**PROJECT SYNOPSIS**

**Title :- V APP e college system for blind students**

**INTRODUCTION**

There are millions of people who experience vision impairment in one way or another. The ability to see is one of the major senses that is crucial for a person to lead a regular existence. Many blind people have significant mobility issues when moving around their surroundings. Due to this condition, the disabled person needs aid or instruction with every move. The everyday, professional, and social lives of those who are blind are quite challenging. The amazing ability of human eyesight to store billions of images in the brain and realise those images by comparing them to pre-images However, some people are still born without the gift of sight, and some have retinal disorders. Due to the widespread use and popularity of Android-based devices, the computer vision application is implemented on the Android platform. At the end of 2012, the Android mobile platform has a market share of smartphones, according to a Gartner survey. The programme is user-friendly and has speech synthesis capabilities so that the identified object can be spoken to blind individuals. The Technology for navigation of the blind is not sufficiently accessible, without vision it can be challenging for visually impaired persons to navigate through rooms or different road paths . The main aim to develop the project is to help the visually impaired people and to detect the obstacles. The blind person’s life become easier and without anyone helps they can walk alone through street they do not need anyone to assist them they can handle their self correctly. The preventing users from dangerous location our aim is to collected from environment (cameras, sensors, scanners, etc.) and transmitted to the users to the audio format. proposed the convolution neural network based for object detection in embedded systems. The YOLOV3 algorithm has been used for the object detection and recognition task, which helped in overcoming the various limitations while integrating the object detection technique into the embedded system. high energy efficiency and close to Real-time application results are achieved through this. implementation of fast YOLOV3, which is much better than the other convolutional neural network algorithms. The goal of this Special Issue is to explore how emerging technology solutions and systems in disease and healthcare applications can help human beings to lead heathy lives. Data in the healthcare industry consists of all the information related to patients. Here a general architecture has been proposed for predicting the disease in the healthcare industry. Thus, we are concentrating on providing immediate and accurate disease predictions to the users about the symptoms they enter along with the disease predicted.

Also using this application blind person check battery status, date/time , send sms , make a phone call by voice.

**PROBLEM STATEMENT**

* Blind people come across a number of challenges in everyday life from reading a book to walk on the street.
* Many tools are available to meet the challenges faced by them, but they are not sufficient.
* The most essentials thing a human can have is vision and it plays a very essential role in the life of a person either a person can see or not.

**MOTIVATION**

* “V APP e college system for blind students” is an android application, which supports voice commands. The application is developed for visually impaired people. After unlocking the mobile phone the application will be launched without any voice command. The systems accept voice command and perform the operations according to it. For performing the further task it first translate the voice into text and then produces output in the form of voice.

**OBJECTIVES**

* The application provides assistance to visually impaired people by providing a set of useful features.
* These various features can be provided through a single device, which reduces costs and complexity, and increases the practicality of the application.
* The presented results show that the proposed application successfully achieves its aims by providing the desired features.
* It has a user friendly interface customized for blind people.

**LITERATURE SURVEY**

* **Object Recognition App for Visually Impaired People.**

The objective of the proposed work is to change the visual world into an audio world by notifying the blind people about the objects in their path. This will help visually impaired people to navigate independently without any external assistance just by using the real-time object detection system.

* **Disease Risk Prediction by Using Convolutional Neural Network.**

Data analysis plays a significant role in handling a large amount of data in the healthcare. The previous medical researches based on handling and assimilate a huge amount of hospital data instead of prediction. Due to an enormous amount of data growth in the biomedical and healthcare field the accurate analysis of medical data becomes propitious for earlier detection of disease and patient care. However, the accuracy decreases when the medical data is partially missing. To overcome the problem of missing medical data, we perform data cleaning and imputation to transform the incomplete data to complete data. We are working on heart disease prediction on the basis of the dataset with help of Na¨ıve bayes and KNN algorithm. To extend this work, we propose the disease risk prediction using structured data. We use convolutional neural network based unimodel disease risk prediction algorithm. The prediction accuracy of CNN-UDRP algorithm reaches more than 65to disease which people face in their life.

* **Smart Eye for Visually Impaired-An aid to help the blind people**

This paper presents an idea of developing a smart system which can assist the visually impaired people in their daily activities. Actually, there are many challenges faced by visually impaired people. In most cases, they require constant support in almost all scenarios especially in their day-to-day activities. Some of the major challenges include difficulty in moving from one place to another without the assistance of someone. Other challenges include difficulty in recognizing people, detecting obstacles, etc. In order to count avert this situation, we propose a “smart eye system” in this work. The device is a voice enabled system that would direct the visually challenged person in their day to day works. The device combines the various available technologies and integrates them into a single multipurpose device that can be used by the visually impaired. The paper discusses about the design of such a system and the challenges involved in designing the device.

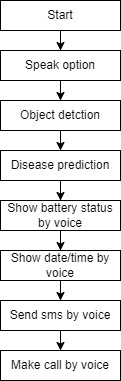
* **Intelligent Eye: A Mobile Application for Assisting Blind People**

The Intelligent Eye android mobile application is presented in this paper. The application provides assistance to visually impaired people by providing a set of useful features: light detection, color detection, object recognition, and banknote recognition. It has a user-friendly interface customized for blind people. These various features can be provided through a single device, which reduces costs and complexity, and increases the practicality of the application. The presented results show that the proposed application successfully achieves its aims by providing the desired features.

* **Mobile App for Word Recognition and Visualization of Objects Using Indonesian Language Google Speech to Text for Deaf Students**

Disability is a condition of many people’s limitations throughout the world, including in Indonesia. According to research, deaf sufferers are the most disabled disabilities in Indonesia, including deaf sufferers who are still as school students. Basic learning how to communicate in word and object recognition between teacher and deaf students is a problem that must be solved to encourage deaf students to communicate well. Several studies conducted previously have succeeded in producing a variety of Android-based applications that help deaf in learning. Otherwise, apps that used English and the absence of visualization of an object make students with hearing impairment at the elementary school level find it difficult to understand the form. This research builds a mobile speech to text application and object visualization by utilizing Google speech to text in Indonesian, which is useful in translating sound into text accompanied by display of objects and their colors. Students, teachers, and parents can use applications as alternative learning in addition to conventional methods that are fun for deaf students so that they will be more enthusiastic in learning.

**SYSTEM ARCHITECTURE**



**TOOLS AND TECHNOLOGIES USED**

Software: Android Studio

Backend Language: Kotlin

Frontend Language: XML

Database: Firebase

**APPLICATION**

* A set of useful features.
* It has a user-friendly interface.
* It supports various notifications.
* It is used for social media implementations’
* It works as a guidance for people.

**CONCLUSION**

The application has a very simple and easily navigable User Interface that suits the visually impaired users. As soon as the application is launched, the camera will start capturing the real time video. As soon as the user presses a button, the server-side backend algorithm will start processing it and notify the user accordingly as output audio. The Yolo algorithm can be stopped by pressing the same button again. This is how objects around the blind people and their positions are detected and conveyed to them via an audio output using the YOLOv3-tiny algorithm. Proposed a system to predict the disease based on symptoms given by user. We provide Hash set dataset for disease prediction.

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