

IT314

SOFTWARE ENGINEERING

Project: Health Center Management

Group: 12

Requirements not implemented

Local Language Support

Description: The application includes a non-functional requirement of providing local language support to the patients. The user of the application can choose option to use local language feature which then displays all the information in the app to the user in his language. Through this, users who are less educated can easily use the application.

Reason: Providing local language support requires the use of machine learning to automatically translate the real-time information that is provided through the app. A team of experts in multiple languages are required to make this translation accurate. Integrating with machine learning requires complex technology and a lot of training data which takes time to collect and process. Computation requirements will also increase very much.

Implementation of manager's side

Description: The application helps managers handle all their tasks, including scheduling visits and maintaining lab equipment data. It would allow them to send the medical reports such as prescriptions to the users. They can determine which doctor is available in which time slot and assign them appointments accordingly. It would help them to optimize allocation of resources such as laboratory equipment, rooms, etc.

Reason: The major objective of the application was to create an application for users so they would not have to manage all of their reports and appointments themselves. Therefore, we spent most of our work creating the application for patients and physicians. Also, it would be preferable to deliver the data to the manager of the hospital for which the application is being developed so they may manage it in accordance with their needs utilizing the data because we had already implemented the doctor's and user's sides of the app.

Payment Processing

Description: For Online appointments, the patients can pay the bill using the application. Multiple payments options like UPI and Net Banking, Debit and Credit card will be provided to the patient. The payment made by patient through the app will be directly deposited into the Hospital bank account.

Reason: Payment processing requires a payment gateway that needs to be integrated with the app which requires contacting banks and other payment brokers. There are no currently available free payment interface or libraries which can be used. It also requires setting up a separate bank account for the deposits. All of these is not possible to implement currently as it takes too much time and cost.

Real time guidance

Description: As per this functional requirement, the application will provide real-time guidance and suggestions which are suggested by the doctors. The User will get details about the diets that should be followed, physical exercise that needs to be done to maintain health. Patient medical history and reports will be monitored and insights are taken from these to give suggestions.

Reason: Currently there are no doctors available to simulate these tasks. Providing real-time guidance requires constant monitoring of the patient health by the doctors. We had created very few accounts for doctors which makes this task difficult. Giving updates about the patient's diet and health requires much more knowledge of his medical condition. Implementing this is merely impossible until and unless there are dedicated doctor accounts to do this which is currently unavailable.

Some of these may have been implemented if sufficient time is available. But according to current time and resources constraints, above functionalities are not implemented completely.