BTP-1(REPORT)

Team Members:

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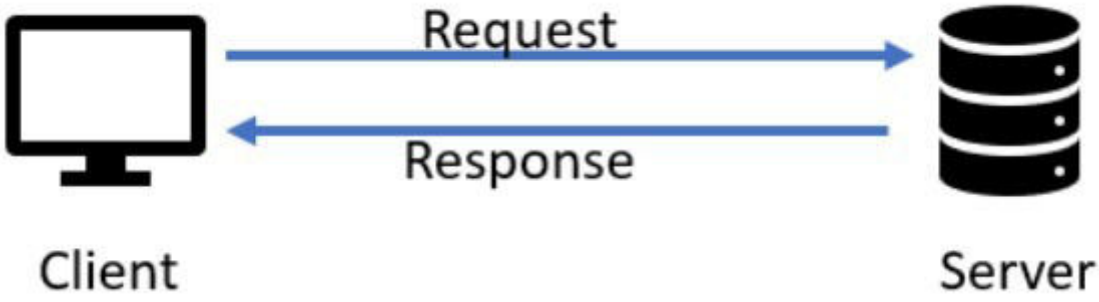
Intoduction:

This app is used to find amplitude, Intensity,pitch,pause of the required by the userand also this app is used to compare the parkinson voice and healthy voice. The comparisions are Amplitude, intensity,pause,Pitch.

Architecure:

Backend(server): Flask.
Frontend(Client): Electronjs.



Here The backend Flask will communicate with the electronjs with the use of POST and GET requests to get the data from the front end to the backend and viceversa. The requirements for the app is in the requirements.txt file.

Launching App:

Start the server in the Backend by using the “Python3 app.py”. And the frontend by using “npm start”. The elctronjs window will open with the welcome page.

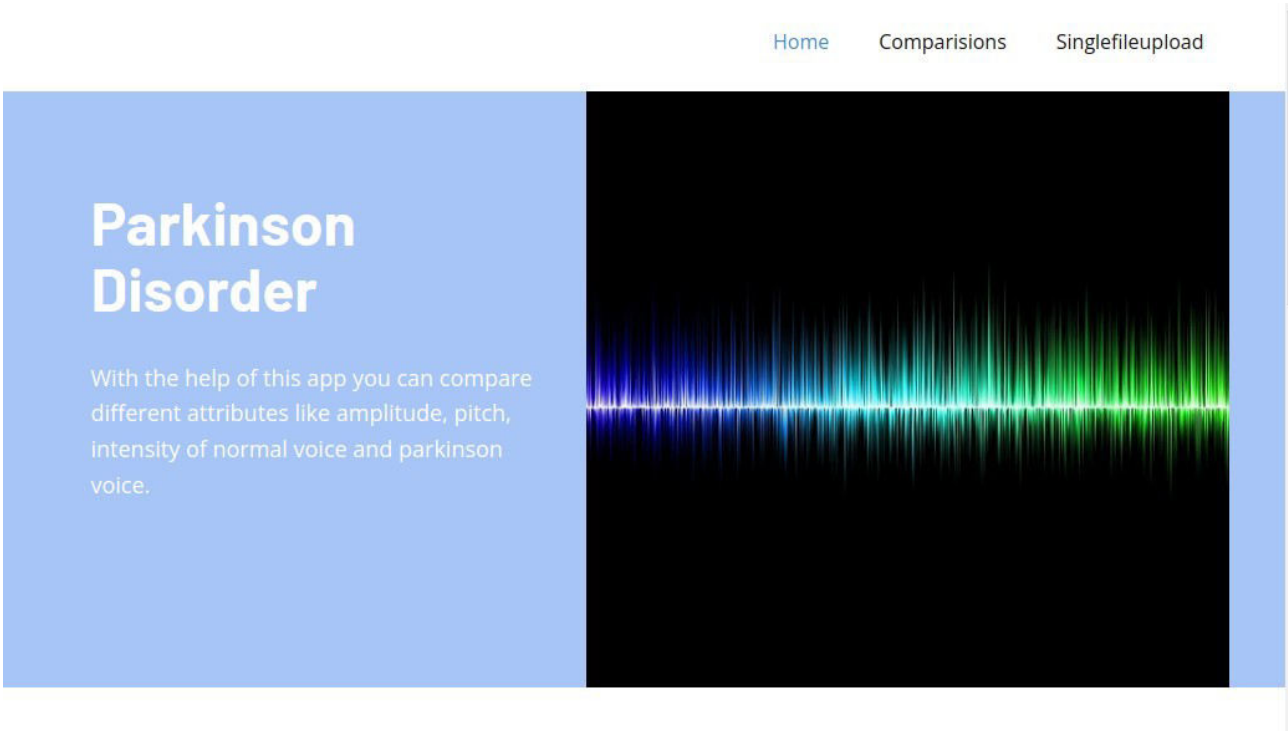
Progress and Features:

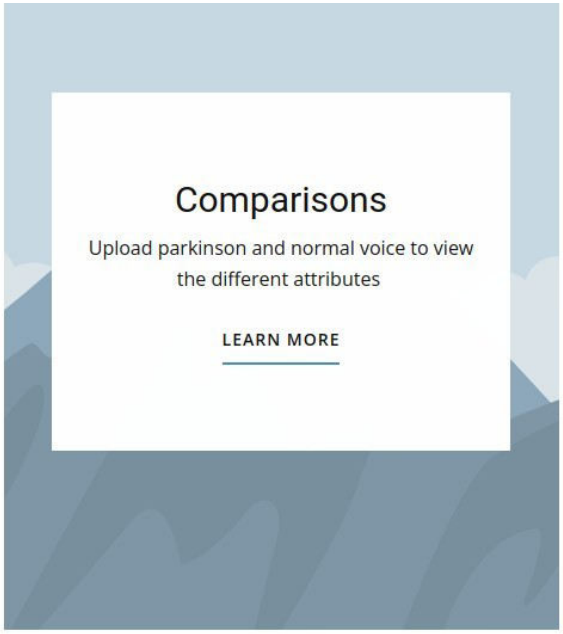
Using flask implemented the Backend to handle all the Queries.
Integrated the amplitude function with the flask backend which give the amplitude for the given audio
Integrated the pitch function with the flask backend which give the amplitude for the given audio
Integrated the Intensity function with the flask backend which give the amplitude for the given audio.
Integrated the pause function with the flask backend which give the amplitude for the given audio.
Shown the graphs for sending the two different audio samples of parkinson and healthy simultaneously and shown in teh comparison page.
Used Electronjs for the frontend and with the 3 pages implementation .
First page is home page, Second is the Comparision and the last is the audio parameters for the single audio.
For the Comparions intialluy there are two healthy and two parkinson comparison changed it to 2 to make the UI more good to look. Furthure added blocks and other CSS elements for page
Improved the UI using bootstrap5. Further connecteting the Three pages with the hyperlinks.
Implemented autorefresh for the page so the user can view the graphs without refreshing the page every single time new file is provided.

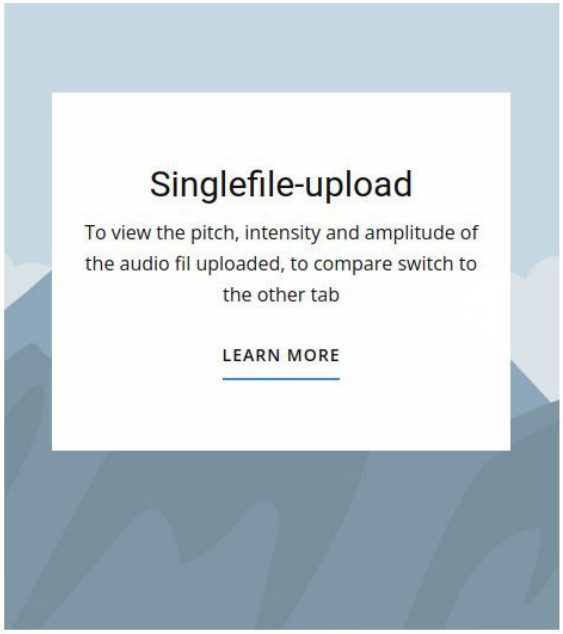
The app is responsive(weppage will adjust to the size of window provided)

App Guide:

1.)Launching the app will open with the home page as shown.

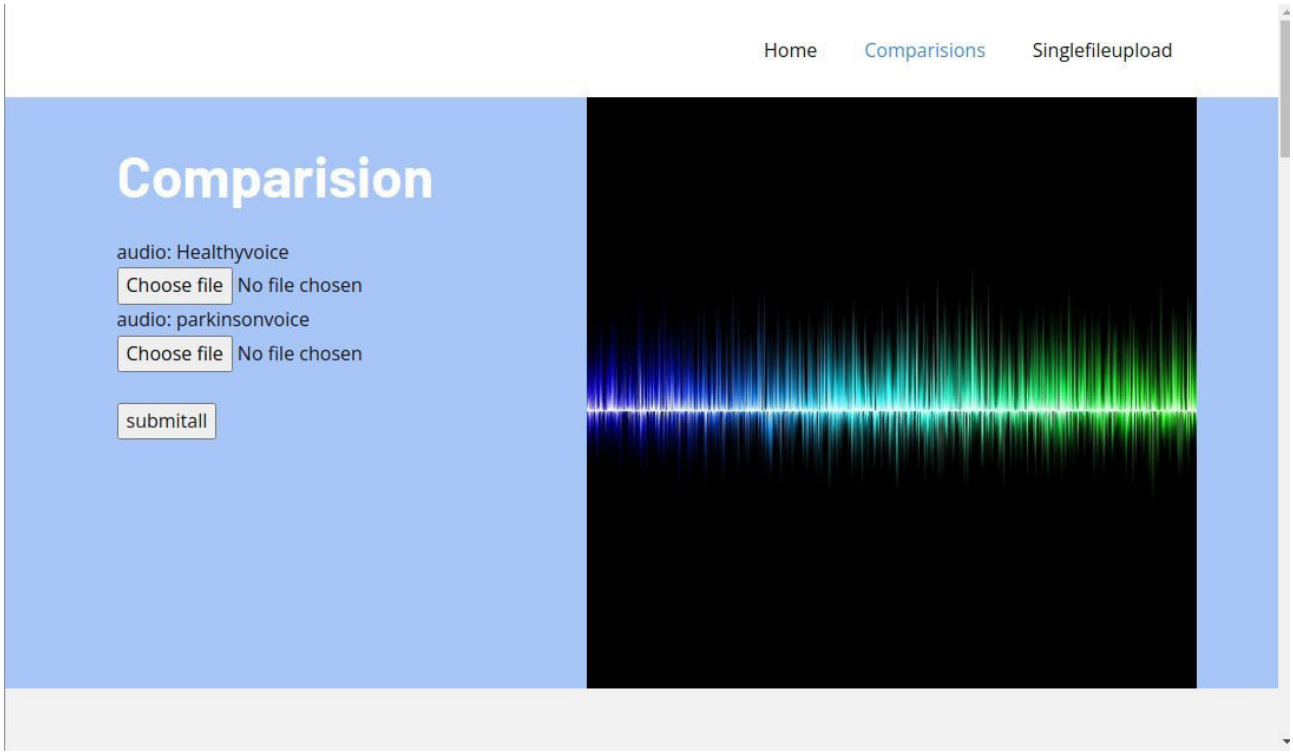




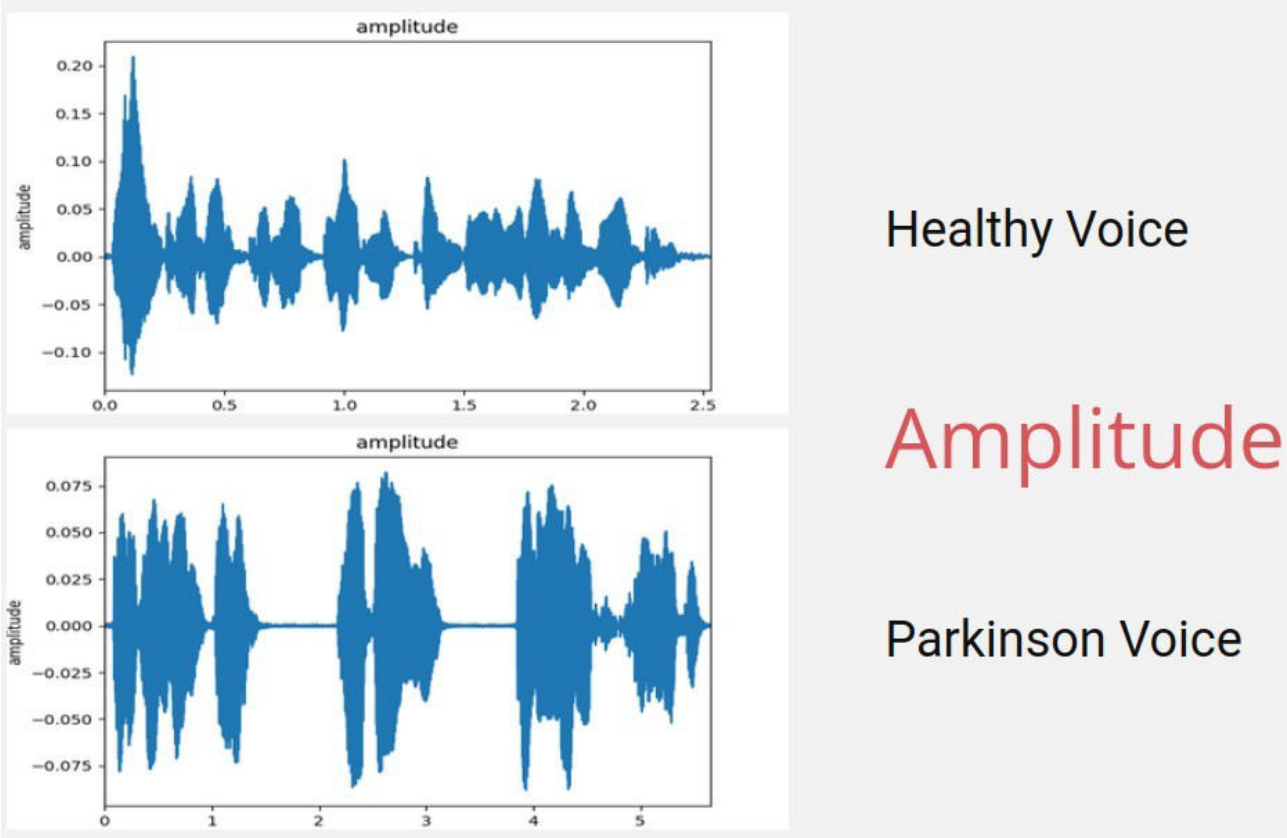


User can navigate to the required page by using the navbar or the “LEARN MORE” button in the required page he need to go.

2)Comparisons Page.
If the User went to the comparisions page then the page will look like this.

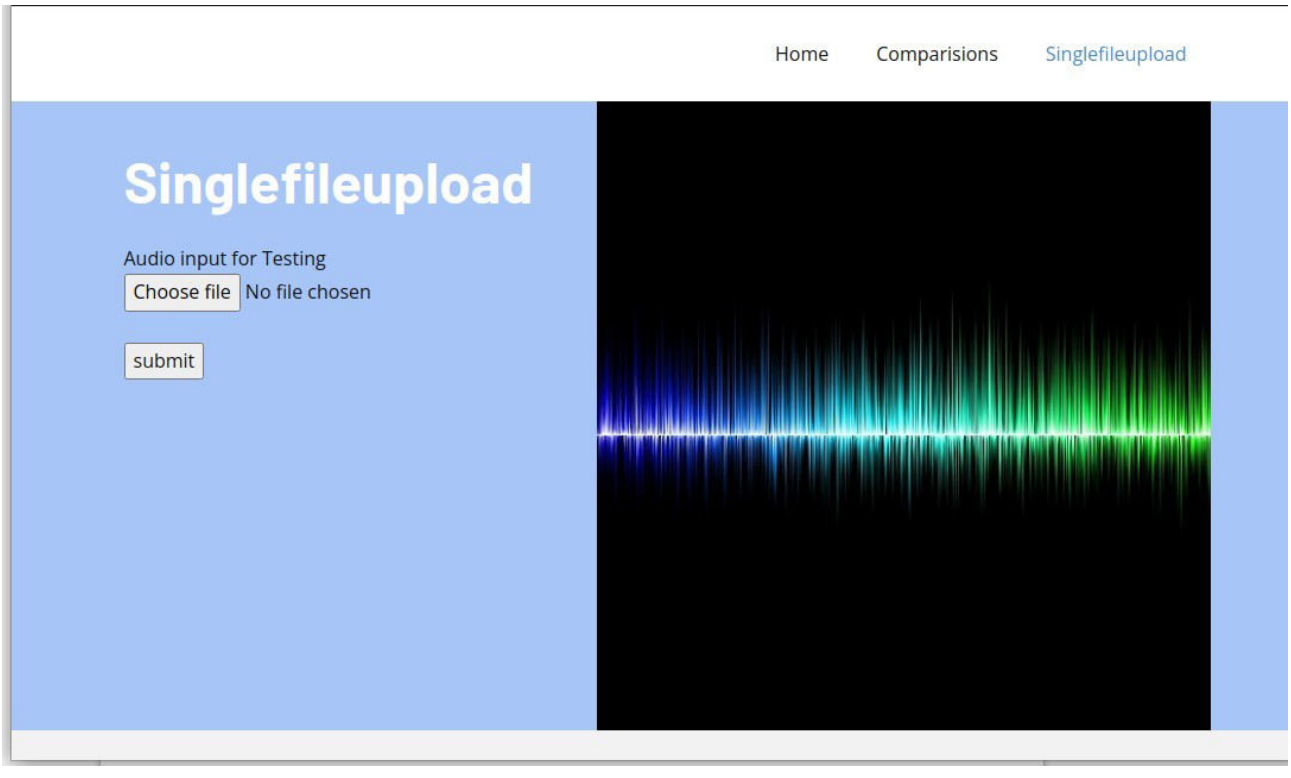


User can upload the required audios one is healthy and the parkinson audio in the respective boxes provided then he can submit the audio by clicking the submitall button. Then the comparision graphs will show. User can scroll th page to view the Amplitude,pitch,intensity and pause showing the parkinson voice and healthy voice graphs side by side.



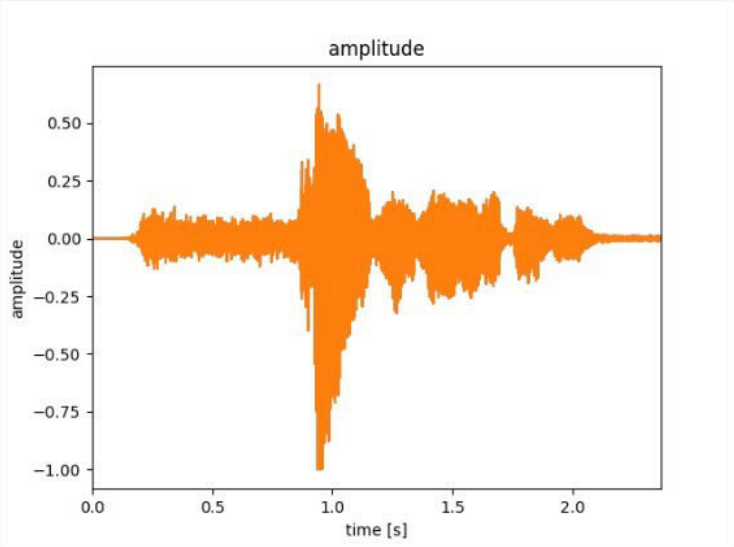
3)Single file upload:

This page is simliar to that of the comparisons here only one audio is provied to quickly view the amplitude,pitch,intensity and pause.



User can give the Audio in the Audio input for the testing then submit it by clicking the submit button then the graphs for the Amplitude,pitch,intensity and pause will be disiplayed. User can scroll through the page to look at the graphs.

Amplitude



Pitch