2 Emotion Detection fore emotion Detection of used the FER-2013 DataSet. Dataset Sources FER 2013 (image) music\_moods\_dataset.csv Emofian for Emotion Detection for music recomendation Model MUSIC Recome no del Data Proprocessing Data Psiepsiocessing sescale, sectation, transformation, reshaping Zoom, height-widthshift Smoothing (balancing) flipping, spliting Reshaping for ConvID compatibility features Model Building Entracted feature overheac CNN + Vgg. Model building (Soporately) CNN + Attention Ensemble Model. Model Braluation model Evaluation CNN + Vgg- 16. Haining Bralua fion Ploting & visualization Ploting & visualizato · Accuracy clown Loss cuente, confusion matrix. poecession clome (Recall) Roc curie

1) Coccating the Music Recomendation.

DataSet (.csv) spotify APP Hugging Face Spotify API Spotify Web API Fach snow extracts audio features for songs zone song + its features (valence, energy, tempo, loudness, mode) etc merged\_dataset.csv [combine all the features for all songs] using sules Spotify using Spotify API music\_moods\_

How to create music\_moods dataset

dataset.csv

(Add a new column mood) form moreged dataset.csv??

Catha new column mood form moreged dataset.csv?? The merged\_dataset.crsv contains audio features from Spotify API Like valence, energy, danceability loudness, tempo etc. i) Deep the unnecessary columns (which was originally about hit I not hit beings, not relevent face mood classification. A function assign\_selected moods () is applied to each Hoppy & high valence, high danceability, major ky. Sad -> low valence, low energy, minax key. Angry & high energy, low valence, low. Fear -> Low lanence, fast tempo high energy Supprise y mid Valence, high tempo, high energy.

