

***MilkBasket Assist* by Team Pontiac Bandit**

1. Summary

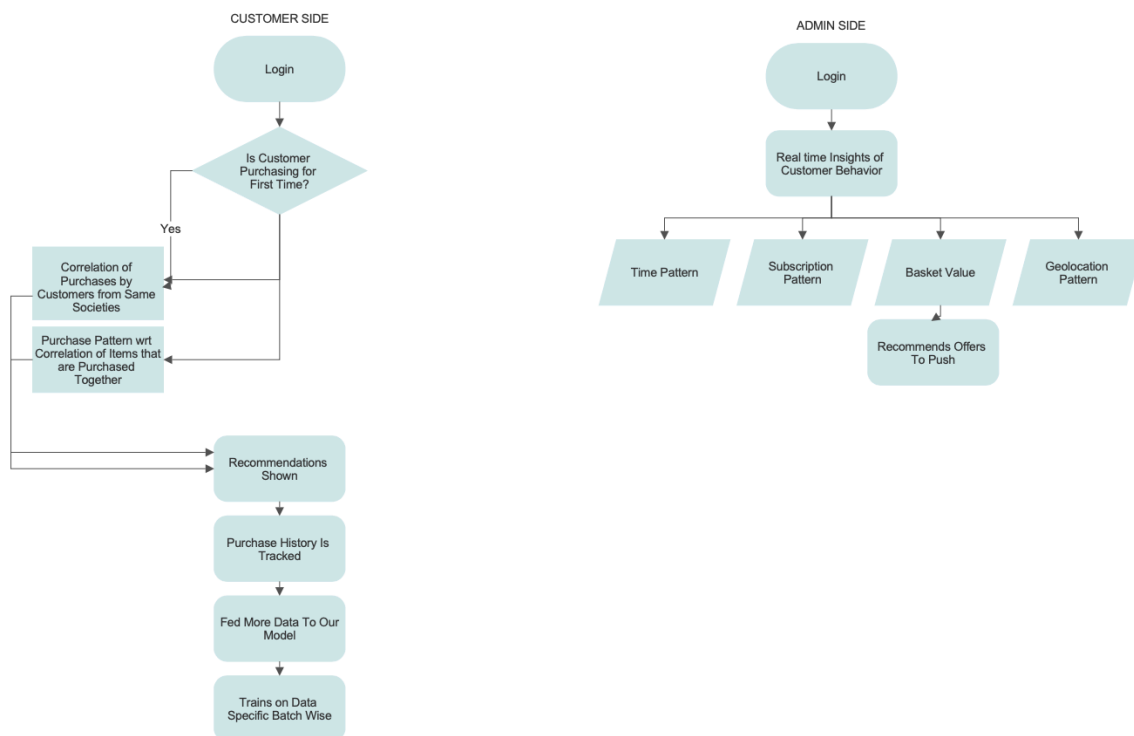
We started by building a simple recommender system for the customer side solely based on frequency of products ordered by Bayes Personalised Ranking. After that, our next step would be integrating time at which the product was added to the basket to the recommendations and also the average basket value to ensure maximum purchases from the recommendations. We plan to build a mobile app using React Native and backend with Django for a portal. The portal would also have an admin side where comprehensive results would be displayed to the company person after a proper RFM analysis which would help push right offers at the right time to the customers and also help push sales of subscriptions to the people most likely to buy. Also helping the admin understand which product to boost in which region.

The Batch Deployment feature of Google BigQuery would be used to retrain the systems and provide better recommendations with time.

2. Tools Used

- A. Python
- B. Scikit Learn, Numpy, Pandas, SciPy
- C. Django & Django Rest Framework
- D. React Native
- E. MySQL

3. Technical Architecture



4. Feasibility

The feasibility of the product would be really high if the data pipelines are maintained properly and regular batch updation takes place. This would actually have a colossal impact on revenue. The ideal failure condition would be randomised fake datasets being uploaded to the models.