Team-Project-1

CMPE272-Team1-Project Idea

Project Ideal:

Introduction to the problem statement

Millions of people suffer from diabetic retinopathy, the leading cause of blindness among working aged adults.

If diabetic retinopathy can be detected in early stages, then this would be very helpful in preventing it in the first place.

Currently only trained doctors can provide reliable diagnosis. In this we hope to provide a web based service where anybody can upload their retina scan and get a first diagnosis for this.

Abstract

We want to build a web service to help people get early diagnosis for diabetic retinopathy. Catching the development early on is crucial to cure it. We hope to leverage the current research in Computer Vision and Deep learning to provide a first level diagnosis for diabetic retinopathy..

Anybody can utilize this service and upload their retina scans to get a first diagnosis for their chance to develop diabetic retinopathy. This will help a far greater number of people be able to get the diagnosis. Incase of a positive diagnosis, further tests by a professional doctor can be done.

Approach

We will be using deep learning technology to create a model. This model will help in detecting the diabetic retinopathy in the early stages in millions of people. The diabetic retinopathy data will be displayed using ReactJS frontend. For the backend we will be using flask technology to implement our project.

Functionalities

Users will sign up for the portal.
Users will log into the portal.
User will upload his retina scan.

User will get the probability of him getting the diabetic retinopathy information.

Persona

User

User who wants to get to know the probability of him getting the diabetic retinopathy

Doctor

Who wants to upload the batch of images to check the probability of his patients getting the diabetic retinopathy

Dataset links

dataset sources: Aptos 2019 Blindness Detection :

https://www.kaggle.com/c/aptos2019-blindness-detection/data

Project Idea 2:

Introduction to the problem statement

We live in a busy working world where most of our time is spent in the office. Hence we get very less time for accomplishing personal tasks like repair and maintenance of home, garden and landscape etc. Hence we are providing a one stop website where the user can login into the portal and raise a service request in below 5 categories and get the right person and contact details.

Abstract

A web application for local services such as repair and maintenance, homecare and design, packers and movers, tutors and lessons, gardening and landscape where users post their service request and service providers can reply to that with budget and timeline to complete that particular job.

Approach

We will be implementing our application using MERN stack.

Portal frontend using ReactJS where the user can submit the requests and the backend will be nodejs.

Functionalities

Users will sign up for the portal.
Users will log into the portal.
User (Service Requesters) will raise the request.
User (Service Provider) will reply back to the service request.

Persona

Service Providers- These are the persons who provide the services Service Requesters- Post their services

Project Idea3:

Investment Suggestions

Introduction to the problem statement

With the growing number of people using the internet and apps, websites are starting to implement login functions. People may not remember passwords for a huge number of websites, so they keep the same passwords for all. When a password/personal details gets breached from one website, it gets breached for everyone.

Abstract

We want to build a website/app or browser extension helping people know if their personal details have been breached or pawned.

Approach

Functionalities

API - https://haveibeenpwned.com/API/v2

Login / Signup on website or extension.

According to the input email id, suggesting if their email id has been breached in any of the websites.

It may include other personal data of users which may have been compromised.

Persona

Users -

People after signing up can get details of their compromised personal details such as their passwords, email addresses, mobile number, addresses, payment information.

Dataset links

https://haveibeenpwned.com/API/v2