**FACEBOOK BOT [PERSONAL ASSISTANCE]**

**A PROJECT REPORT**

***Submitted by***

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***in partial fulfillment for the award of the degree***

***of***

**BACHELOR OF ENGINEERING**

**IN**

**COMPUTER SCIENCE AND ENGINEERING**

**KGiSL INSTITUTE OF TECHNOLOGY**

**ANNA UNIVERSITY :: CHENNAI 600025**

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**BONAFIDE CERTIFICATE**

Certified that this project report “**STOCKPILE PROCUREMENT SYSTEM**” is the bonafide work of “**R.S.AKILANDEESWARI, N.BHARATHI, .K.KAVYA**” who carried out the project work under my supervision.

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**ABSTRACT**

Facebook bot is a Chat bot used in Facebook . A chatter robot is a type of conversational agent, a computer program designed to simulate an intelligent conversation with one or more human users via auditory or textual methods.

There are two main types of chatbots, one functions based on a set of rules, and the other more advanced version uses [artificial intelligence](https://en.wikipedia.org/wiki/Artificial_intelligence). The chatbots based on rules, tend to be limited in functionality, and are as smart as they are programmed to be. On the other end, chatbots that use artificial intelligence, [understands language](https://en.wikipedia.org/wiki/Natural_language_understanding), not just commands, and continuously gets smarter as it learns from conversations it has with people.

Here we use the latter which uses artificial intelligence.We use IBM bluemix conversation API which is used to train the bot i.e uploading set of corresponding responses to the user input.The Facebook UI is used as our front end.The connectivity between the front end and the back end (i.e IBM Watson conversation) is done with the help of a nodejs programming.Heroku server is hosted as our main server.

**INTRODUCTION**

**CHAPTER 1**

**INTRODUCTION**

**1.1 Project Definition:**

This Project is entitled Facebook Bot as the main purpose of our project is to provide the Facebook users with a chatter bot which responds as a human partner. The user can log into his/her Facebook account, open the chat window and choose the name Jarvis to chat with our chatterbot.

**1.2 Outline of the Project:**

This Project is developed by using Facebook messenger as the front end, IBM Watson conversation as the back end nodejs as the main scripting language.

The main objective of our project is to provide an artificial intelligent robot for chatting service to all the facebook users.The voice chat is an integrated feature in our project.

**1.3 Module description:**

After careful analysis, the system has been split up into the following modules:

1.Bot Training.

2.Connection Establishment.

1.3.1 Bot Training module:

This module deals with the training of the chatter bot with various user inputs and corresponding responses that the bot must give to the user.It is tedious job to develop an artificial intelligence from the scratch so, we use an already exsisting AI framework called IBM Watson conversations.This framework enables us to train the bot with text messages.

1.3.2 Connection Establishment module:

This module deals with the connection establishment between the facebook server and the IBM Watson.We use Heroku server to host our project main.Nodejs is the scripting language used to program the server connectivity.

**1.4 Significance of the project:**

The significance of the project is that it provides chat services both in textual form and voice form.The already existing chatbots either support text messages or voice message.We have programmed or bot is such a way that it accepts both text inputs and voice inputs and replies in text form.

**SYSTEM ANALYSIS**

**CHAPTER 2**

**SYSTEM ANALYSIS**

System analysis is a problem solving technique that decomposes a system into component pieces of purpose of studying how well those component parts work and interact to accomplish their purpose the following chapter provides the detail description of the existing system. It also provides an overview of the proposed system and feasibility of the Digital Portfolio.

**2.1 EXISTING SYSTEM**

There are some already existing chat bots like,

* Natasha – hike messenger – Text messages only
* Siri – IoS – Voice recognization
* Program O – Web bot – Text messages only
* Allo – Google – Voice recognization

**2.2 PROPOSED SYSTEM**

Our proposed system has serveral other features included in it, which makes the system an efficient,stand-alone and an integrated system of several independent features.

**Advantages:**

1.Already existing AI framework is used here, thus the reliability of the AI framework is high.

2.No special UI design is needed. Facebook UI API is used.

3.There is no need for separate database management because IBM Watson has its own knowledge base.

4.Both text and voice inputs are accepted.

**2.3 FEASIBILITY STUDY**

Feasibility study is a high level capsule version of the entire process intended to answer a number of questions like: What is the problem? Is there any feasible solution to the given problem? Is the problem even worth solving? Feasibility study is conducted once the problem clearly understood. Feasibility study is necessary to determine that the proposed system is feasible by considering the technical, operational, and economical factors. By having a detailed feasibility study the management will have a clear-cut view of the proposed system.

The following feasibilities are considered for the project in order to ensure that the project is variable and it does not have any major obstructions. Feasibility study encompasses the following things

* Technical Feasibility
* Economical Feasibility
* Operational feasibility

In this phase, we study the feasibility of all proposed systems, and pick the best feasible solution for the problem. The feasibility is studied based on three main factors as follows.

**2.3.1 Economical Feasibility**

In this step, we verify which proposal is more economical. We compare the financial benefits of the new system with the investment. The new system is economically feasible only when the financial benefits are more than the investments an expenditure. Economical Feasibility determines whether the project goal can be within the resource limits allocated to it or not. It must determine whether it is worthwhile to process with the entire project or whether the benefits obtained from the new system are not worth the costs. Financial benefits must be equal or exceed the costs. In this issue, we should consider,

* The cost to conduct a full system investigation.
* The cost of h/w and s/w for the class of application being considered.
* The development tool.
* The cost of maintenance etc.,

Our project is economically feasible because the cost of development is very minimal when compared to financial benefits of the application.

**2.3.2 Operation Feasibility**

In this step, we verify different operational factors of the proposed systems like man-power, time etc., whichever solution uses less operational resources, is the best operationally feasible solution. The solution should also be operationally satisfied user objectives could be fitted into the current system operation.

* The methods of processing and presentation are completely accepted but the clients since they can meet all user requirements.
* The clients have been involved in the planning and development of the system.
* The proposed system will not cause any problem under any circumstances.

Our project is operationally feasible because the requirements and personnel requirements are satisfied. We are a team of 4 members and we worked on this project for three working months.

**2.3.3 Technical feasibility**

In this step, we verify whether the proposed systems are technically feasible or not, ie., all the technologies required to develop the system are available readily or not.

Technical Feasibility determines whether the organization has the technology and skills necessary to carry out the project and how this should be obtained. The system can be feasible because of the following grounds.

* All necessary technology exists to develop the system.
* This system is too flexible and it can be expanded further.
* This system can give guarantees of accuracy, ease of use, reliability and the data security.
* This system can give instant response to inquire.

Our project is technically feasible because, all the technology needed for our project is readily available.