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Synopsis

On

“Vaarta: The multi-lingual messaging and media sharing application”

Mini Project

For Partial Fulfilment of

B-Tech in Computer Science and Engineering

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Abstract: -

Chatting applications are very popular among Internet users and Smartphone's owners. Hundred millions of smartphone owners use chat applications on monthly basis. These chat applications offer the communication free of charge and majority of them are free to install which makes it very appealing for the potential customers. We can use it every day for business, travel, and education. language converter provides many features like text and voice translation, voice recognition, detailed history for stored translations, he/she will see many options in from which the user selects the language according to his wish that which language is to we convert then the application will convert that language the user selects this is the basic function of our application. This chatting application offers many features like End-To-End Chatting ,Video and Voice Calling ,Search Users .Future Features Like Language Translation Both the Ends, Send Images/Videos/Documents etc.

1. Introduction:

Chatting applications have become indispensable tools in today's workforce. There are hundreds of chatting application in the market with different operating systems and capabilities. These chatting applications have the capability of installing applications on them in order to do many tasks, such as sending text messages. A language translator that translates any sentence or phrase or word into the targeted language converter application are most important in daily life especially when you travel foreign country. The basic means of communications for all humans or even computers is language which is very diverse. Therefore we use language translator in the form of software's or through professionals. When talking about translators the first software that strikes our mind is the "Google Translators". Our application will work like google translate, it will help people to understand other language.

1.1 Project statement

The Vaarta Chatting Application Users will register through Email And password and they will communicate with real time chatting video/voice calling. Application gives feature to chat with own mother language it gives seamless user experience.

1.2 Objective:

The main objective of the project on chatting application is to manage the details of online chat, real time message translates, chat history, chat profile, users. It manages all the information about online chat, emojis chat, users online. The project is totally built at administrative end and thus only the administrative is guaranteed the access. The purpose of the project is to build an application to reduce the manual work for managing the online chat, translating messages in many languages it tracks all the details about User's interaction

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1.3 Scope :

The scope of this project is to provide best user experience smooth and real time chat it may help collecting perfect management of user details It provides a general architecture for chat applications, and anyone or organization can use it as the basis for providing instant messaging capabilities. The application is written in an object-oriented language called Java. Clients need to install the app through play store. Only network access is needed for communicating with each other.

i- It will satisfy the user requirement.
ii- It will Be easy to understand by the user and operator.
iii- It will Be easy to operate.
iv- It will be Have a good user interface.
v- Will Be expandable.

2. Data Flow Diagram

A Data Flow Diagram (DFD) is a graphical representation of the “flow” of data through an Information System. A data flow diagram can also be used for the visualization of Data Processing. It is common practice for a designer to draw a context-level DFD first which shows the interaction between the system and outside entities. This context-level DFD is then “exploded” to show more detail of the system being modelled. A DFD represents flow of data through a system. Data flow diagrams are commonly used during problem analysis. It views a system as a function that transforms the input into desired output. A DFD shows movement of data through the different transformations or processes in the system. Dataflow diagrams can be used to provide the end user with a physical idea of where the data they input ultimately has an effect upon the structure of the whole system from order to dispatch to restock how any system is developed can be determined through a dataflow diagram. The appropriate register saved in database and maintained by appropriate authorities.

2.1 Data Flow Diagram (DFD):

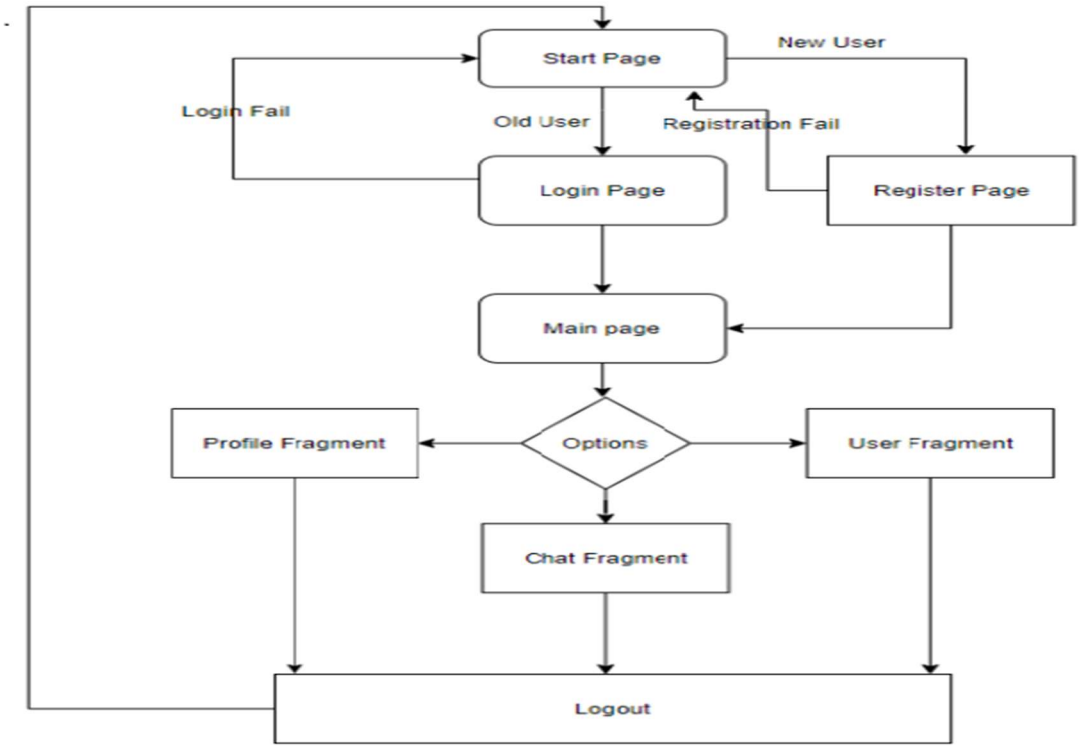

Fig 2.1 Level 1- Data Flow Diagram

2.2 Proposed System Architecture:

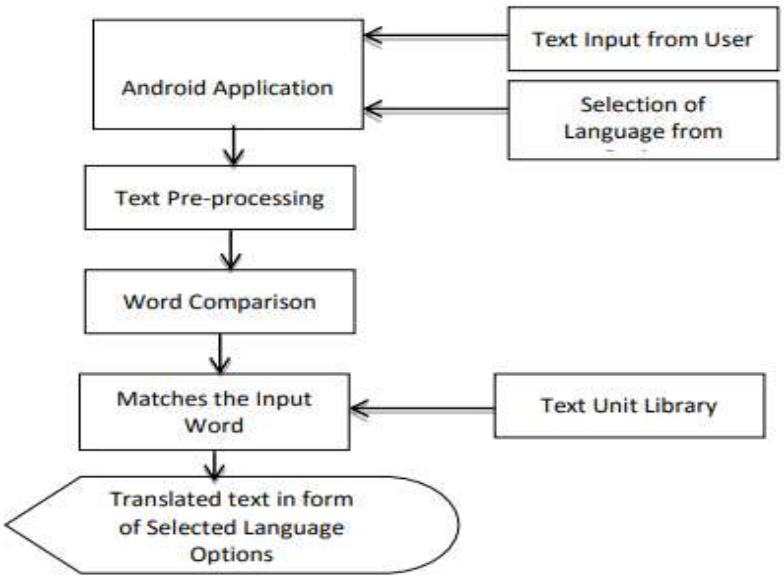

Fig 3.1 Proposed System Architecture

3. Tools, platforms / Hardware and Software Requirements

3.1 Operating System Required

1. Ubuntu 12.4 and above the supported Operating Systems For server include Linux. Linux is used as server operating system.
2. Window 7 and above Microsoft Windows is a series of graphical interface operating systems developed, marketed, and sold by Microsoft. Microsoft introduced an operating environment named Windows on November 20, 1985 as a graphical operating system shell for MS-DOS in response to the growing interest in graphical user interfaces (GUIs).
3. Android OS Android is a mobile operating system (OS) based on the Linux kernel and currently developed by Google. With a user interface based on direct manipulation, Android is designed primarily for touchscreen mobile devices such as smartphones and tablet computers, with specialized user interfaces for televisions (Android TV), cars (Android Auto), and wrist watches (Android Wear).

3.2 Language to be used

1. JAVA
2. XML

3.3 Software Interface Requirement

The software which is used to develop this application in Android studio because is best IDE which we can use for making android applications**.**

3.4 Security

This system is provided with authentication without no user can pass. So only the legitimate users are allowed to use the application. If the legitimate users share the authentication information, then system is open to outsiders.

3.5 Database Connectivity

The Firebase Realtime Database can be accessed directly from a mobile device or web browser; there's no need for an application server. Security and data validation are available through the Firebase Realtime Database Security Rules, expression-based rules that are executed when data is read or written.

5.Gantt Chart:

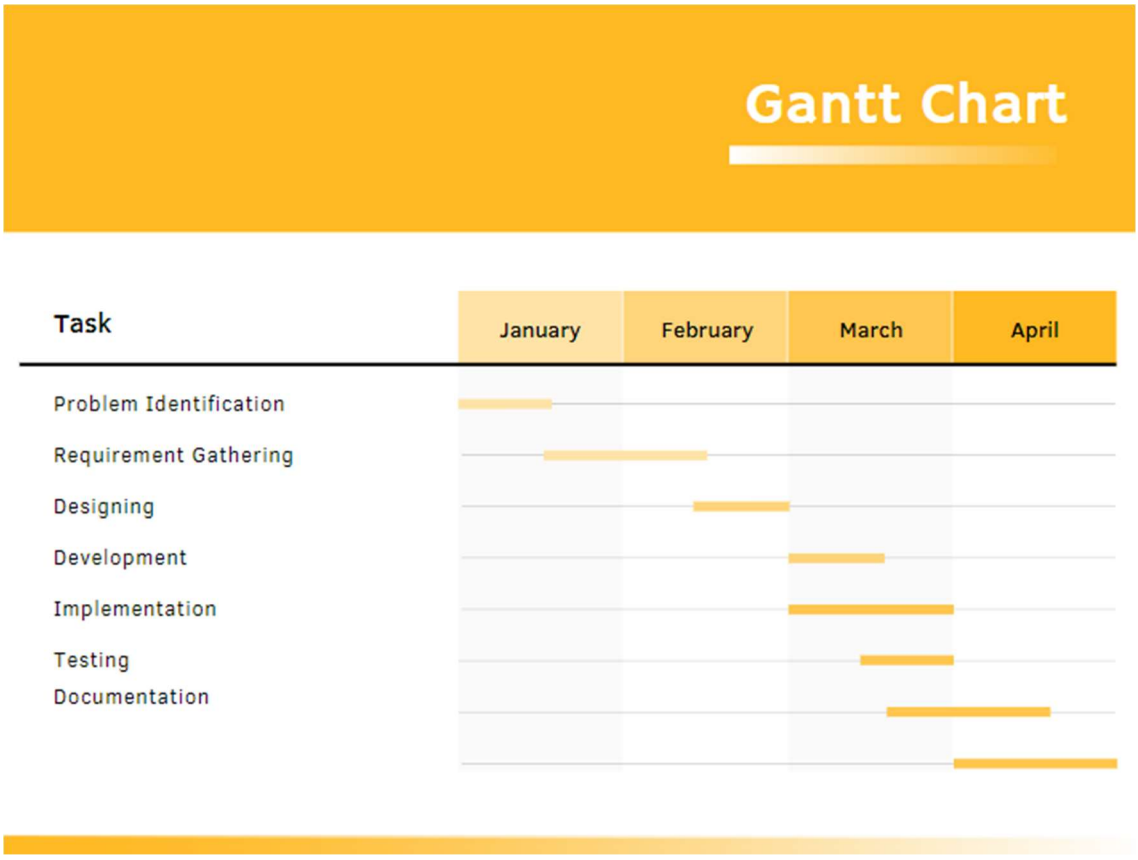

Fig.5.1 Gantt Chart

6. Roles and Responsibilities

1. Aman Raj Singh (Frontend Developer, Programing)
2. Prashant Kumar (Frontend Developer, Programming, Bug finder)
3. Varsha Shrotriya (Backend Developer, Database connectivity)

7. Conclusion:

The integration of chatting system for users operations will have a great potential to reducing operational errors, poor accessibility to record information, and poor security of data entry. Almost 90% published studies and reviews according to findings did not meet the rigorous quality standard thereby resulting in poorly generalized standards across all chatting system. The author did literature review based on articles, journals and the internet to gather facts about the current chatting system. Questionnaires and interviews were also used as important resources to obtain accurate information about the prevailing situation in the problem domain. This study is proven that the integration of the chatting system will help in reducing the insecurity in chatting system. The major problems with the current system have been analysed and examined and a solution proposed to address the issues through proper identification and evaluation of methods, tools, and techniques used to develop solution.