gives a highlight to give answers to a particular address in a particular information source, so presently the client does not have to examined all the content to get the reply, he fair has to introduce the address, the computer program. will get input on content information itself utilizing a perusing machine. Therefore, applying machine learning and discourse to content procedures makes the assignment of getting to the app, which was already troublesome presently much simpler, quicker and more efficient. The comes about appeared that we were able to run our computer program on three well-known destinations: Google Gmail, and Drive.

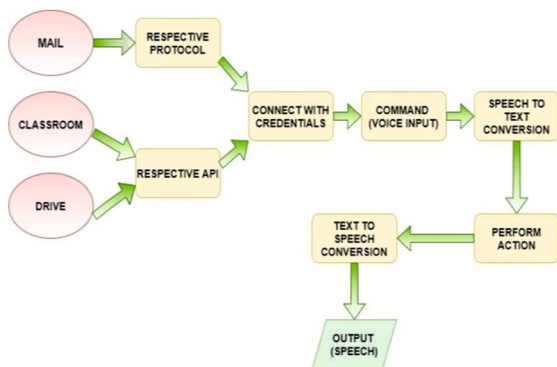


Figure 7 : Application Overview

VII. CONCLUSION

In this paper, we have presented a secluded arrangement to move forward get to for the outwardly impeded. Visual Collaborator is an autonomous working framework and does not depend on client input from the client for comfort and points to give consistent data to the client. By utilizing discourse to content and content to discourse. the client can communicate and customize the program. We have presented the framework plan and usefulness of the three modules right now in utilize. Virtual Right hand gives simple get to to any outwardly impeded individuals to get to everything will work with voice commands.

VIII. FUTURE DEVELOPMENT

As of now the app as it were bolsters commands given in English dialect. We would moreover like to make a comparative system that can be connected to any program and make a browser expansion hence making it simpler to switch between the two modes, particularly in Instructional exercises so that outwardly disabled individuals can get to online courses as a direct degree Person.

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