# Initial Project Plan:

**Project Name**: User Language Dependent Messaging App - MyChat

**Project Description**: This project aims to bridge the Language Barrier faced by International personnel when they first arrive in a country whose main language is not their native language. Via this project an Android Messaging App is to be created in which the users can communicate with people from all backgrounds in a language of their choice without the need for them to manually translate each message. It will use a translator API available to translate messages from the sender’s language to the receiver’s language. It will provide a User-Friendly Interface for the users to authenticate and send and receive messages.

**Project Aims and Objectives:** The main aim of the project is to create a fully functional, User Friendly messaging app that allows the users to send and receive message in a language of their choice by handling the translation of messages in the server.

The objectives to achieve the aim are:

1. To create an API which would handle the services such as user authentication and real-time message transmission provided in the app.
2. To choose a free translation API available which will translate the message from one language to another.
3. To create a user friendly and easy to use frontend via which users can send and receive messages, choose a language of their choice, and authenticate to the app.
4. To display all available users.
5. To allow the users to update their details such as email, password etc.

**Work Plan:** The work plan is as followed in the order it is planned to be executed:

1. Create the project scope, aim and objectives.
2. Research on the advantages and disadvantages on the tools available to complete the project and choose the tools best suited for it.
3. Complete the Research Integrity Online Training Programme for Students.
4. Complete Ethics Approval application form.
5. Create wireframes for the App UI and questions regarding those wireframes for the online User UI Feedback form.
6. After Ethics Approval, broadcast ad asking for volunteers to take part in the UI feedback form.
7. User Authentication is to be completed, including creating the API to handle Signup, Login and Logout requests and minimal frontend to test those requests.
8. Complete one-one real-time messaging service without the translation. It includes the backend to handle the message send requests and receiving message requests. It also includes the frontend to provide minimal facilities to test the send and receiving of messages.
9. To implement the Translate API so that messages can be translated from one language to another.
10. To implement push notification so that the user can be notified of any incoming new message even if the app is running in the background.
11. To build the UI based on the standard practices and the feedback received from the user feedback.
12. To extensively test the App with all the completed features.
13. To broadcast an ad for volunteers to take part in a study of the app final built and receive feedback regarding it.
14. To write the final Thesis report.