## Habib University – DSA Project (L5)

Project Name: Book Butler

30<sup>th</sup> March 2019

Instructor: Ayaz ul Hassan Khan (L5)

## **Project Members:**

- Muhammad Salman Abid
- Muhammad Ammar Khan
- Hassan Naseem

## Description:

Our aim is to create an application using different algorithms which will help us in recognizing connections between consumers who use a specific type of product, and to use them to recommend similar other products which others have used (and liked). This application would be geared towards use in environments like libraries, DVD shops or even online streaming services.

## Techniques to be used:

We intend to use graphs in creating the links between the members and to calculate the closeness of their relation by formulating a method to calculate weight. The weight would be based upon similar products used, and whether that consumer liked that product or not.

For e.g. If consumer A read Book1 and liked it, and consumer B also read it and liked it, it would lead to a positive effect on the weight between their edge.

Whereas if consumer B read book1 and disliked it, it would be a negative effect on the weight of their edge.

Further analysis based on the created graph would then be used to pick out products for the user based on:

- Products used by other users of similar taste
- Products of similar genres
- Products based on personal usage history and taste

