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Chat Bot for University Exam

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Abstract: The project ChatBot for University Exam will be most effective solution for student to search their seating arrangement during university exam. This project is been developed for reducing the human efforts of searching seat every time. A ChatBot is a Computer Program which conducts a conversation via textual method. ChatBot are typically used in dialogue system for various practical purpose including service or information acquisition. Our project emphasize on the use of ChatBot for providing details of roll no. of university students and according to that roll no. allotted in the room. It keep track of students can't seat on same bench. We attempt an application by which we will get the information about the seating arrangement during university exam.

Keywords: Chatbot, query, university exam, seating arrangement.

1. Introduction:

Chatbot (Artificial Conversational Entity) is a computer program which conducts a conversation via auditory or textual methods. Such programs are often designed to convincingly simulate how a human would behave as a conversational partner, thereby passing the Turing test. Chatbots are typically used in dialog systems for various practical purposes including customer service or information acquisition. Some chatterbots use sophisticated natural language processing systems, but many simplersystems scan for keywords within the input, then pull a reply with the most matching keywords, or the most similar wording pattern, from a database.
The term "ChatterBot" was originally coined by Michael Mauldin (creator of the first Verbot, Julia) in 1994 to describe these conversational programs. Today, chatbots are part of virtual assistants such as Google Assistant, and are accessed via many organizations' apps, websites, and on instant messaging platforms. Non-assistant applications include chatbots used for entertainment purposes, for research, and social bots which promote a particular product, candidate, or issue.

2. Software/Hardware Requirement:-

Hardware requirements:

a. Window based system with at least4GB of RAM.
b. Hard disk with at least 2GB of storage.
c. Android phone for testing and debugging the application.

Software requirements:

a. Android Studio with version more than 4.1.
b. Firebase Database APIs for database connectivity.
c. Text Editor.

Communication Interface:

The application shall communicate with the Firebase Database and its software services via API functions call. Because the application is written in JAVA, java function will make this call to the APIs.

Software System Attributes:

Security: Only authorized users will be able to access the application by entering the correct login name and corresponding password.

Maintainability: The application can be maintained in present or future. It will be easy to incorporate new requirements in the individual modules.

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3. Methodology:

Software engineering is the discipline whose aim is:

1. Production
2. Software that is delivered on time
3. Cost within the budget
4. Satisfies all requirements.

Software process is the way in which we produce the software. Apart from hiring smart, knowledgeable engineers and buying the latest development tools, effective software development process is also needed, so that engineers can systematically use the best technical and managerial practices to successfully complete their projects. A software life cycle is the series of identifiable stages that a software product undergoes during its lifetime. A software lifecycle model is a descriptive and diagrammatic representation of the software life cycle. A life cycle model represents all the activities required to make a software product transmit through its lifecycle phases. It also captures the order in which these activities are to be taken.

Life Cycle Models. There are various life cycle models to improve the software processes.

- AGILE MODEL
- PROTOTYPE MODEL
- ITERATIVE ENHANCEMENT MODEL
- EVOLUTIONARY MODEL
- SPIRAL MODEL

In the project, Agile model is followed

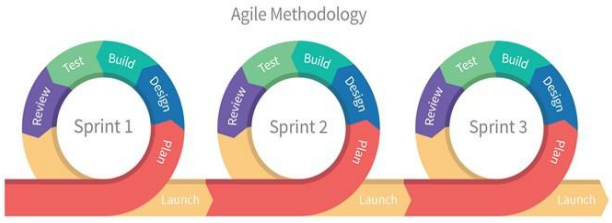

Fig. Traditional Method

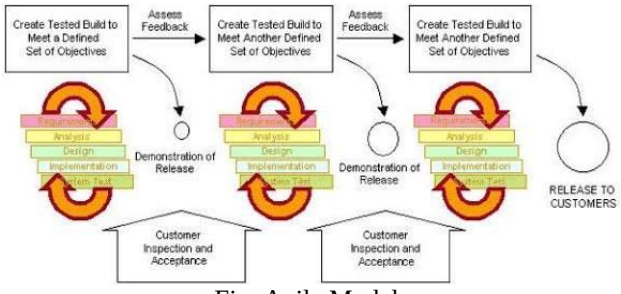

Fig. Agile Model

Agile Model:

Agile is a software development methodology to build a software incrementally using short iterations of 1 to 4 weeks so that the development process is aligned With the changing business needs. Instead of a single-pass development of 6 to 18 months where all the requirements and risks are predicted upfront, Agile adopts a process of frequent feedback where a workable product is delivered after 1 to 4 week iteration.

Proposed Work: In our application we are giving the information of seating arrangement to students which consume the waste of time. Any new user want to use the app will have to register first with username and password. Then only user allowed to logged in and use the application. Only authorised user are allowed. When user get registered in the system the unique id generated for the particular user which is referred only by admin. After get registered, user will logged in and start chatting to get information about their seating arrangement by going for the help. The system gives correct result by fetching the word from the query given by user and the related queries stored in the database.

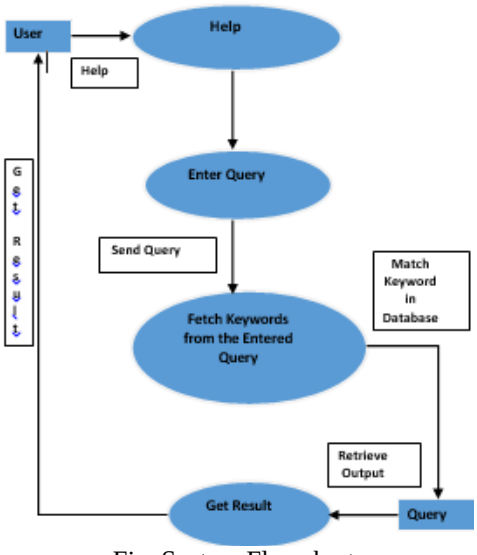

Fig. System Flowchart

System Design

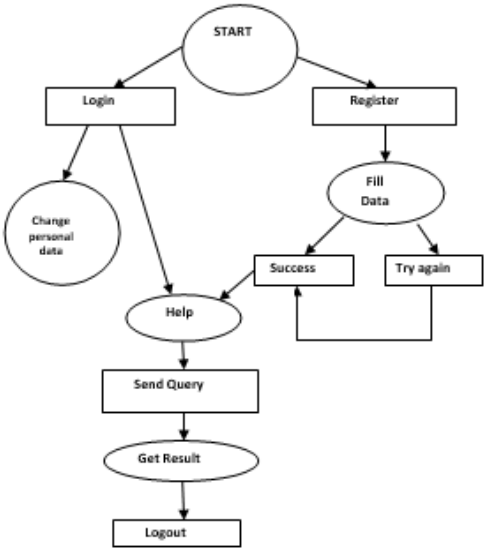

Fig. Android Specification

This is the overall design of application which shows the how step by step procedure takes place.

4. Result:

- The application will help the college students to find their seating arrangement easily with chatbot.
- As user need to register first only authorized person can access the data.
- The colleges will register themselves to provide this facility to their students.
- The student can login through USERNSME and PASSWORD and give their queries on database.
- Administrator will be responsible for updating the app.

5. Conclusion:

- Chatbots are effective tools when it comes to education, IR, e-commerce, etc.
- Downside includes malicious users as in yahoo messenger.
- The aim of Chatbot designers should be: to build tools that help people, facilitate their work, and their interaction with computers using natural language; but not to replace the human role totally, or imitate human conversation perfectly.

References:

[1]. Head First Android Development: ISBN-9781449362157 By- Anthony J.F Griffiths
[2]. Google Android Firebase :Learning the Basics ISBN-9781365223075 By-Stohem
[3]. Firebase Tutorial Google Documents.
[4]. D.E. Post, "The Changing Face of Scientific and Engineering Computing", Computing in Science & Eng., vol. 15, no. 6, pp. 4-6, 2013. Show Context View Article Full Text: PDF (339KB)
[5]. D. Heaton, J.C. Carver, "Claims about the Use of Software Engineering Practices in Science: A Systematic Literature Review", Information and Software Technology, vol. 67, pp. 207-219, 2015. Show Context CrossRef Google Scholar
[6]. P. Prabhu et al., "A Survey of the Practice of Computational Science", Proc. Int'l Conf. High Performance Computing Networking Storage and Analysis (SC 11), pp. 19:1, 2011. Show Context Access at ACM
[7]. J.E. Hannay et al., "How Do Scientists Develop and Use Scientific Software?", Proc. Workshop Software Eng. for Computational Science and Eng. (SECSE 09), pp. 1-8, 2009. Show Context View Article Full Text: PDF (126KB)
[8]. S. Faulk et al., "Scientific Computing's Productivity Gridlock: How Software Engineering Can Help", Computing in Science & Eng., vol. 11, pp. 30-39, 2009. Show Context View Article Full Text: PDF (25446KB)
[9]. P.E. Ceruzzi, A History of Modern Computing, MIT Press, 2003. Show Context
[10]. A. Newell, A. Perlis, H. Simon, "Letter to the Editor", Science, vol. 157, pp. 1373-1374, 1967. Show Context CrossRef Google Scholar