

FRONTEND MODULE

Web Application

Languages used: HTML, CSS3, jQuery

Tools used: Visual Studio Code, Git, Microsoft Azure

Front-end web development, also known as client-side development is the practice of producing HTML, CSS and JavaScript for a website or Web Application so that a user can see and interact with them.

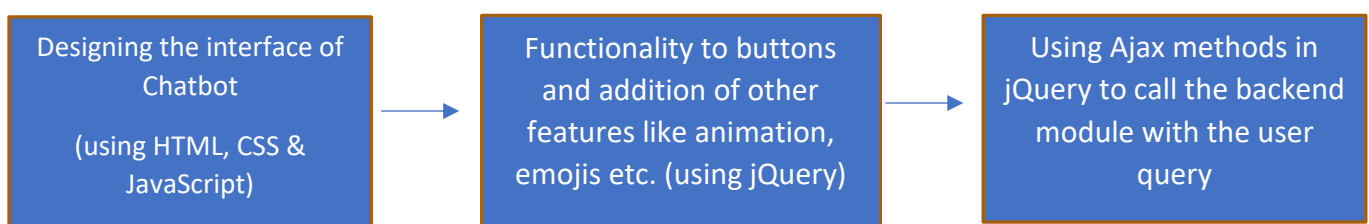
The objective of designing a web application is to ensure that when the users open up the site, they see the information in a format that is easy to read and relevant.

Structure of Web Application

It consists of 3 files-

- **HTML** – used for describing the structure of the chatbot and to display content
- **CSS3** – used for styling and enhancement of the design layout of the user interface
- **JavaScript** - jQuery has been used in backend to add functionality to buttons and addition of animation and other effects

Process Flow (Frontend module)



Android Application

Languages: Java, XML

Tools: Android Studio, Git

Android application for the chatbot is developed in Java and XML using Android Studio, which is the official IDE for Android development. This application is built to support minimum SDK version 21 i.e. it supports Android KitKat 4.0.0 and above. The objective for designing an android application for the chatbot is to provide the access of our chatbot to smartphone users.

The inputs to the chatbot are queries of the student which is passed on to the backend for processing and the answer to the query is displayed as the output.

Structure of Android Application

- **Java** – used to give functionality to buttons, accessing the backend through the API endpoints.
- **XML** – used to make the design layout of the application.
- **OkHttp3** – used okhttp client server to call the API endpoints.