



**Parshvanath Charitable Trust's**  
**A. P. SHAH INSTITUTE OF TECHNOLOGY, THANE**  
**(All Programs Accredited by NBA)**

**Department of Information Technology**



# **Smart Recommendation System using ML**

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# 1. Introduction

- Rapid development of mobile devices and internet has made possible for us to access different music resources freely.
- The number of songs available exceeds the listening capacity of single individual.
- People sometimes feel difficult to choose from millions of songs. Moreover, music service providers need an efficient way to manage songs and help their costumers to discover music by giving quality recommendation.
- Thus, there is a strong need of a good recommendation system.

## 2. Objectives

1. To provide cross platform application and Chatbot to interact with user.
2. To provide recommendation based on recorded information on the user's preferences.
3. To deliver a set of playlist from estimating the current and future popularity of songs ,artist and genres.
4. To keep track on frequently played songs.

### **3. Problem Definition**

1. People sometimes feel difficult to choose from millions of songs. Moreover, music service providers need an efficient way to manage songs and help their users to discover music by giving quality recommendation.
2. Sometimes just recommending doesn't give user satisfactory outcome to avoid this problem chatbot is introduced to make more personalized recommendation.

## 4. Technology Stack

- **Frontend:**

- Flutter

- **Backend:**

- BigQuery

- TensorFlow

- Firebase

- **Algorithms :**

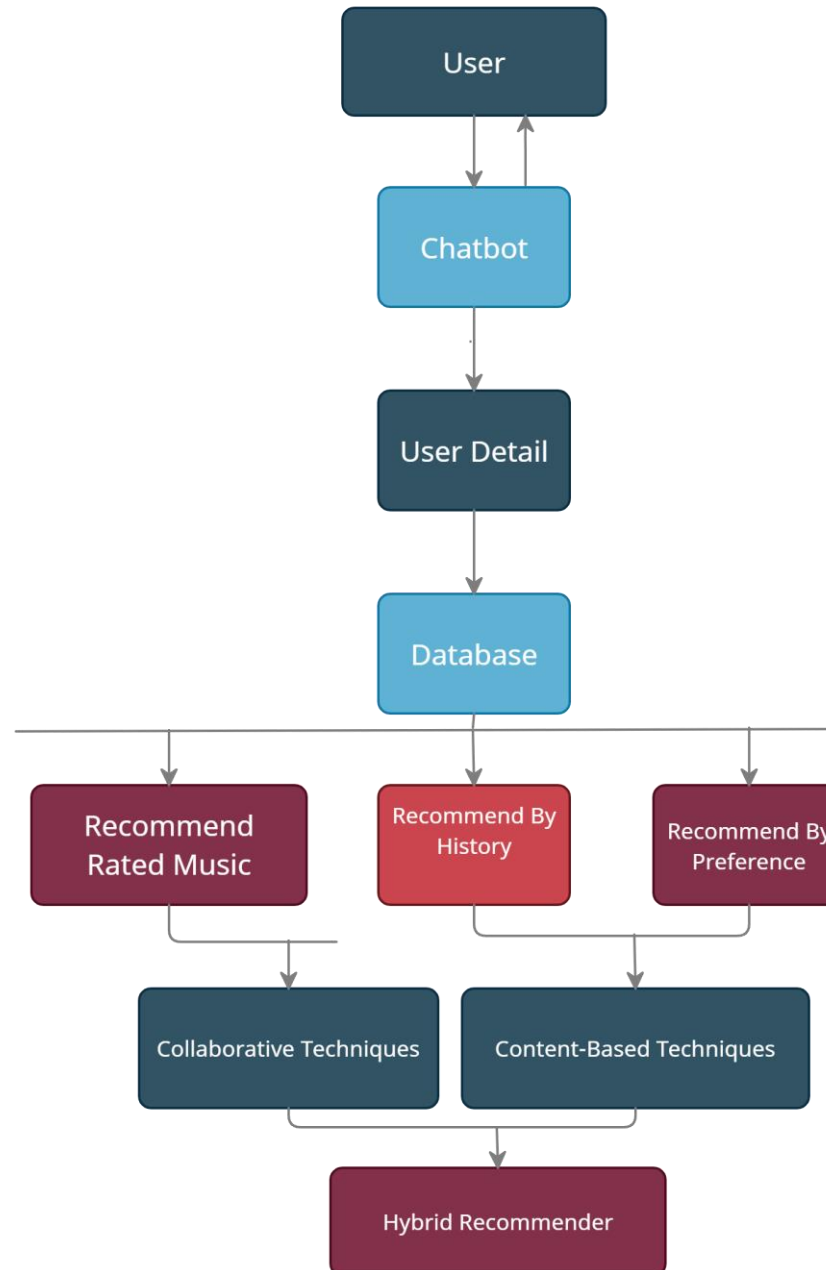
- Hybrid Algorithm ( Collaborative Filtering and content based )

- **AI Chatbot** :DialogueFlow-Flutter Library

## **5. Review Suggestions (Given in Last meeting)**

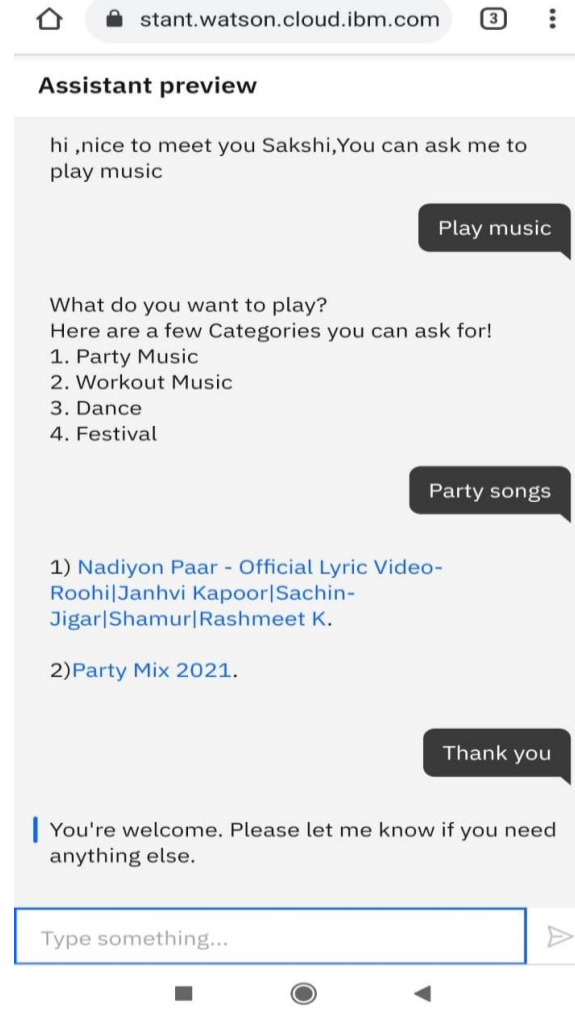
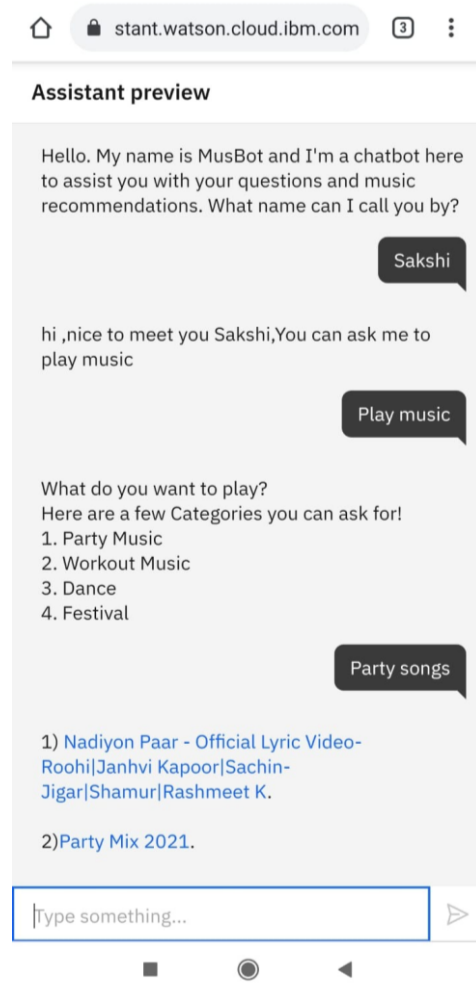
1. Scope of the project to be redefine.
2. Check feasibility, if project can be developed for cross platform(flutter)
3. Objective should be clearer.
  - a) Firstly user will have interface where user can interact with chatbot.
  - b) From interaction, Mood or genre of music user should be fetch.
  - c) As per the interest song should be pushed to the user interface.

## 6. Block Diagram to propose project Idea





# 7. Prototype Design Demonstration



# Implementation Status



# Targeted Conference

1. 3rd International Conference on Deep Learning, Artificial Intelligence and Robotics, (ICDLAIR) 2021

Abstract Deadline: September 05, 2021

Paper Submission Deadline: January 15, 2021

2. International Conference On Big Data, Machine Learning and Applications

Paper Submission Deadline: September 25, 2021

Thank You...!!