#### **PROJECT PROPOSAL**

1. Recommendation system for Project Hymnal App

In this current time where most of the sales are done through online webs and applications, there is a growing concern as to how to market relevant products to customers. When people see an irrelevant ad, they would just simply ignore it or even find it bothersome at times which could lead to a certain level of negative feelings and impression towards the brand that was being advertise.

#### **Problem Statement Formation**

What opportunities exist for Project Hymnal to increase user usage by 20% through implementation of improved recommender system?

#### Context

My housemate has an app (Project Hymnal) in the android and apple store, and he wants me to improve on the recommender system currently in his application. The current recommender system has no learning ability and is only based on the most popular item throughout the app.

### Criteria for success

Recommender system will be adopted and implemented no later than April 2021.

# Scope of solution space

Recommender System will be applied specifically on the Project Hymnal Application to better understand the impact on the potential user experience.

### **Constraints within solution space**

Data collected will be limited to the Google Cloud Analytics Database

# Stakeholders to provide key insight

Samuel Liu – App owner

Rajiv Shah - Mentor

### What key data sources are required?

Google cloud analytics Database – contains all application data

In this course there will be 2 individual capstone projects. For the first individual capstone project, I will be creating a model to determine whether a user will remain using the app or delete the app within a set period of time. The approach I plan to use is to base the model of the application's user history data given. The features that I plan to use are the geo location, or user background such as age. I will have to further discuss with my mentor as to what type of model to test on.