I’m Beside You

Software Engineering Internship Assignment

Emotion Analyser

By-
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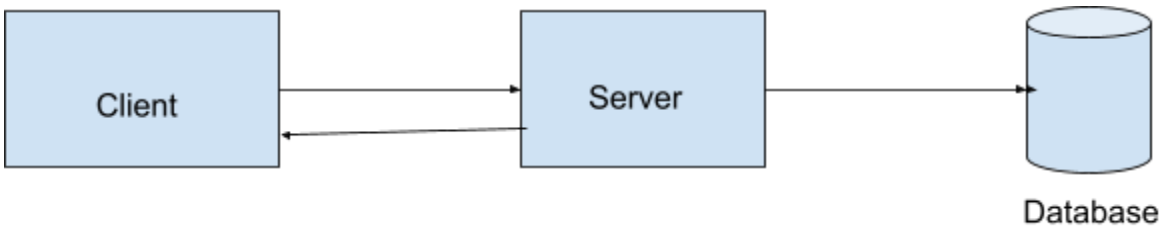
The Emotion Analyser is a computer vision based emotion recognition application.

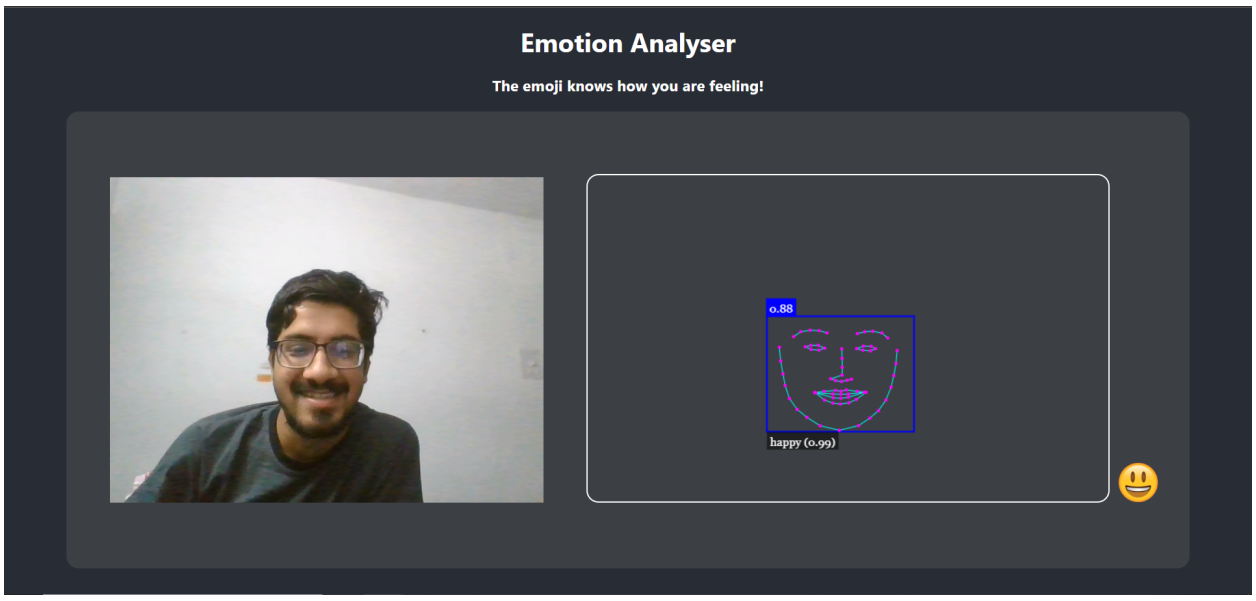
Flow

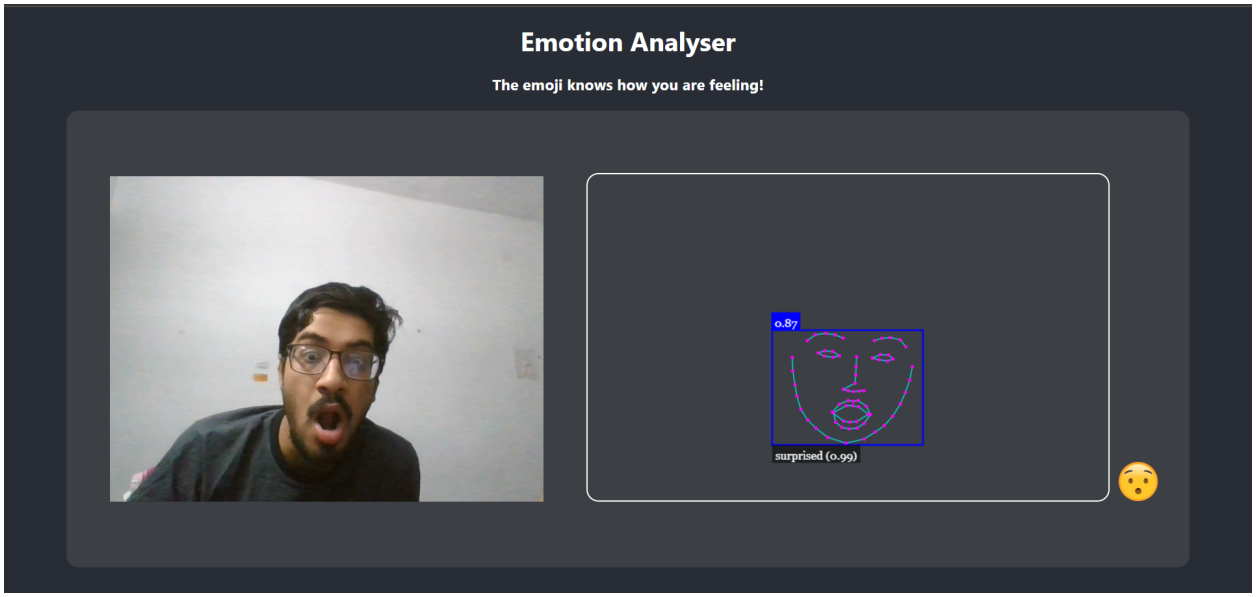


Front-end

The frontend of the application is created using **Reactjs.**
Here I have used the **face-api.js** javascript library to detect emotions on the frontend.

face-api.js is accurate in predicting the emotions correctly by calculating emotion indexes and comparing them to get the final emotion.





The **face-api** is also available for node js but still it is used at frontend to reduce server load or continuous requests.

Back-end

The Backend of the application is developed using **Nodejs** and **MongoDB** is used as the database to store facial emotion indexes and the predicted emotion.

MongoDB is efficient as compared to MySQL in querying and storing data because of its flexible schema ability and handling unstructured data.

Here we require a faster request and response system because of continuous emotion detection and storing. Therefore MongoDB is used as the database.

It is storing data in a collection named **faces.**

Schema:

{
  neutral: 0.00005580005745287053,
  happy: 3.522692554325246e-11,
  sad: 0.9996051788330078,
  angry: 0.00033190843532793224,
  fearful: 0.000069027869358251 34,
  disgusted: 1.4353206401196417e-9,
  surprised: 2.822859244133724e-7,
  emotion: 'sad',
  _id: new ObjectId("6262b5a0fceb6605954399d4"),
  __v: 0
}

Scopes

Storing the emotion recognition can benefit in many ways like

- Medical Diagnosis
- Education
- Autonomous cars etc.

Thank you