Introduction:

Motivation:

Allocation of projects topics for students is always time taking and requires a person to dedicate his time in allocating of projects/topics for the students. It’ll be more complicated if there are many students and fewer topics or many students preferring same topic or even in some cases where a single topic needs to allocated to a group of students.

Problem Definition:

In our university, currently we are facing problem for Personal and group skills module where a topic needs to be allocated to group of five students and all these processes is done manually by our professors or admin team by sending topics list to every student registered in this module and each student submits their preferred topics in an order and then admin needs to check the order of preference of each student to each project and carefully allocate project topic to each student by making sure they are allocated with their preferred topic and then sending emails to each student with topic allocated to them along with names of their other group members. The main objective of the project is to make this entire process automated with limited admin intervention.

Challenges:

Most of the project is not so complicated, as it is only a web application which stored user preferences and stored them in the database and then run a matching algorithm, which is the most challenging task in this project, as we have 5 preferences for each student and then we need to allocate 5 students for each topic and also make sure that each student is allocated with their top preferred topic.

Limitations of the project:

• Users have convenient access without major security requirements.

• Will not work if there is no internet connection.

• Less interaction between students and professors.

Background research:

During this phase, I found that admin/tutor currently sending emails to students with all the topics which are approved and asks all the students to submit their 5 preferences in order.

Admin then collects all these preferences of students and allocates them into groups.

As this is not once only work, admin needs to do this process for every semester for students who choose personal and group skills module.

Considering this, we have decided to do a web application which can be accessed online where admin can add topics and students submits their preferences, admin runs algorithm which allocated them to groups.