**SOFTWARE REQUIREMENT SPECIFICATION**

**STUDENT INFORMATION CHATBOT SYSTEM**

By

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1.Introducton

The objective Student Information Chat Bot System paves a way to introduce a system that makes its users to have their doubts by means of querying. This system uses the AI that allows the user to get solutions for their questions.

User interfaces for software applications can come in a variety of formats, ranging from command-line, graphical, web application, and even voice. While the most popular user interfaces include graphical and web-based applications, occasionally the need arises for an alternative interface. Whether due to multi-threaded complexity, concurrent connectivity, or details surrounding execution of the service, a chat bot based interface may suit the need.

Chat bots typically provide a text-based user interface, allowing the user to type commands and receive text as well as text to speech response. Chat bots are usually a stateful services, remembering previous commands (and perhaps even conversation) in order to provide functionality. When chat bot technology is integrated with popular web services it can be utilized securely by an even larger audience.

1.1 Purpose

Now days, many software based applications has been designed with a great user interfaces. These interfaces can be in various formats such as command line based interface, web based application, graphical based application, voice based interface. . This chat room will helpful for many areas such as business, colleges, schools, etc...This brings out the environment that paves a way for everyone in particular organization or any such thing to have their staffs digitally in single place. For instance, Manager will solve the problems regarding management by enquiring the issues through this chat bot surrounding. This reduces the travelling or visiting time, or any enquiry timings. Because bringing out all staffs in a specifically named area is difficult process, since not everyone may feel that it is convenient rime.

1.2 Scope

In the future enhancement of our project, we can include speech based questions and responses. The users just need to provide voice-based input and the developed bot will provide the text-based output and while giving it, it will provide a voice-based output as well.. These types of chat rooms will void the usage of menus in phones, delaying, and communication over mail etc. Chat bot acts as environment that allows to user to have their queries that may be regarding anything. This proposed system not uses any language specifically in order to interact with users.

1.3 Definition and Acronyms

Student Information Chat Bot System paves a way to introduce a system that makes its users to have their doubts by means of querying. This system uses the AI that allows the user to get solutions for their questions. The interfaces that based on Web and graphical are most widely using applications in this human environment. So the need for introduction of new interface has been aroused to act as alternative choice. Finally, an interface that based on chat rooms named chat bot has developed in order to provide connectivity concurrently, the complexity that depends on multi-threading, detailing executions of services around the environment.

Advantage of student information chat bot system is User does not have to go personally to college office for the enquiry. This application enables the students to be updated with college cultural activities.This application saves time for the student as well as teaching and non teaching staffs.

1.4 References

“Theories, methods and current research on emotions in library and information science, information retrieval and human computer interaction," Information Processing and Management. Automatic conversation system is an intelligent human machine interaction using natural language

1.5 Overview

Now days, many software based applications has been designed with a great user interfaces. These interfaces can be in various formats such as command line based interface, web based application, graphical based application, voice based interface. The interfaces that based on Web and graphical are most widely using applications in this human environment. So the need for introduction of new interface has been aroused to act as alternative choice. Finally, an interface that based on chat rooms named chat bot has developed in order to provide connectivity concurrently, the complexity that depends on multi-threading, detailing executions of services around the environment. This chat room will helpful for many areas such as business, colleges, schools, etc...This brings out the environment that paves a way for everyone in particular organization or any such thing to have their staffs digitally in single place.

For instance, Manager will solve the problems regarding management by enquiring the issues through this chat bot surrounding. This reduces the travelling or visiting time, or any enquiry timings. Because bringing out all staffs in a specifically named area is difficult process, since not everyone may feel that it is convenient rime. Chat bot acts as environment that allows to user to have their queries that may be regarding anything. This proposed system not uses any language specifically in order to interact with users.

2 overall descriptions

The chat bot system introduces the areas where the people will interact and get solutions. Having the environment that one paves a path to chat bot system users. That path may be based on querying and answering. Introduced chat bot system will provide an interface that depends on text. This allows the users to type the commands and receive the text. It also involves receiving end may be having response as text to the speech. It uses the stateful based services which could remember the commands that previously asked that may be conversation.

2.1 Product perspective

This System is a web application which provides answer to the query of the student. Students just have to query through the bot which is used for chatting. Students can chat using any format there is no specific format the user has to follow. The System uses built in artificial intelligence to answer the query.

2.1 Product Function

* This System is a web application which provides answer to the query of the student very effectively.
* Students just have to query through the bot which is used for chatting.
* Students can chat using any format, as there is no specific format that the user has to follow.
* The answers are appropriate what the user queries.
* If the answer found to be invalid, user just need to select the invalid answer button which will notify the admin about the incorrect answer.
* Admin can view invalid answer through portal via login
* System allows admin to delete the invalid answer or to add a specific answer of that equivalent question.
* The user does not have to personally go to the college for enquiry.
* The system analyzes the question and then answers to the user.
* The system replies using an effective Graphical user interface which implies that as if a real person is talking to the user.
* The user can query about the college related activities through online with the help of this web application.
* This system helps the student to be updated about the college activities.

2.3 User Characteristics

1. **Admin Login:**

User has to login to the system to access various helping pages through which user can ask queries to the system with the help of bot.

1. **Bot Chat:**

User can chat with the bot it implies as if enquiring to the college person about college related activities.

1. **Text to Speech:**

The bot also speaks out the answer.

2.4 constraints

One of the greatest disadvantages or constrain of chat bots is that they have been designed to handle first-level questions only. They may not be able to solve complex queries. You need to train them to converse with your customers in the right way. You also need to structure and optimize your knowledge base in a bot-friendly way.

2.5 Assumption and dependence

This System is a web application which provides answer to the query of the student. Students just have to query through the bot which is used for chatting. Students can chat using any format there is no specific format the user has to follow.. The answers are appropriate what the user queries. If the answer found to invalid, user just need to select the invalid answer button which will notify the admin about the incorrect answer.Admin can view invalid answer through portal via login.System allows admin to delete the invalid answer or to add a specific answer of that equivalent question.The User can query any college related activities through the system. The user does not have to personally go to the college for enquiry. The System analyzes the question and then answers to the user. The system answers to the query as if it is answered by the person. With the help of artificial intelligence, the system answers the query asked by the students. The system replies using an effective Graphical user interface which implies that as if a real person is talking to the user. The user can query about the college related activities through online with the help of this web application.This system helps the student to be updated about the college activities

3. Specific Requirements

**Software Requirements:**

* Windows 7 or higher
* MySql
* xamp Server

**Hardware Requirements:**

* Processor – i3
* Hard Disk – 5 GB
* Memory – 1GB RAM

4. Conclusion

The main objectives of the project were to develop an algorithm which will be wont to identify answers associated with user submitted questions. To develop a database were all the related data are going to be stored and to develop an internet interface. The web interface developed had two parts, one for easy users and one for the administrator. A background research happened, including an summary of the conversation procedure and any relevant chat bots available. A database system was designed, that stores information regarding questions, answers, keywords, logs and feedback messages.