

Emotion based **Music Recommendation** System





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INTRODUCTION

- Emotion based music recommendation System is a web application to address the current emotions experienced by a person through music.
- It is enabled by recommending songs related to the current mood or the state of mind of a person.
- Reduces confusion and enables to express emotions by facial expressions and hand movements.
- Enables the user to choose the singer and preferred language to give a customized output.
- This application has a lot of scope for development in the future.



LIMITATIONS OF EXISTING MODEL

- **Privacy:** Most of the available models work on a basic database, so there might at least some level of threat for user's data to get invaded that is privacy invasion.
- **Cannot identify certain emotions:** Few emotions might not be identified by the existing model as the facial expression might differ from the developer to the user. Example: Happy face
- **Cannot identify the need based on the object shown.**
For example : Workout/Gym
- **Lack of help desk and feed back centre:** Cannot customise the output based on the feedback.



SOLUTIONS TO OVERCOME LIMITS

- Taking the hand gestures also into the consideration.
- Providing a feedback centre:
 - > Developer side
 - > User side
- Providing a help desk

FEATURES

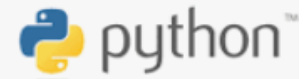
- **Security and Privacy:** This System will prioritize security measures to protect user data.
- **Documentation and Support:** Comprehensive documentation and support resources will be provided to guide users and developers in setting up and using the application.
- **Feed back station:** Users can provide their feedback and suggestions,if any, based on their experience.
- **Help centre:** If any user has a query regarding the usage of the application, user can take the help of the virtual assistant that will be available in the application.

TECH STACK USED

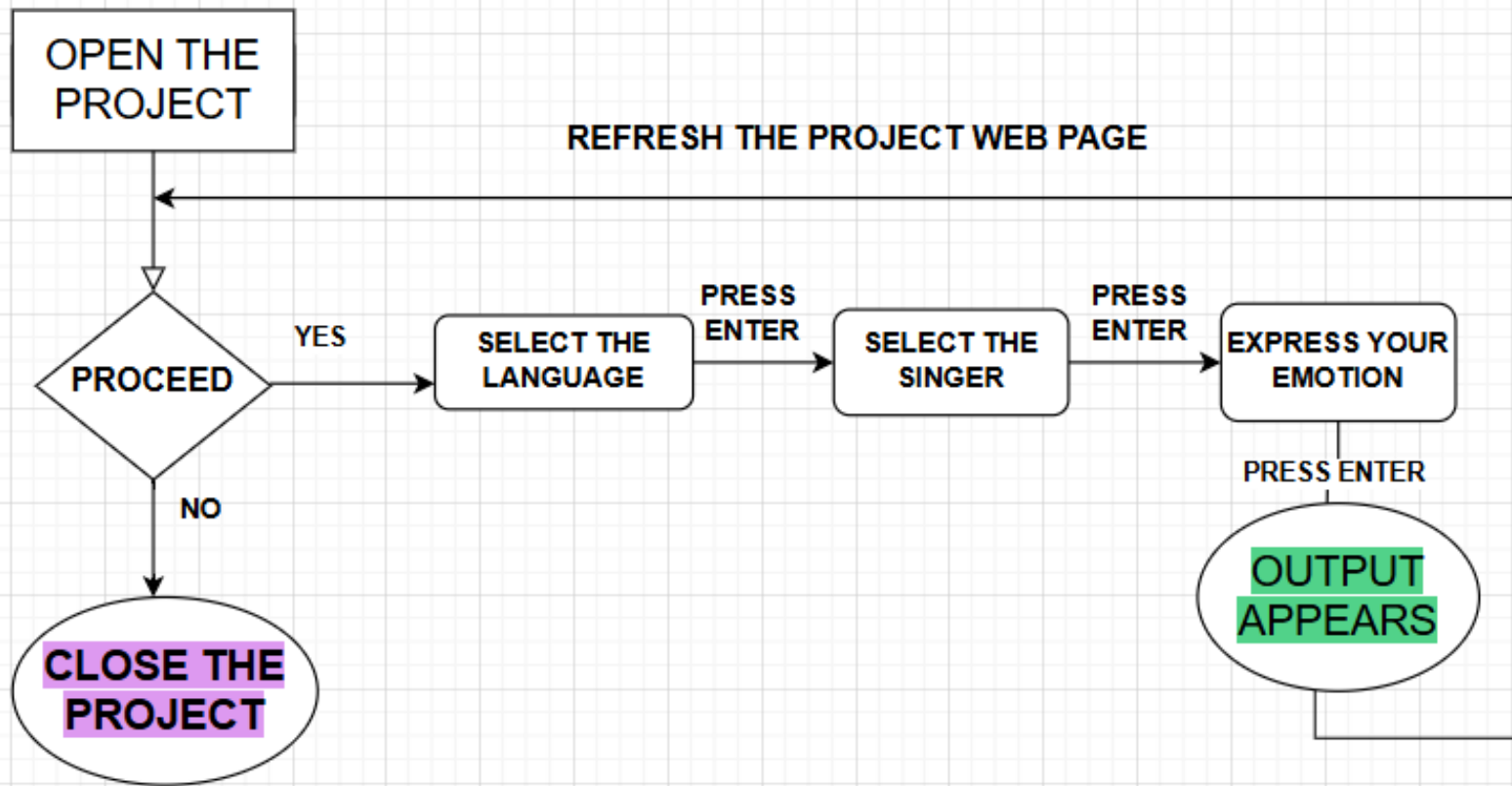
- Python
- Tensorflow, Keras
- OpenCV
- MediaPipe



Visual Studio Code



Project Design



A Look Into UI

 RUNNING... Stop Deploy 



Emotion Based Music Recommender

Language

telugu

Singer

SPB



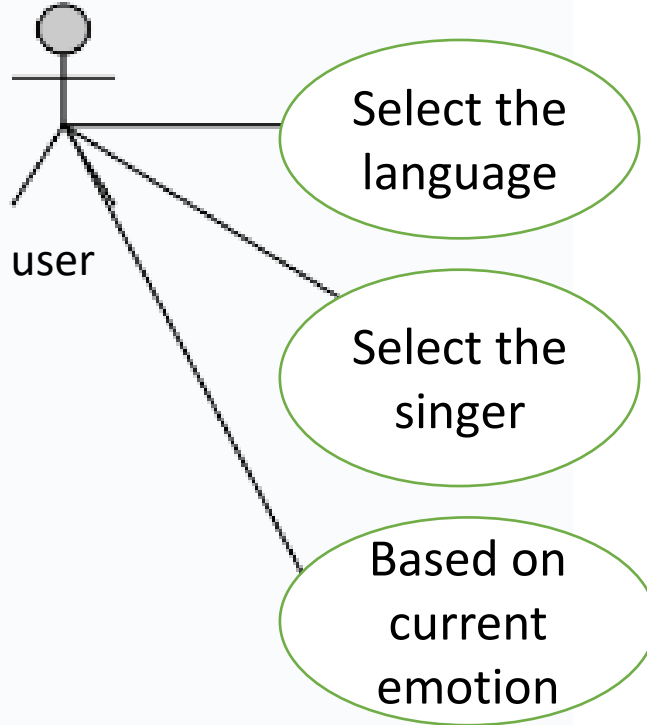
happy



STOP

Recommend me songs

UML Use Case





Future Scope and Conclusion

Future scope:

- Enables users to create a room and share songs and their experiences.
- Link the web application to other third party music applications like Spotify, and Wynnk.

Conclusion:

- This presentation encapsulates the journey of conceptualizing, designing, and implementing a platform that seamlessly facilitates real-time usage of emotion based music recommendation.

REFERENCES

<https://ieeexplore.ieee.org/document/10134389>

<https://www.geeksforgeeks.org/music-recommendation-system-using-machine-learning/>

<https://docs.streamlit.io/develop/api-reference>

<https://www.youtube.com/watch?v=ZxZSGRdTLtE>



Thank you...



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