IDEA BLUEPRINT DETAILS

Technology Bucket: Software - Mobile App Development
Category : Software
Company Name : PayTM
Team Leader Name : Mexson Fernandes
Problem Statement: Reduce the amount of push notifications require for e-commerce apps

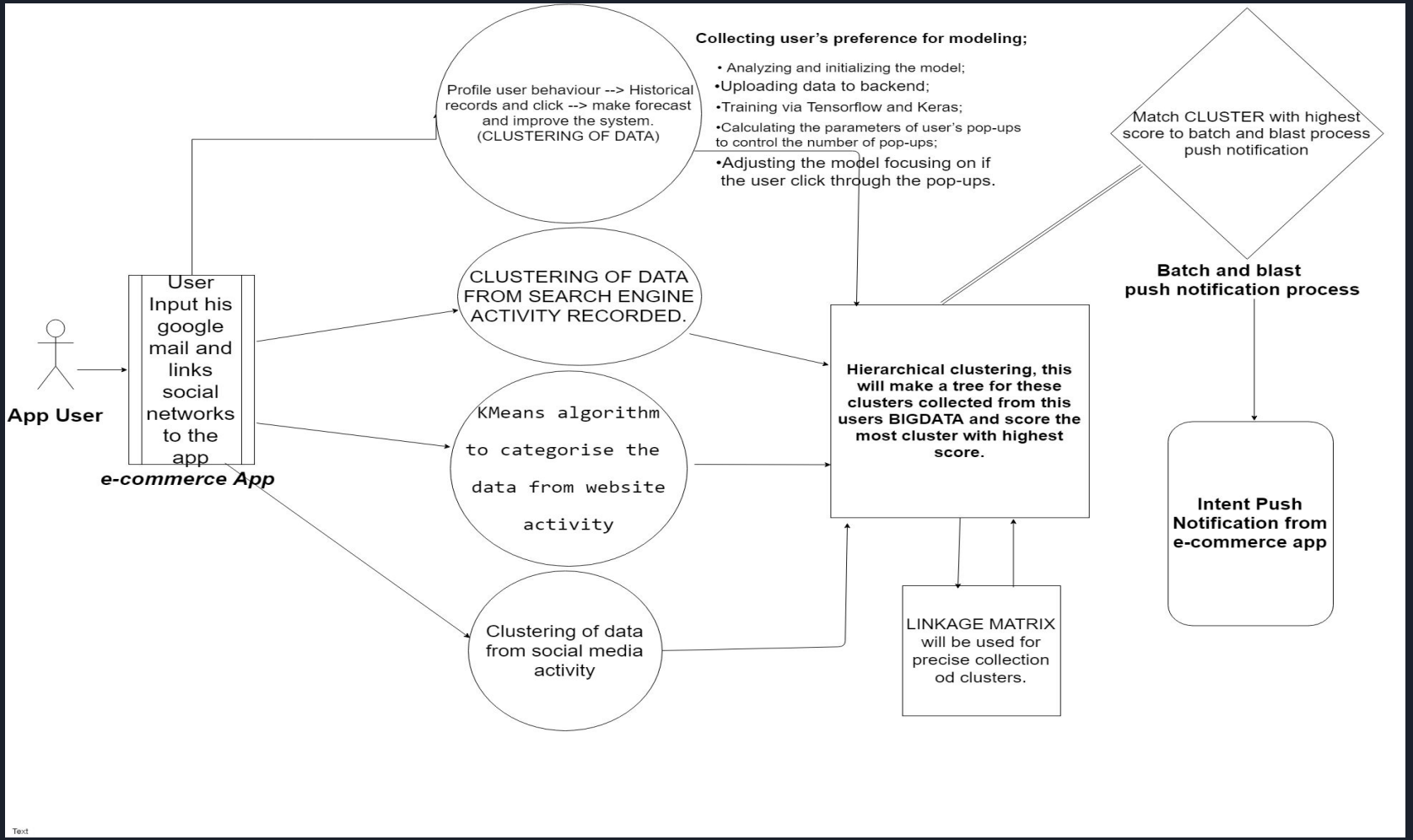
Problem Code: SJ1
College Code: 1-3512827697

IDEA TITLE: ClusTMPay - **A** Deep Learning approach to reduce push notifications

IDEA SOLUTION:

It's no wonder that push notifications have a reputation for being irritating. For Intent push notification from e-commerce apps we will use Clustering algorithms for value based potential push notification from app. User details will be submitted including email and link to social network. The capture of data of users real-time behaviour, service record, personal tastes and preferences, website activity, Social media and Comprehensive contact information is done . The k-means algorithm will be applied to cluster the data with same categories. These clusters collected from different regions of internet will cluster to contribute and classify data with Hierarchical Clustering. **Hierarchical** Clustering will cluster the data to the maximum possible child nodes. The more number of child nodes to a cluster the more the score. Deepested the branch , maximum the score in **Hierarchical** Clustering. These clusters will make match with the batch and blast process of sending push notifications and the cluster with highest score matching the the dataset of push notifications will be sent as Intent Push Notification.

USE CASE DIAGRAM



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TECHNOLOGY STACK:

Tools:

Python (Building AI models),
Tableau (data visualization),
Firebase (Data collection and push notification setup for prototyping),
Google Colab (Training model on TPUs)

Frameworks:

PyTorch (Python Deep Learning framework),
Bigtable (For easy storing and retrieval that can be used in Fintech like paytm),
Keras (High Level Neural Network API),
Tensorflow (Backend for Keras),

DEPENDENCIES:

User activity data to analyze click through rate using customized tool,
High-end system to train Deep Learning model (Google Colab will help here),

SHOW STOPPER:

Availability of large dataset,
User’s permission to share their internet activity,