



**ARTIFICIAL INTELLIGENCE PROJECT**

**REPORT FILE**

**TITLE: - CHATBOT FOR ADMISSIONS**

**SECTION: - K18BY      GROUP: - 01**

**SUBMITTED TO: - ISHATPREET KAUR**

**SUBMITTED BY**

NAME	ROLL NO	REGISTRATION NO
1. AYUSHI SINGH	17	11806775
2. AMAN PAINKRA	18	11803157
3. VASA ARAVIND	19	11802931
4. ALLA GOKUL SAI KUMAR REDDY	20	11802934

## **Abstract**

A chatterbot or Chatbot aims to make a conversation between both human and machine. The machine has been embedded knowledge to identify the sentences and making a decision itself as response to answer a question. The response principle is matching the input sentence from user .The present technical project consist of developing an expert System for college enquiry desk using an android based Chabot, through Artificial Intelligence technology and virtual assistance (Human-machine conversation),transmitting natural language to a server.

## **Acknowledgment**

I would like to express my profound grateful to prof ISHATPREET KAUR ma'am or providing an opportunity to complete my academics .I would like to show my greatest appreciation to my teacher Ishatpreet kaur to support for the completion of project.I can't say thank you enough for the tremendous support and help of the all the members. The guidance and support received from all the members who contributed and who are contributing to this report, was vital for the success of the project. I am grateful for their constant support and help. The project on Online Chatting System (For admissions) for College Enquiry using Knowledgeable Database was very helpful to us in giving the necessary background information and inspiration in choosing this topic for the project.

# **CONTENTS**

## **1.INTRODUCTION**

1.1 Project Idea

## **2.PROBLEM DEFINITION AND SCOPE**

2.1 Problem Statement.

2.2 Goals and objectives.

2.3 Statement of scope.

## **3. TECHNICAL KEYWORDS**

3.1Area of Project.

3.2 Technical Keywords.

## **4.OUTCOMES**

4.1 code & output

## **5.APPLICATIONS**

## **6.PROJECT DESIGN**

6.1 Data flow diagram

## **7.CONCLUSION**

7.1 Conclusion .

## **1.INTRODUCTION:-**

A chatbot is a program that communicates with you.

It is a layer on top of, or a gateway to, a service. Sometimes it is powered by machine learning (the chatbot gets smarter the more you interact with it). Or, more commonly, it is driven using intelligent rules (i.e. if the person says this, respond with that).

The services a chatbot can deliver are diverse. Important life-saving health messages, to check the weather forecast or to purchase a new pair of shoes, and anything else in between.

The term chatbot is synonymous with text conversation but is growing quickly through voice communication... “Alexa, what time is it?” (other voice-chatbots are available!)

The chatbot can talk to you through different channels; such as Facebook Messenger, Siri, WeChat, Telegram, SMS, Slack, Skype and many others.

Consumers spend lots of time using messaging applications (more than they spend on social media). Therefore, messaging applications are currently the most popular way companies deliver chatbot experiences to consumers.

Artificial Intelligence chatbots use deep learning algorithms to improve the quality and relevance of their output. Instead of scripted responses based on specific text input, they detect users’ intent. All of the example AI chatbots mentioned below have evolved for many years and are new incarnations of mature AI bot projects.

### **Chat bot ideas**

Job candidate hunting **chatbot** that helps you to find and manager candidates using multiple data sources and a **chat** platform. Job advertisement performance monitoring and alerting with graphics. Claim your money back **bot**. Make your expense report easy.

AI chat bot examples:

- Mitsuku
- Rose
- Visual Chatbot
- Cleverbot

Customer service chat bot:

- Order a Phone Call Chatbot
- Domino’s Chatbot

## **2.PROBLEM DEFINITION AND SCOPE**

### **Problem statement:**

Artificial intelligence chatbot is a technology that makes interactions between man and machines using natural language possible. ... Chatbot can give different responses from the same input given by user according to current conversation issue.

Chatbots on messenger platforms are still relatively new, and there are still things that are hindering chatbots from reaching mainstream user adoption. Below are 3 major problems with chatbots and chatbot development.

### **1. Discovering bots is still an issue for potential users**

Most people using messaging platforms such as facebook messenger are still not aware that chatbots exist. The discovery of chatbots on many messaging platforms is still very limited at the moment. Without massive marketing efforts, it is very difficult for bot developers to get in front of massive audiences on messaging platforms, which can be quite frustrating for developers.

### **2. No established business models**

A monetisation strategy for developers who create chatbots for messenger currently does not exist. In other words, chatbot developers have no way to make money from their chatbots, unless they develop these bots for a third party. That is not to say that one of the major platforms will not deploy a compelling monetisation method in the coming years. Perhaps in a few years users will have to pay a small fee to use the best Facebook messenger chatbots.

### **3. Most chatbots aren't that great at having normal conversations**

The relatively low barrier to entry for chatbot makers, means a lot of chatbots have been published since messenger had announced that it was allowing chatbots on its messenger platform. This has caused an influx of bots in a relatively short amount of time, with a lot of these bots being subpar or not of the highest quality. A lot of the chatbots on messenger are frustrating to use and not helpful at all. Kursweil (a Google engineer) claims that chatbots will be able to have human level language abilities by 2029.

## 2.1 Goals and objectives.

A chatbot can communicate with a real person behaving like a human.

Let's list down objectives and purpose of chatbots.

You can create chatbots for any business the same as you recruit a person for any department of your company. Whether you are a:

- Wedding Planner
- Insurance Assistant
- **Education Consultant**
- Legal Assistant
- A real estate business
- Recruiter
- Travel Agency
- Hospital or a Beautician

### **Purpose: -**

- Chatbots are mainly used to provide customer support.
  - It helps in catering a huge amount of target audience at the same time 24/7
  - Can Schedule meetings, Broadcast newsletters, auto-sequences
  - Acquires lead from comments
  - Create conversational forms and saving all the data on spreadsheets
  - Chatbots are very intelligent. You train them once and they will communicate with your target audience in their language.
- Multilingual chatbots have saved you from investing much on hiring different languages resources.

## **2.2 Scope of chatbot:**

Artificial intelligence, programming languages, databases, and APIs are rapidly evolving and we can see their direct impact on chatbots.

### **❖ Chatbots are replacing apps**

- The world has seen almost 6.5 million apps developed. It has been identified that 23% of the users uninstall the apps after a few weeks of use.
- Enterprises are losing a lot of business this way. Chatbots come across as a potential way to engage with the audience then. A messaging app brings along a chatbot that is easy to download and users get engaged with the campaigns quickly.

### **❖ Emotional processing**

- Advanced chatbots are just a fine line away from being capable of offering the human-level conversation. They have already won over the natural language processing territory and next in scope is NLU and NLG.
- NLU stands for Natural Language Understanding, although a subset of NLP, a lot of focus is on making the chatbot capable of understanding even the unstructured input.
- NLG comes into a picture while the chatbot tries to generate a response to the query. It is getting more efficient day by day and the next scope is multilinguistic responses.

### **❖ Voice bots**

- Chatbots have received a lot of criticism from a section of developers who believe why to have a user interface. They prefer voice over taps.
- The development of smart speakers has been a step into this territory.

### **❖ Customer insight analysis**

- A massive amount of data is available online. Enterprises do not know what to derive out of this data and they do not even have so much of the workforce.



- Customized chatbots are being developed to make sense out of all the data available and do the predictive analysis on customer behavior as per the data insight.

#### ❖ **Healthcare**

- Many times patients need a quick piece of advice. They would not wish to take the pain of taking an appointment and wait for days to get in touch with the healthcare professional.
- Chatbots could make things easier. Personalized chatbots would have the patient history stored and would understand the queries of the patient. The queries would be answered as per the history and current situation.

### **3. TECHNICAL KEYWORDS:**

#### **Artificial intelligence (AI)**

Artificial intelligence, or AI, is an all-encompassing field. It is a huge topic, one I couldn't dream of covering in this article. To keep this approachable by non-geeks, I'll keep it simple.

#### **Autoresponder**

An autoresponder is a message that is automatically triggered when a user sends their first message, or specific keyword, to the bot.

#### **Broadcast**

A broadcast is a message sent to your entire list of chatbot users.

If you have used any email marketing provider before, you have most likely already broadcasted an email. The same principals apply to your chatbot. Through using a messaging platform like ubisend, you can draft and broadcast a list-wide message across multiple channels.

#### **Conversational UI**

Conversational UI, which stands for user interface, is everything surrounding words. It's the design of the chat interface, the buttons, the widget, the images, the message templates.

#### **Conversational UX**

Conversational UX, which stands for user experience, refers to the experience of interacting with the bot. The jury is still out on whether this includes visuals (buttons, images, etc.) or not. If so, this would mean conversation UI is a sub-set of conversational UX.

### **3.1 Area of Project.**

#### **➤ Chatbots in Education Industry**

Chatbots can offer a huge value here. The chatbots that help the students during the admission processes can further be used to provide them all the necessary information about their courses, its modules, and faculties. The bots can also act as campus guides and help the students as they arrive at the campus.

#### **Chatbots In Education: Applications Of Chatbot Technologies**

##### **◆ Cooperation Between Schools And Corporations**

##### **❖ Essay Scoring**

Educators often use the multiple-choice tests to make their job easier. Essays offer much better insight into a student's level of knowledge, methodology, and problem-solving skill, but they are much harder to grade and assess. In the future, educational chatbots will have essay scoring functionality.

##### **❖ Spaced Interval Learning**

This learning concept involves repeating the old lessons, just before you forget them. The spaced interval learning was used as a basis for developing an app that helps people to track the learning process and reminds them to repeat the lessons they are about to forget and promoted by the SuperMemo company.

##### **❖ Student Feedback And Professor Assessment**

In modern educational institutions, student feedback is the most important factor for assessing a teacher's work. Most schools and universities have upgraded their feedback collection process by shifting from print to online forms. They can make it even more efficient by using chatbots for this task. While chatting with bots, students will have the chance to explain their claims. On the other hand, the bot can be trained to ask additional questions based on their previous answers.

**3.2 Technical idea CHATBOTS IN EDUCATION:** - The authors believe that education is a very important field of application for chatbots. Nowadays, students receive a significant part of their information about studies, curriculum and tasks online. Chat programs therefore provide significant help in learning and learning processes, for example, NerdyBot.

## 4.OUTCOMES

### Chatbots Improve Customer Service

Chatbots can open support tickets, answer questions, collect feedback, and point customers toward helpful resources quickly and efficiently. Bots are only as good as their programming but good bot interactions escalate to human agents if they get stuck in conversations.

Chatbots are very beneficial for the purpose of education and all other related domain which gives the freedom to the all perspective for admission related enquiries which help the customer to better understanding without reaching to the university or colleges for admission.it makes ease to customer and save the time for business man to approach physical to the university for futher enquiry.

#### 1. Chatbots Help Engage Customers

- From the moment someone visits your site, logs onto your app, or connects with your social media page, a chatbot can be there to start the conversation.
- Chatbots can guide customers where they need to go, based on feedback, browsing history, and other personalized variables.
- Available 24/7 and across a variety of platforms, consumers can connect with your brand whenever they want, using the messaging channels they already know and use.

#### 2. Chatbots Improve Customer Service

- 95% of consumers believe customer service is going to be the major beneficiary of chatbots<sup>2</sup>.
  - Chatbots can open support tickets, answer questions, collect feedback, and point customers toward helpful resources quickly and efficiently.
  - Bots are only as good as their programming but good bot interactions escalate to human agents if they get stuck in conversation.
- Chatbots are predicted to handle 85% of customer service interactions by 2020.
- Setting up a chatbot platform is a cost-effective way to relieve human agents of simple, repetitive tasks, and increase efficiency.

#### 3. Chatbots Increase Conversions

- Chatbots can monitor conversations in real-time and analyze the available data to suggest products to human agents. 47% of customers would buy items suggested from a chatbot<sup>4</sup>.
- Set rules for your chatbot to recognize keywords such as “buy” or “purchaase” to prioritize customers who may need help with a transaction.
- Chatbots can present dates and times for customers to schedule appointments and reservations that customers can book with a tap of a button.

#### 4.1 CODE:

```
*****// CHATBOT FOR ADMISSIONS CELL//*****  
  
/*  
  
from chatterbot import ChatBot  
from chatterbot.trainers import ListTrainer  
from tkinter import *  
import pyttsx3 as pp  
import speech_recognition as s  
import threading  
  
engine = pp.init()  
  
voices = engine.getProperty('voices')  
print(voices)  
  
engine.setProperty('voice', voices[0].id)  
  
def speak(word):  
    engine.say(word)  
    engine.runAndWait()  
  
# pyttsx3  
bot = ChatBot("My Bot")  
  
convo = [
```

**'hello',**

**'Hi there,How are you?'**,

**'i am fine',**

**'ok thats great',**

**'I want to know about Admissions in LPU',**

**'Ok, I will tell you everything what you want to know',**

**'what are the placement record of LPU',**

**'From Google to Microsoft, LPU Students are working with top brands at packages of over Rs. 1 Crore',**

**'what are LPUs ranking in india',**

**'LPU is ranked No. 2 in Management (Outreach and Inclusivity) by NIRF 2018 ranking released by MHRD, Government of India',**

**'OK',**

**'In which course you want to enroll',**

**'Btech CSE,what are special skills given to LPU students',**

**'Industry professionals mentor the students on niche technologies like Google, SAP, Oracle which provides an edge to the skill set that attracts a lot of placement opportunities for them.',**

**'Thank u',**

**'your welcome have a good day '**

**]**

**trainer = ListTrainer(bot)**

**# now training the bot with the help of trainer**

**trainer.train(convo)**

**main = Tk()**

```
main.geometry("500x625")
```

```
main.title("ADMISSION CELL CHATBOT")
```

```
img = PhotoImage(file="bot1.png")
```

```
photoL = Label(main, image=img)
```

```
photoL.pack(pady=5)
```

```
# takey query : it takes audio as input from user and convert it to string..
```

```
def takeQuery():
```

```
    sr = s.Recognizer()
```

```
    sr.pause_threshold = 1
```

```
    print("your bot is listening try to speak")
```

```
    with s.Microphone() as m:
```

```
        try:
```

```
            audio = sr.listen(m)
```

```
            query = sr.recognize_google(audio, language='eng-in')
```

```
            print(query)
```

```
            textF.delete(0, END)
```

```
            textF.insert(0, query)
```

```
            ask_from_bot()
```

```
        except Exception as e:
```

```
            print(e)
```

```
            print("not recognized")
```

```
        def ask_from_bot():
```

```
query = textF.get()
answer_from_bot = bot.get_response(query)
msgs.insert(END, "you : " + query)
print(type(answer_from_bot))
msgs.insert(END, "bot : " + str(answer_from_bot))
speak(answer_from_bot)
textF.delete(0, END)
msgs.yview(END)
```

```
frame = Frame(main)
```

```
sc = Scrollbar(frame)
```

```
msgs = Listbox(frame, width=80, height=20, yscrollcommand=sc.set)
```

```
sc.pack(side=RIGHT, fill=Y)
```

```
msgs.pack(side=LEFT, fill=BOTH, pady=10)
```

```
frame.pack()
```

```
# creating text field
```

```
textF = Entry(main, font=("Verdana", 20))
```

```
textF.pack(fill=X, pady=10)
```

```
btn = Button(main, text="Ask from bot", font=("Verdana", 20), command=ask_from_bot)
```

```
btn.pack()
```

**# creating a function**

**def enter\_function(event):**

**btn.invoke()**

**# going to bind main window with enter key...**

**main.bind('<Return>', enter\_function)**

**def repeatL():**

**while True:**

**takeQuery()**

**t = threading.Thread(target=repeatL)**



**t.start()**

**main.mainloop()**

**\*/**



## OUTPUT



you : hello

bot : Hi there,How are you?

you : i am fine

bot : ok thats great

you : I want to know about Admissions in LPU

bot : Ok, I will tell you everything what you want to know

you : what are the placement record of LPU

bot : From Google to Microsoft, LPU Students are working with top brands at packages of o

you : what are LPUs ranking in india

bot : LPU is ranked No. 2 in Management (Outreach and Inclusivity) by NIRF 2018 ranking re

you : ok

bot : In which course you want to enroll

you : Btech CSE,what are special skills given to LPU students

bot : Industry professionals mentor the students on niche technologies like Google, SAP, Or

you : Btech CSE,what are special skills given to LPU students

bot : Industry professionals mentor the students on niche technologies like Google, SAP, Or

you : thank u

bot : I want to know about Admissions in LPU

you : ok

bot : In which course you want to enroll

Ask from bot

## 5.APPLICATIONS:

some of the ways chatbots and AI are influencing the education sector today.

- Learning through **chatbots**. ...
- Better student engagement. ...
- Efficient **teaching** assistants. ...
- Instant assistance to students. ...
- Solid student support. ...
- Easy accessibility to institutional information.

Chatbot applications in education is an excellent way to transform the way institutions interact with students today. In fact, it is now further easier for students to explore more about their options and things they can do at school.

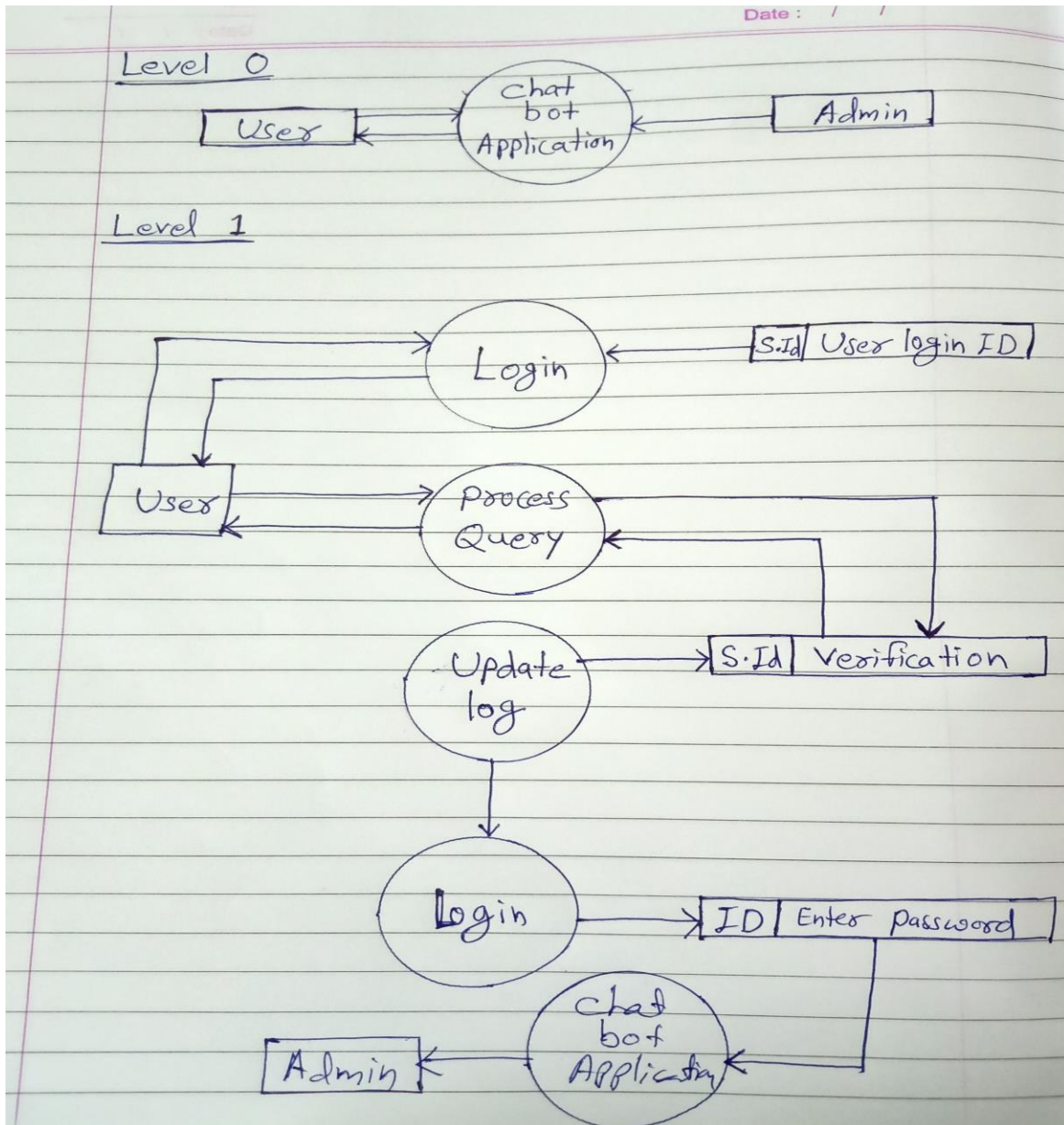
The increasing use of technology in everyday life is changing the way students learn and absorb information. Artificial intelligence is letting educators provide a personalized learning environment to the students.

Technology advancements have made systems that automatically detect whether the students are able to understand the study material or not.

Chatbots and other artificially intelligent tools improve student interactions and are acting as a game-changer in the innovative education-technology world.

## 6.PROJECT DESIGN:

### 6.1 Data flow diagram(DFD)



## **7.CONCLUSION:**

Artificial Intelligent is the fastest growing technology every were in the word. With the help of Artificial Intelligent and Knowledgeable database. we can make the transformation in the pattern matching and virtual assistance. This system is developing chat bot based on android system so with the combination of Artificial Intelligent Knowledgeable database and virtual assistance. we can developed such chat bot which will make a conversion between human and machine and will satisfy the question raised by user.

In the fast-growing world of AI, consumers are getting technological help in all facets of their lives. The internet provides various ways to get information and has radically changed the way we communicate.

Innovation has enhanced our lives with more opportunities, and everything is quite simple for us. Everybody likes to collaborate and expect quick answers without much delay. You can use online networking platforms or websites regularly for various reasons to connect with others.

A chatbot is a program or service that easily connects with you to help solve your queries. The services that a chatbot can deliver are quite diverse, from providing important life-saving health messages to checking the weather forecast to purchasing a new pair of shoes. While interacting with a chatbot, you should feel as if you are talking with a real person.

From my perspective, chatbots or smart assistants with artificial intelligence are dramatically changing businesses. There is a wide range of chatbot building platforms that are available for various enterprises, such as e-commerce, retail, banking, leisure, travel, healthcare, and so on.

Chatbots can reach out to a large audience on messaging apps and be more effective than humans. They may develop into a capable information-gathering tool in the near future.