

SOFTWARE REQUIREMENT SPECIFICATIONS (SRS)

On

*LPU ARTIFICIAL INTELLIGENCE
COMMUNICATION ASSISTANT*

Team Members

1	Sumanth	<i>12107634</i>
2	Vijay	<i>12108102</i>
3	Easwanth	<i>12106096</i>

“School of Computer Science and Engineering”

Lovely Professional University

Phagwara, Punjab.

Introduction:

A chatbot system that is used to maintain student details and view students by chatting with a bot. the whole application is contributed in Java. SQL database, java frames should be used in the project.

Startup module:

All the interface modules should be sized 1080 x 1920, and the home page should contain the logo of a lovely professional university and a start button to start the chatbot system. The button should render the chat page of the LPU bot.

Chat module:

The module begins with an exit button represented by an arrow (←) and a concurrent profile picture of LPU followed by some name and a menu bar (All these are arranged at the top of the interface)

The center portion contains a background where the messages are prompted by the user and the bot

Now the bottom section contains a text message and sends button which is taken as input.

Menu module:

The menu consists of options type insert delete and clear options.

which are like inserting a student detail and deleting the record of a student and clearing the chat that was done at that time.

Clear module:

The clear module should be designed in such a way that it should not create multiple frames everything should be done only by clearing the existing frame.

Insert module:

The insert module should have information like student registration number and name image details.

Delete module:

The delete module should take the student registration number as input and delete the record of the student.

Camera module:

- 1)As soon as the camera button hovered the bot should open a camera
- 2)it should capture an image of the user if requested.

Usage:

- 1)The bot should open with a logo and a button to go to the next page
- 2) On the chat page there should be multiple panels that join each other
- 3)the first panel should be used for displaying the profile picture and an arrow to exit
- 4)the camera button should prompt upon an interface that opens a default web camera
- 5)The 3-dot menu should give a menu option clear, insert, delete, and exit option to the user

Google Cloud Platform:

- 1) Google Cloud provides client libraries that enable you to easily create and manage resources
- 2) Google Cloud client libraries expose APIs for two main purposes: App APIs provide access to services.
- 3)We need a service account to work with agents
- 4) GCP offers a range of security features, including data encryption and identity and access management, which help to keep data and applications secure.
- 5) GCP is a powerful cloud-computing platform

Dialog flow: -

- 1) Dialog flow is a natural language processing (NLP) platform provided by Google
- 2) This allows developers to build conversational interfaces such as chatbots, voice assistants, and interactive voice response (IVR) systems.
- 3) Dialog flow uses machine learning and artificial intelligence
- 4) Dialog flow also provides analytics and insights to help developers understand how their conversational interfaces are being used and how they can be improved.

Insert Usage: -

- 1) The page should take basic information from the user
Reg no, name, attendance, image criteria
- 2) There should be two buttons to enable back to chat page and to insert values in the database
- 3) The insert button should be able to insert all the values in the database

Delete Usage: -

- 1)It should ask for the id to delete the user
- 2)again it should take confirmation by a tick box
- 3)Similarly it should have 2 buttons delete and back to chat page
- 4)If the button deletes then it should be able to delete the record

Database Design:

The database should be designed efficiently, and it should be normalized.

Constraints:

- 1)Bot should respond in both the cases if student exists and if not
- 2)Images should be rendered only in case of the user's requirement
- 3)Data type errors should be handled