



CONCEPTUAL DESIGN

APHELION MUSIC

MUSIC GENRE CLASSIFIER

STEP 1

We have to download the GTZAN Dataset which is popular for Music Genre Classification

STEP 2

Next we need to extract the MFCC features from the dataset and store it in a .json file so that we can use this for training our ML models

STEP 3

Try out a couple of models namely: ML (kNN, SVM, random forest etc.), RNN, ANN, LSTM and CNN. Independently check each model performance and save the best model.

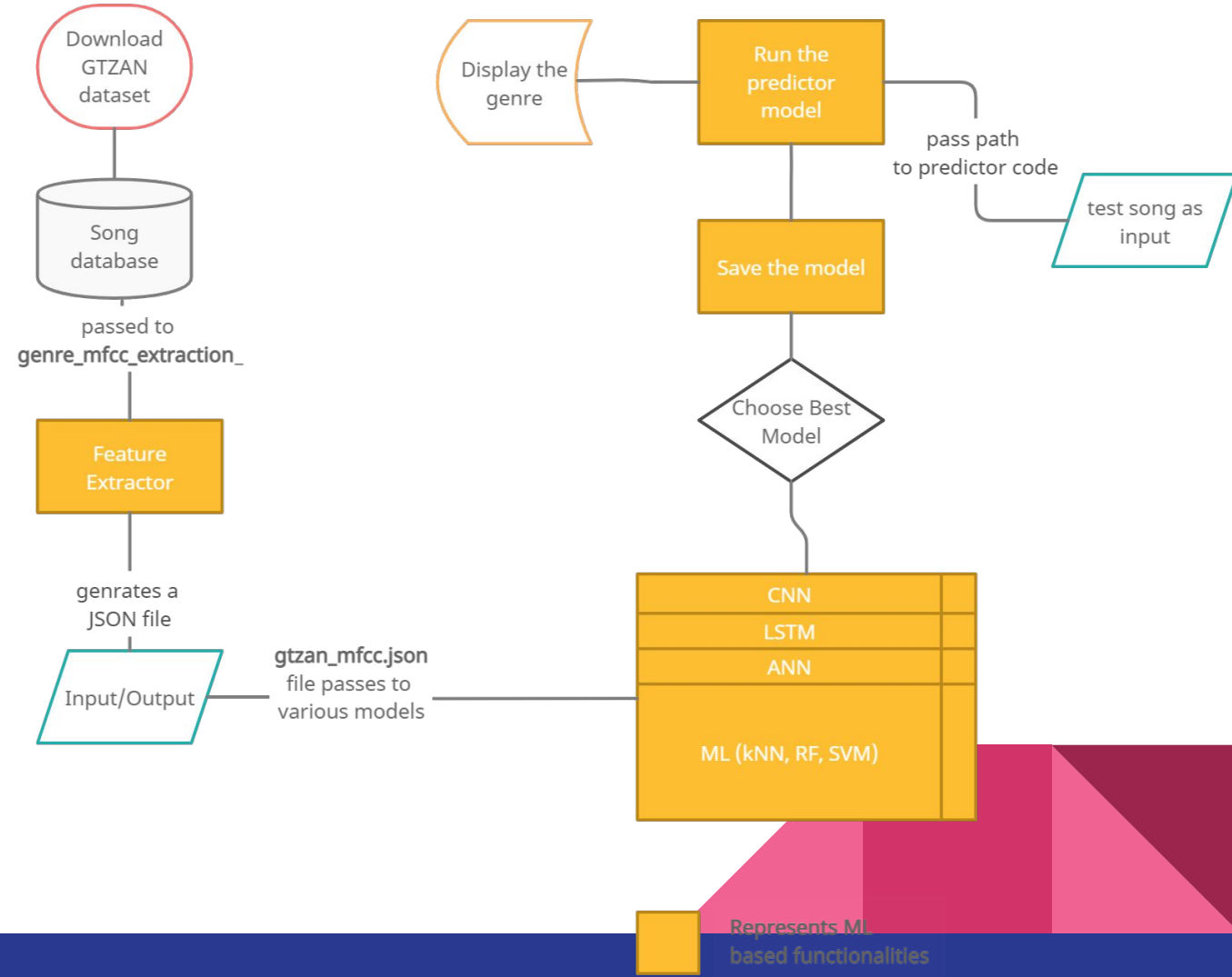
STEP 4

Program is tested for all the inputs as well as unit test is incorporated into the modelling and program

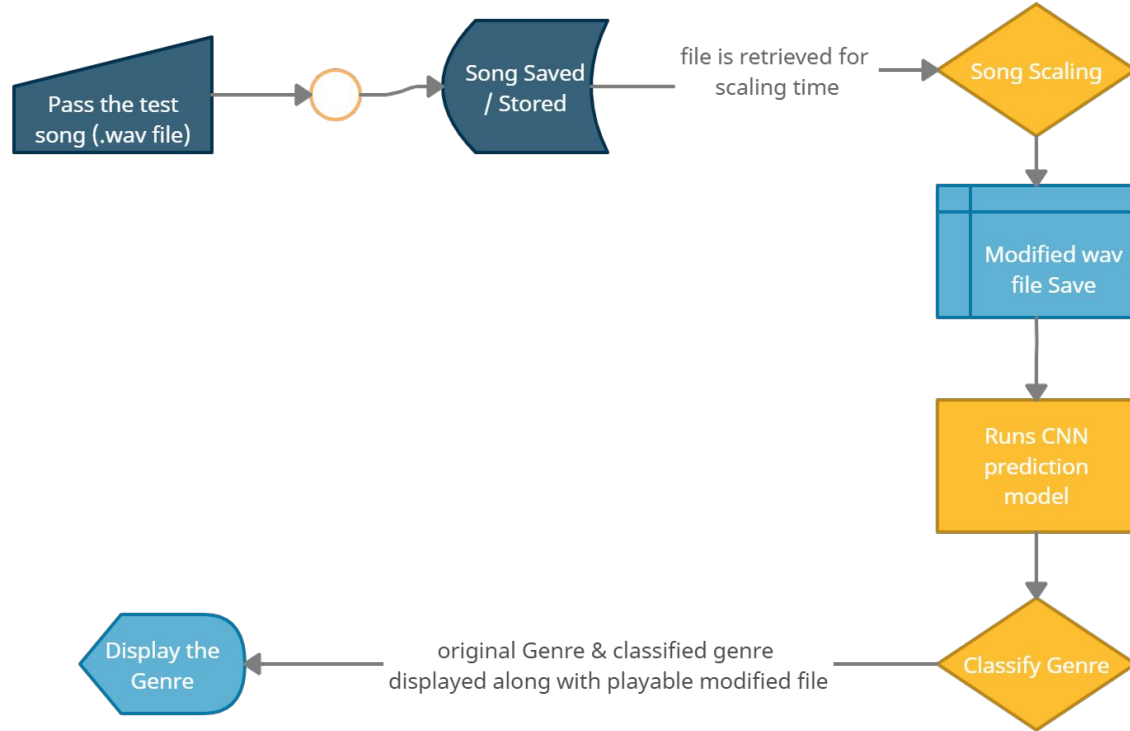
STEP 5

User interface program is created which user the user will interact with. It will classify any song provided by the user

Project High-Level Planning



High-Level User / Developer Interface



Represents ML
based functionalities



Other functions



User / Developer Manual Functions