



**VIT<sup>®</sup>**

**Vellore Institute of Technology**  
(Deemed to be University under section 3 of UGC Act, 1956)

# **CHATBOTS ON THE CLOUD: TRENDS AND OPPORTUNITIES**

## **A PROJECT REPORT**

**Submitted as a J<sup>th</sup> Component for the Cloud Computing**

### **Master Of Computer Application**

**Submitted By:-**

<b>Priya Nayak</b>	<b>22MCA0365</b>
<b>Pooja</b>	<b>22MCA0419</b>
<b>Ankit Kumar</b>	<b>22MCA0391</b>

**Under the Guidance of  
Prof. Krishnamoorthy N**

**School of Information Technology & Engineering**  
**SITE**

## **TABLE OF CONTENTS**

<b>CHAPTER NO.</b>	<b>TITLE</b>	<b>PAGE NO.</b>
<b>1.</b>	Abstract	<b>3</b>
<b>2.</b>	Introduction	<b>3</b>
<b>3.</b>	Problem Statement	<b>3-4</b>
<b>4.</b>	Solution Statement	<b>4</b>
<b>5.</b>	Modules Description	<b>4-5</b>
<b>6.</b>	System Design/ER Diagram	<b>5</b>
<b>7.</b>	Use case diagram	<b>6-7</b>
<b>8.</b>	Implementation	<b>7-39</b>
<b>9.</b>	Result	<b>39-41</b>
<b>10.</b>	Conclusion	<b>41</b>

## ABSTRACT

Chatbots have gained popularity as a cost-effective platform for millions of consumers, leveraging natural language services for their development. However, the complexity of developing and deploying chatbots persists, requiring integration of cognitive services, interface coordination, and ensuring extensibility, scalability, and maintenance. This paper introduces a Python chatbot AI that enables effortless creation of chatbots with minimal coding. Its unique features include AI-powered bots and chat handlers, facilitating seamless integration of REST APIs and Python functions. Leveraging cloud-based services like Amazon Web Services (AWS), Infinity Free Hosting, developers can build and deploy chatbot engines using AWS Lex for NLP, AWS Lambda for backend processing, and Amazon S3 for storage. The paper explores the trends, opportunities, challenges, and potential use cases of cloud-based chatbots, emphasizing the benefits of Python and AWS in their implementation.

**Keywords:** *Java Script, php , css , Infinity Free Hosting, machine learning.*

## INTRODUCTION

In today's fast-paced digital world, chatbots have revolutionized customer engagement for businesses by providing instant and personalized responses. However, the development and deployment of chatbots can be complex, requiring the integration of various technologies and services. To address these challenges, our groundbreaking project combines the power of Python programming language with the versatility of Amazon Web Services (AWS). By leveraging AWS services such as Amazon Lex for natural language processing, AWS Lambda for backend processing, and Amazon S3 for storage, our Python-based chatbot AI simplifies the development process, empowering developers to build robust chatbots with minimal coding. The architecture of our cloud-based chatbot encompasses the front-end interface, chatbot engine, and back-end services, offering seamless user interaction, sophisticated natural language processing, and additional functionalities like database integration and analytics. This paper explores the trends and opportunities of cloud-based chatbots, emphasizing the benefits of PHP, CSS and Infinity Free Hosting. Our project aims to revolutionize customer interactions by enabling businesses to effortlessly deploy scalable and secure chatbots, enhancing customer experiences and driving business growth in diverse industries.

## PROBLEM STATEMENT

- Traditional methods like phone calls and emails can be time-consuming, costly, and may not always be available 24/7.

- ▶ Building and deploying chatbots require expertise in areas like natural language processing, machine learning, and cloud computing, making it a complex and resource-intensive process.
- ▶ Successful implementation of chatbots can improve customer engagement, operational efficiency, and lead to increased revenue and growth for businesses.
- ▶ This is always work on internet, so we need strong network.

## PROPOSED SOLUTION

- ▶ Determine the specific business needs and use cases for chatbots.
- ▶ Design a chatbot architecture that is scalable, flexible, and cost-effective, while being highly functional and user-friendly.
- ▶ Train the chatbot using machine learning techniques and natural language processing to improve its ability to understand and respond to user inquiries and requests.

## MODULES DESCRIPTION

The architecture of a cloud-based chatbot typically consists of three main components:

- 1. Front-end Interface:** This is the user-facing part of the chatbot that users interact with. It can be a web interface or a messaging platform such as Facebook Messenger, WhatsApp, or Slack. The front-end interface is responsible for collecting user input and sending it to the chatbot engine for processing.
- 2. Chatbot Engine:** This is the heart of the chatbot, where the natural language processing (NLP) and machine learning (ML) algorithms are implemented. The chatbot engine processes the user input, understands the user's intent, and generates an appropriate response.

The chatbot engine can be built using a variety of technologies such as Python, Node.js, or Java. Many cloud providers offer pre-built chatbot engines such as Amazon Lex, Google Dialogflow, and Microsoft Bot Framework. These engines are designed to integrate easily with other cloud services, making it easy to build and deploy chatbots on the cloud.

- 3. Back-end Services:** This component provides additional functionality to the chatbot, such as database integration, analytics, and security. Cloud-based back-end services such as Amazon S3, AWS Lambda, and Firebase can be used to store user data, perform

backend processing, and provide real-time analytics on user interactions with the chatbot.

Overall, the architecture of a cloud-based chatbot is designed to be highly scalable, flexible, and secure. By leveraging cloud services, chatbot developers can easily build and deploy chatbots with minimal infrastructure setup, making it easy for businesses to implement conversational interfaces to engage with their customers.

## SYSTEM DESIGN

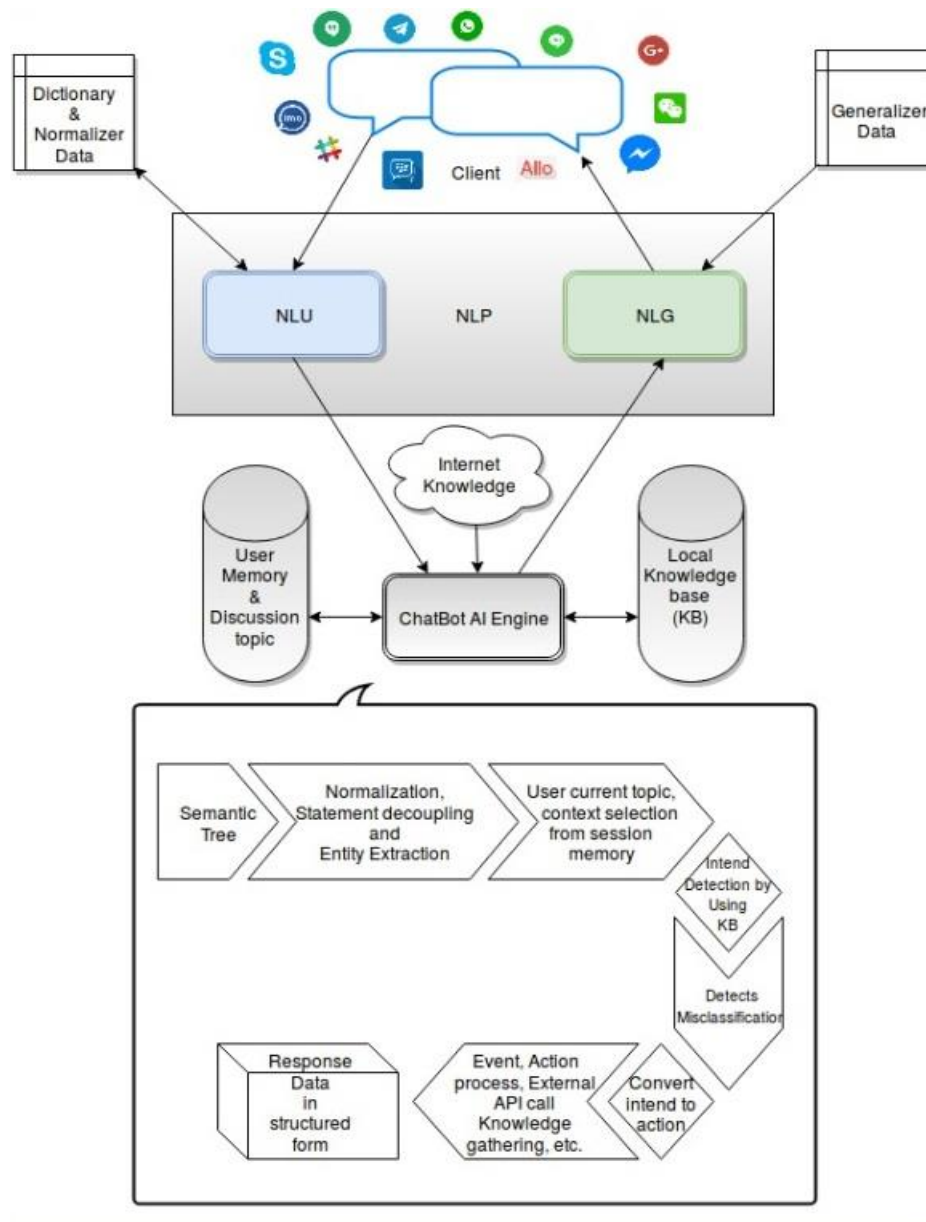
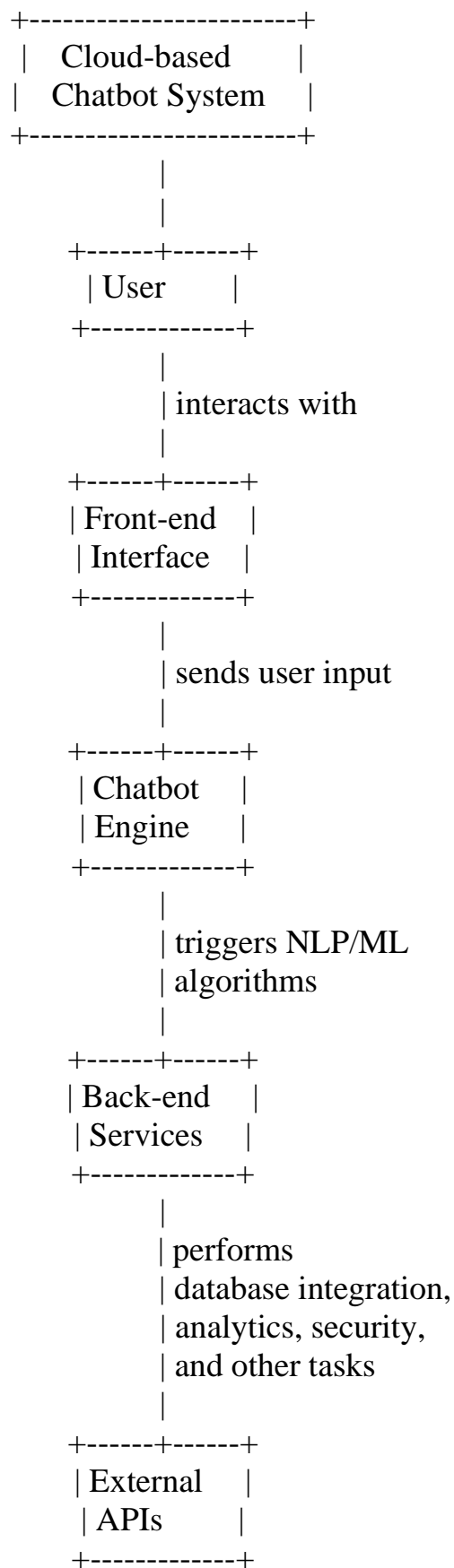


Fig. 1

This is the working architecture of Chatbot and in future we will implement in AWS.

## USE-CASE DIAGRAM



Explanation: -

- **User:** The user interacts with the chatbot system through the front-end interface, providing input and receiving responses.
- **Front-end Interface:** The user-facing part of the chatbot system, responsible for collecting user input and sending it to the chatbot engine for processing. It can be a web interface or a messaging platform like Facebook Messenger, WhatsApp, or Slack.
- **Chatbot Engine:** The core component of the chatbot system, where the natural language processing (NLP) and machine learning (ML) algorithms are implemented. The chatbot engine processes the user input, understands the intent, and generates appropriate responses.
- **Back-end Services:** This component provides additional functionality to the chatbot, including database integration, analytics, security, and other tasks. Cloud-based back-end services like Amazon S3, AWS Lambda, and Firebase can be used to store user data, perform backend processing, and provide real-time analytics on user interactions.
- **External APIs:** In some cases, the chatbot may need to interact with external services or APIs to fetch data or perform certain actions. The chatbot triggers the external API when necessary to fulfil user requests or retrieve information.

This diagram illustrates the overall architecture of a cloud-based chatbot system, showcasing the interaction between the user, front-end interface, chatbot engine, back-end services, and external APIs.

## IMPLEMENTATION

```
/*CSS file*/

input{

    width: 430px;
    margin: 0 auto;
    padding: 10px;
    border: 1px solid #ccc;

}

#main-wrapper{

    border-radius : 10px;
    background-color: white;
```

```

border: 3px solid #f1f1f1;
width: 500px;
margin: 0 auto;

}

.myform{

    border-radius : 10px;
    background-color: rgba(0,0,0,0.8);
    border: 3px solid #f1f1f1;
    width: 500px;
    margin: 0 auto;

}

.inner_container{
    width:450px;
    margin:0 auto;
}

.login_btn {
    background-color: #4CAF50;
    color: rgba(0,0,0,0.8);
    margin-left: 10px;
    margin-top:10px;
    padding:10px;
    width: 60%;
    font-size:18px;
    font-weight: bold;
}

.register_btn{
    background-color: #3498db;

    color: rgba(0,0,0,0.8);
    margin-top:10px;
    margin-bottom:15px;
    padding:10px;
    width: 60%;
    font-size:16px;
    font-weight: bold;
}

.back_btn{
    margin-top:10px;
    color: white;
    margin-bottom:15px;
    padding: 10px;
    background-color: #e67e22;
}

```



```

.logout_button{
  background-color: #c0392b;
  color: white;
  margin-top:10px;
  padding:10px;
  width: 60%;
  font-size:18px;
  font-weight: bold;
}

.sign_up_btn {
  background-color: #3498db;
  color: white;
  padding:10px;
  margin-top:10px;
  margin-bottom:10px;
  width: 60%;
  font-size:16px;
  font-weight: bold;
}

.imgcontainer {
  text-align: center;
  margin: 24px 0 12px 0;
}

img.avatar {
  width: 30%;
  border-radius: 50%;
}

.container {
  margin:140px;
  width:100%;
}

input{

  width: 300px;
  align-self: center;
  color:#7cfc00;
  padding: 10px;
  border: 1px solid #ccc;
}

#main-wrapper{
  background-color: rgba(0,0,0,1.6);
  border-radius : 1px;
  border: 3px solid #f1f1f1;
  width: 300px;
  margin-left: 450px;
}

```

```

border-radius: 105px;
}
.myform{
padding: 10px;
border-radius : 10px;
background-color: rgba(0,0,0,0.6);
border-radius: 105px;
border: 3px solid #ffffff;
width: 500px;
margin: 0 auto;
}

.inner_container{
width:550px;
color: rgba(0,0,0,0.8);
margin:0 auto;
margin-left: 100px;
}

#log{
color: white;
}
#login_btn{

color: rgba(0,0,0,0.8);
margin-left: 40px;
margin-top:10px;
padding:10px;
border-radius: 25px;
width:40%;
font-size:13px;
font-weight: bold;
}
#us{
background-color: rgba(0,0,0,0.7);
border-radius: 25px
}

#pass{
background-color: rgba(0,0,0,0.7);
border-radius: 25px
}

#register_btn{

border-radius: 25px;
color: rgba(0,0,0,0.8);
margin-top:10px;

```

```

margin-bottom:0 px;
padding:10px;
width:40%;
margin-left: 40px;
font-size:13px;
font-weight: bold;
}

#un{
    color: white;
}
#pas{
    color:white;
}
#back_btn{
    border-radius: 25px;
    color: rgba(0,0,0,0.8);
    margin-top:10px;
    margin-bottom:0 px;
    padding:10px;
    width:40%;
    margin-left: 40px;
    font-size:13px;
    font-weight: bold;
}
#run{
    color:white;
}

#rpas{
    color:white;
}
#rcpas{
    color:white;
}
#ruser{
background-color: rgba(0,0,0,0.7);
    border-radius: 25px
}
#rpass{
background-color: rgba(0,0,0,0.7);
    border-radius: 25px
}

#rcpass{
background-color: rgba(0,0,0,0.7);

```

```

border-radius: 25px
}
#logout_button{
background-color: rgba(0,0,0,0.8);
color: white;
margin-top:10px;
padding:10px;
border-radius: 25px;
width: 60%;
font-size:18px;
font-weight: bold;
}
#regis{
color:white;
}
#signup_btn {
border-radius: 25px;
color: rgba(0,0,0,0.8);
margin-top:10px;
margin-bottom:0 px;
padding:10px;
width:40%;
margin-left: 40px;
font-size:13px;
font-weight: bold;
}

.imgcontainer {
text-align: center;
margin: 24px 0 12px 0;
max-width: 100%;
max-height: auto;
object-fit: 100%;
}
#admin_btn{border-radius:25px;

color: rgba(0,0,0,0.8);
margin-top:10px;
margin-bottom:0px;
padding:10px;
width:40%;
margin-left: 40px;
font-size:13px;
font-weight: bold;
}
#admin{
color: white;
}
#adminp{
color: white;

```

```

}
#adminpass{
    border-radius: 25px;
    background-color: rgba(0,0,0,0.8);
}

//before implementing this create a folder named dbconfig and paste this file in it.

<?php
$con = mysqli_connect("localhost","root","") or die("Unable to connect");
mysqli_select_db($con,'logindb');
?>

//before implementing this create a folder named dbconfig and paste this file in it.

<?php
$con = mysqli_connect("localhost","root","") or die("Unable to connect");
mysqli_select_db($con,'logindb');
?>
<?php
    session_start();
    require 'dbconfig/config.php';
?>
<!DOCTYPE html>
<html>
<head>

<title>Login as Admin</title>
<link rel="stylesheet" href="css/stylex.css">
<style>
body
{
    background-image:
url('https://png.pngtree.com/thumb_back/fw800/background/20190223/ourmid/pngtree-smart-robot-arm-advertising-background-backgroundrobotblue-backgrounddark-backgroundlightlight-image_68405.jpg' );
    background-repeat: no-repeat;
    background-attachment: fixed;
    background-size: 100% 100%;
}
</style>

</head>

<br>
<br>
<br>

```

```

<br>
<br>
<br>

<!-- <body style="background-color:#bdc3c7"> -->

    <div id="main-wrapper">
        <center>
            <div class="imgcontainer">
                
            </center>

            <form class="myform" action="adminpage.php" method="post">

                <div class="inner_container">

                    <label><b id="adminp">Password:</b></label><br>
                    <input name="password" type="password" class="inputvalues" id="adminpass"
placeholder="Type your password" required/><br>

                                <a href="adminlogin.php"><input type="button" id="admin_btn"
value="LogIn"/></a><br>
                                <a href="index.php"><input type="button" id="back_btn" value="Back"/></a>

                </div>

            </form>

        </div>
</body>
</html>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <title>Admin Portal</title>
    <link rel="stylesheet" href="navbar.css">
    <!--<link href="https://fonts.googleapis.com/css?family=Alfa+Slab+One|Open+Sans"
rel="stylesheet">-->
</head>
<header>
    <icon>

    </icon>
    <h1>AR<span>ESA<span>BOT</span></span></h1>
    <nav>

```

```

        <ul>
            <li><a href="adminlogin.php">Chats</a></li>
            <li><a href="qna.php">Dataset</a></li>
            <li><a href="invalid.php">Invalid</a></li>
            <li><a href="index.php">Sign Out</a></li>
        </ul>
    </nav>
</header>

<!--
<div id="main-wrapper">
    <center>
        <h2><strong>Admin</strong></h2>
        <div class="imgcontainer">
            
        </div>
    </div>
-->

<body>
    <table align="center" border="1px" style="width: 800px;line-height: 20px">
        <tr>
            <th colspan="4"><h2>Chat record</h2></th>
            <h3></h3>

        <tr>
            <th align="center">id</th>
            <th align="center">message</th>
            <th align="center">Added on</th>
            <th align="center">Type</th>
        </tr>
        <?php
        $conn=mysqli_connect("localhost","root","","youtube");
        if($conn-> connect_error){
            die("connection failed:".$conn-> connect_error);
        }
        $sql = "SELECT id,message,added_on,type from message";
        $result= $conn-> query($sql);

        if($result-> num_rows >0){
            while ($row =$result ->fetch_assoc()) {
                echo "<tr><td>".$row["id"]."</td><td>".$row["message"]." </td><td>".$row["added_on"]." </td><td> ".$row['type']. "</td></tr>";
                # code...
            }
            echo "</table>";
        }
        else{

```

```

        echo "0 result";
    }
    $conn-> close();
    ?>

</table>

</body>
</html>
<?php
$con=mysqli_connect('localhost','root','','youtube');
?>
<?php
$conn=mysqli_connect("localhost","root","","youtube");
if($conn-> connect_error){
die("connection failed:".$conn-> connect_error);
}
$id=$_GET['rn'];
$query="DELETE FROM CHATBOT_HINTS WHERE ID ='$id' ";

$data=mysqli_query($conn,$query);

if($data)
{
    echo "<script>alert('Record Deleted from database')</script>";
?>

<META HTTP-EQUIV="Refresh" CONTENT="0; URL=http://localhost:7882/qna.php">
<?php
}
else {
    # code...
    echo "<font color='red'>Failed to delete from db!!";
}
?>
<?php
date_default_timezone_set('Asia/Kolkata');
include('database.inc.php');
$txt=mysqli_real_escape_string($con,$_POST['txt']);
$sql="select reply from chatbot_hints where question like '%$txt%'";

$res=mysqli_query($con,$sql);

if(mysqli_num_rows($res)>0){

    $row=mysqli_fetch_assoc($res);
    $html=$row['reply'];
}else{
    $html="Sorry not be able to understand you";
}

```



```

$added_on=date('Y-m-d h:i:s');
mysqli_query($con,"insert into message(message,added_on,type)
values('$txt','$added_on','user')");
$added_on=date('Y-m-d h:i:s');
mysqli_query($con,"insert into message(message,added_on,type)
values('$html','$added_on','bot')");
echo $html;
echo " ";
?>

<!--
<!DOCTYPE html>
<html>
<head>
    <title></title>
</head>
<style>

    <link href="style.css" rel="stylesheet">
</style>
<a href="#"><small><input name="invalid" type="button" id="admin_btn"
value="Invalid?"></small></a>

<body>

</body>
</html>-->

<?php
date_default_timezone_set('Asia/Kolkata');
include('database.inc.php');
?>
<!DOCTYPE html>
<html lang="en">
    <head>

        <br>
        <br>
        <br>
        <meta charset="utf-8">
        <meta name="robots" content="noindex, nofollow">
        <title>Aresa Chatbot</title>
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <link href="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css"
rel="stylesheet" id="bootstrap-css">
        <link href="style.css" rel="stylesheet">
        <script src="//cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
        <script
src="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/js/bootstrap.min.js"></script>

```

```

</head>

<style>
body
{
    background-image:
url('https://png.pngtree.com/thumb_back/fw800/background/20190223/ourmid/pngtree-smart-robot-arm-advertising-background-backgroundrobotblue-backgrounddark-backgroundlightlight-image_68405.jpg' );
    background-repeat: no-repeat;
    background-attachment: fixed;
    background-size: 100% 100%;
}
</style>
<body>
    <div class="container">
        <div class="row justify-content-md-center mb-8">
            <div class="col-md-8">
                <form class="myform" action="homepage.php" method="post">
                    <input name="logout" type="submit" id="logout_btn" value="Log Out"/><br>

                </form>

                <?php
                    if(isset($_POST['logout']))
                    {
                        session_destroy();
                        header('location:index.php');
                    }
                ?>

                <!--start code-->
                <div class="card">
                    <div class="card-body messages-box">
                        <ul class="list-unstyled messages-list">
                            <?php
                                $res=mysqli_query($con,"select * from message");
                                if(mysqli_num_rows($res)>0){
                                    $html='';
                                    while($row=mysqli_fetch_assoc($res)){
                                        $message=$row['message'];
                                        $added_on=$row['added_on'];
                                        $strtotime=strtotime($added_on);
                                        $time=date('h:i A',$strtotime);
                                        $type=$row['type'];
                                        if($type=='user'){
                                            $class="messages-me";
                                            $imgAvatar="user_avatar.png";
                                            $name="Me";
                                        }else{
                                            $class="messages-you";
                                            $imgAvatar="bot_avatar.png";
                                            $name="Chatbot";
                                        }
                                    }
                                }
                            ?>
                        </ul>
                    </div>
                </div>
            </div>
        </div>
    </div>

```



```

        jQuery('.start_chat').hide();
        var txt=jQuery('#input-me').val();
        var html='<li class="messages-me clearfix"><span class="message-img"></span><div class="message-
body clearfix"><div class="message-header"><strong class="messages-title">Me</strong>
<small class="time-messages text-muted"><span class="fas fa-time"></span> <span
class="minutes">'+getCurrentTime()+'</span></small> </div><p class="messages-
p">'+txt+'</p></div></li>';

        jQuery('.messages-list').append(html);
        jQuery('#input-me').val('');
        if(txt){
            jQuery.ajax({
                url: 'get_bot_message.php',
                type: 'post',
                data: 'txt='+txt,
                success: function(result){

                    var html='<li class="messages-you clearfix"><span class="message-
img"></span><div
class="message-body clearfix"><div class="message-header"><strong class="messages-
title">Chatbot</strong> <small class="time-messages text-muted"><span class="fas fa-
time"></span> <span class="minutes">'+getCurrentTime()+'</span></small> </div><p
class="messages-p">'+result+'</p></div></li><a href="invalidans.php"
id="invalid_btn"><i>Invalid Answer ?</i></a>';

                    jQuery('.messages-list').append(html);
                    jQuery('.messages-box').scrollTop(jQuery('.messages-
box')[0].scrollHeight);
                }
            });
        }
    }
</script>
</body>
</html>

<?php
    session_start();
    require 'dbconfig/config.php';
?>
<!DOCTYPE html>
<html>
<head>

```

```

<title>Login Page</title>
<link rel="stylesheet" href="css/stylex.css">
-->
<style>
body
{
    background-image:
url('https://png.pngtree.com/thumb_back/fw800/background/20190223/ourmid/pngtree-smart-
robot-arm-advertising-background-backgroundrobotblue-backgrounddark-backgroundlightlight-
image_68405.jpg' );
    background-repeat: no-repeat;
    background-attachment: fixed;
    background-size: 100% 100%;
}

</style>

</head>

<br>
<br>
<br>
<br>
<br>
<br>

<br>
<br>

<!-- <body style="background-color:#bdc3c7"> -->

    <div id="main-wrapper">
        <center>
            <h2><strong id="log">Login</strong></h2>
            <div class="imgcontainer">
                
            </center>

            <form class="myform" action="index.php" method="post">

                <div class="inner_container">

                    <label><b id="un">Username:</b></label><br>
                    <input name="username" id="us" type="text" class="inputvalues"
placeholder="Enter Username here..." required/><br>

```

```

        <label><b id="pas">Password:</b></label><br>
        <input name="password" id="pass" type="password" class="inputvalues"
placeholder="Your Password..." required/><br>

        <input name="login" type="submit" id="login_btn" value="Login"/><br>

        <a href="register.php"><input type="button" id="register_btn"
value="Register"/></a> <br>

        <a href="admin.php"><input type="button" id="admin_btn" value=" Login as
Admin"/></a>

    </div>

</form>
<?php
if(isset($_POST['login']))
{
    $username=$_POST['username'];
    $password=$_POST['password'];

    $query="select * from userinfotable WHERE username='$username' AND
password='$password'";

    $query_run = mysqli_query($con,$query);
    if(mysqli_num_rows($query_run)>0)
    {
        // valid
        $_SESSION['username']= $username;
        header('location:homepage.php');
    }
    else
    {
        // invalid
        echo '<script type="text/javascript"> alert("Invalid credentials")
</script>';
    }

}

?>

</div>
</body>
</html>

<?php
$conn=mysqli_connect("localhost","root","","youtube");

```

```

        if($conn-> connect_error){
            die("connection failed:".$conn-> connect_error);
        }

?>

<!DOCTYPE html>
<html>
<head>
    <title>Update</title>
<style >
    input{
        font-size: 1vw;
    }

    table{
        color: white;
        border-radius: 19px;

        background:linear-gradient(blue,black,blue);
    }
    #button
    {
        background-color:rgba(0,0,0,0.6);
        color: white;
        height: 32px;
        width: 145px;
        border-radius: 25px;
        font-size: 16px;
    }
    body{
        background:linear-gradient(black,black);

        background-repeat: no-repeat;
background-attachment: fixed;
background-size: 100% 100%;

    }
</style>

</head>
<br><br><br><br><br><br>
<br>
<br>
<form action="" method="POST">
    <table border="0" bgcolor="black" align="center" cellspacing="50">
        <div id="main-wrapper">
            <center>

```

```

        <div class="imgcontainer">
            
        </center>
    </div>
    <tr>
        <td>Id</td>
        <td><input type="text" value="" name="id" placeholder="Type Id
here..."required></td>

    </tr>

    <tr>
        <td>Question</td>
        <td><input type="text" value="" name="question" placeholder="Type your query
here..."required></td>

    </tr>
    <tr>
        <td>Reply</td>
        <td><input type="text" value="" name="reply" placeholder="Type your response
here..."required></td>

    </tr>

    </tr>
    <tr>
        <td colspan="3" align="center"><input type="submit" id="button" name="submit"
value="Report as Invalid"/></td>
    </tr>

</table>
</form>

</body>
</html>

<?php
if(isset($_POST['submit']))
{
    $id=$_POST['id'];
    $question=$_POST['question'];
    $reply=$_POST['reply'];

$query="insert into chatbot_hints values('$id','$question','$reply')";
$query_run = mysqli_query($conn,$query);

```



```

        if($query_run)
        {
            echo '<script type="text/javascript"> alert("Success!")
</script>';
        }
        else
        {
            echo '<script type="text/javascript">
alert("' .mysqli_error($conn).'") </script>';
        }
    ?>

<META HTTP-EQUIV="Refresh" CONTENT="0; URL=http://localhost:7882/qna.php">
<?php

}
?>

<!DOCTYPE html>
<html lang="en">
<body>
<head>
    <meta charset="utf-8">
    <title>Admin Portal</title>
    <link rel="stylesheet" href="navbar.css">
    <!--<link href="https://fonts.googleapis.com/css?family=Alfa+Slab+One|Open+Sans"
rel="stylesheet">-->
</head>
<header>
    <icon>

    </icon>
    <h1>AR<span>ESA<span>BOT</span></span></h1>
    <nav>
        <ul>

            <li><a href="adminlogin.php">Chats</a></li>
            <li><a href="qna.php">Dataset</a></li>
            <li><a href="invalid.php">Invalid</a></li>
            <li><a href="index.php">Sign Out</a></li>
        </ul>
    </nav>
</header>
<body>
    <table align="center" border="1px" style="width: 800px;line-height: 20px">
        <tr>
            <th colspan="2"><h2>Invalid</h2></th>
            <h3></h3>

        <tr>

```

```

        <th align="center">id</th>
        <th align="center">Invalid query/response</th>
    </tr>

<?php
$conn=mysqli_connect("localhost","root","","youtube");
if($conn-> connect_error){
    die("connection failed:".$conn-> connect_error);
}
$sql = "SELECT id,messages from invalid";
$result= $conn-> query($sql);

if($result-> num_rows >0){
    while ($row =$result ->fetch_assoc()) {
        echo "<tr><td>".$row["id"]."</td><td>".$row["messages"]."</td></tr>";
        # code...
    }
    echo "</table>";
}
else{
    echo "0 result";
}
$conn-> close();
?>

</table>

</body>
</html>
</html>

<?php
$conn=mysqli_connect("localhost","root","","youtube");
if($conn-> connect_error){
    die("connection failed:".$conn-> connect_error);
}

?>

<!DOCTYPE html>
<html>
<head>
    <title>Update</title>
<style >
    input{
        font-size: 1vw;
    }

    table{
        color: white;
        border-radius: 19px;

```



```

</table>
    </form>

</body>
</html>

<?php
if(isset($_POST['submit']))
{
    $id=$_POST['id'];
    $messages=$_POST['messages'];

$query="insert into invalid values('','$messages')";
$query_run = mysqli_query($conn,$query);

        if($query_run)
        {
            echo '<script type="text/javascript"> alert("Success!")
</script>';
        }
        else
        {
            echo '<script type="text/javascript">
alert("'" .mysqli_error($conn).'"') </script>';
        }
    ?>

<META HTTP-EQUIV="Refresh" CONTENT="0; URL=http://localhost:7882/homepage.php">
<?php
}
?>

body
{
    background-image:
url('https://png.pngtree.com/thumb_back/fw800/background/20190223/ourmid/pngtree-smart-
robot-arm-advertising-background-backgroundrobotblue-backgrounddark-backgroundlightlight-
image_68405.jpg' );
    background-repeat: no-repeat;
    background-attachment: fixed;
    background-size: 100% 100%;
}
{
    color: #ffffff;
}

```

```

.heading{
  font-size: 30px;
  font-family: 'Lobster', cursive;
  text-align: center;
}

.bg{
  background: url('doctor.jpg') no-repeat; width: 100%; height: 100vh;
}

.myform{
  border: 1px solid #000000;
  padding: 30px 60px;
  margin-top: 20vh;
-webkit-box-shadow: 9px 2px 26px -7px rgb(0, 0, 0, 1);
-moz-box-shadow: 9px 2px 26px -7px rgb(0,0,0,1);
box-shadow: 9px 2px 26px -7px rgba(0, 0, 0, 1);
}

/*****For signup.html
page*****/

.orlogin{
  text-align: center;
}

.cancel{
  padding: 16px;
  text-align: center;
  color: white;
}

/* .cancelbtn {
  width: auto;
  padding: 10px 18px;
  background-color: #f44336;
}
*/
/* Change styles for span and cancel button on extra small screens */
@media screen and (max-width: 300px) {
  span.psw {
    display: block;
    float: none;
  }
  .cancel {
    width: 100%;
  }
}

body,html{
  margin: 0;
  padding: 0;
}

```

```

header{
  width: 100%;
  height: 70px;
  background-color: #282828;
}
h1{
  position: absolute;
  padding: 3px;
  float: left;
  margin-left: 2%;
  margin-top: 10px;
  font-family: 'Alfa Slab One',cursive;
  color: #39ca74;
}
span{
  color: #ffffff;
}
ul{
  width: auto;
  float: right;
  margin-top: 8px;
}
li{
  display: inline-block;
  padding: 15px 30px;
}

a{
  text-align: center;
  color: #39ca74;
  text-decoration: none;
  font-family: 'Open Sans',sans-serif;
  font-size: 0.8vw;
}

a:hover{
  color: #fff;
  transition: 0.5s;
}
img{
  width: 100%;
  margin-top: -16px;
}
input{
  color: #000;
  marker-end: 25%
}
input:hover{
  color:#fff;

```

```

    transition: 0.5s;
}
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <title>Admin Portal</title>
    <link rel="stylesheet" href="navbar.css">
    <!--<link href="https://fonts.googleapis.com/css?family=Alfa+Slab+One|Open+Sans"
rel="stylesheet">-->
</head>
<header>
    <h1>AR<span>ESA<span>BOT</span></span></h1>
    <nav>
        <ul>

            <li><a href="adminlogin.php">Chats</a></li>
            <li><a href="qna.php">Dataset</a></li>
            <li><a href="invalid.php">Invalid</a></li>
            <li><a href="index.php">Sign Out</a></li>
        </ul>
    </nav>
    <?php
        if(isset($_POST['logout']))
        {
            session_destroy();
            header('location:index.php');
        }
    ?>
</header>

<!--
<div id="main-wrapper">
    <center>
        <h2><strong>Admin</strong></h2>
        <div class="imgcontainer">
            
        </center>

    </div>
-->
<style>

    input{
        padding: 2px;
        margin-left: 1255px;
        margin-top: 35px;
        height: 20px;
        width: 90px;
        color: #fff;
        background-color: #000;
    }

```

```

</style>

<a href="insert.php"><input type="button" id="insert_btn" value="Insert/Add"
align="center"/></a>

<body>
    <table cellpadding="5" align="center" border="1px" style="width: 800px;line-height:
40px">
        <tr>
            <th colspan="5"><h2>Chatbot Dataset</h2></th>
            <h3></h3>

        <tr>
            <th width="20px">id</th>
            <th align="center">Query</th>
            <th align="center">Reply</th>
            <th colspan="2" align="center">Operation</th>

        </tr>
        <?php
        $conn=mysqli_connect("localhost","root","","youtube");
        if($conn-> connect_error){
            die("connection failed:".$conn-> connect_error);
        }
        $sql = "SELECT id,question,reply from chatbot_hints";
        $result= $conn-> query($sql);

        if($result-> num_rows >0){
            while ($row =$result ->fetch_assoc()) {
                echo "<tr>
                <td>".$row["id"]."</td>
                <td>".$row["question"]." </td>
                <td> ".$row["reply"]." </td>
                <td><a
href='update.php?rn=$row[id]&ques=$row[question]&rep=$row[reply]'">Edit/Update</td>
                <td><a href='delete.php?rn=$row[id] onclick='return
checkdelete()'>Delete</td></tr> ";

                # code...
            }
            echo "</table>";
        }
        else{
            echo "0 result";
        }
        $conn-> close();
        ?>

    </table>
<script>
    function checkdelete()

```



```

        {
            return Confirm('Are you Sure you want to delete this record ?');
        }

</script>
</body>
</html>
<?php
    require 'dbconfig/config.php';
?>
<!DOCTYPE html>
<html>
<head>

<style>
body
{
    background-image:
url('https://png.pngtree.com/thumb_back/fw800/background/20190223/ourmid/pngtree-smart-robot-arm-advertising-background-backgroundrobotblue-backgrounddark-backgroundlightlight-image_68405.jpg' );
    background-repeat: no-repeat;
    background-attachment: fixed;
    background-size: 100% 100%;
}
</style>

<br>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
<br>
<title>Registration Page</title>
<link rel="stylesheet" href="css/stylex.css">
</head>
<!--<body style="background-color:#bdc3c7"> -->

    <div id="main-wrapper">
        <center>
            <h2><strong id="regis">Sign Up</strong></h2>
            
        </center>

        <form class="myform" action="register.php"method="post">
            <!--      <label><b>Full Name:</b></label><br>

```

```

        <input name="fullname" type="text" class="inputvalues" placeholder="Type your
Full Name" required/><br>
        <label><b>Gender:</b></label>
        <input type="radio" class="radiobtns" name="gender" value="male" checked
required> Male
        <input type="radio" class="radiobtns" name="gender" value="male" required>
Female<br>
        <label><b>Educational Qualification</b></label>
        <select class="qualification" name="qualification">
            <option value="BScIT">BScIT</option>
            <option value="BMS">BMS</option>
            <option value="BE.IT">BE.IT</option>
            <option value="MCA">MCA</option>
        </select><br> -->

        <div class="inner_container">

            <label><b id="run">Username:</b></label><br>
            <input name="username" type="text" id="ruser" class="inputvalues"
placeholder="Type your username" required/><br>
            <label><b id="rpas">Password:</b></label><br>
            <input name="password" type="password" id="rpass" class="inputvalues"
placeholder="Your password" required/><br>
            <label><b id="rcpas">Confirm Password:</b></label><br>
            <input name="cpassword" type="password" id="rcpass" class="inputvalues"
placeholder="Confirm password" required/><br>
            <input name="submit_btn" type="submit" id="signup_btn" value="Sign Up"/><br>
            <a href="index.php"><input type="button" id="back_btn" value="Back"/></a>

        </div>

    </form>

    <?php
        if(isset($_POST['submit_btn']))
        {
            //echo '<script type="text/javascript"> alert("Sign Up button clicked")
</script>';

            # $fullname = $_POST['fullname'];
            $username = $_POST['username'];
            $password = $_POST['password'];
            $cpassword = $_POST['cpassword'];

            # $gender = $_POST['gender'];
            # $qualification = $_POST['qualification'];

            //echo '<script type="text/javascript"> alert("User already exists.. try
another username") </script>';
            //echo '<script type="text/javascript"> alert("'" . $fullname . ' ---
'. $username . ' --- ' . $password . ' --- ' . $gender . ' --- ' . $qualification . '" ) </script>';

```

```

        if($password==$cpassword)
        {
            $query= "select * from userinfotable WHERE username='$username'";
            $query_run = mysqli_query($con,$query);

            if(mysqli_num_rows($query_run)>0)
            {
                // there is already a user with the same username
                echo '<script type="text/javascript"> alert("User already exists..
try another username") </script>';
            }
            else
            {
                $query= "insert into userinfotable
values('','$username','$password')";
                $query_run = mysqli_query($con,$query);

                if($query_run)
                {
                    echo '<script type="text/javascript"> alert("User Registered..
Go to login page to login") </script>';
                }
                else
                {
                    echo '<script type="text/javascript">
alert("'.mysqli_error($con).'") </script>';
                }
            }
        }
        else{
            echo '<script type="text/javascript"> alert("Password and confirm password
does not match!") </script>';
        }
    }
    ?>
</div>
</body>
</html>
.unread {
    cursor: pointer;
    background-color: #f4f4f4;
}
.messages-box {
    max-height: 28rem;
    overflow: auto;
    color: rgba(0,0,0,2);
}

```

```

}
.online-circle {
    border-radius: 5rem;
    width: 5rem;
    height: 5rem;
}
.messages-title {
    float: right;
    margin: 0px 5px;
}
.message-img {
    float: right;
    margin: 0px 5px;
}
.message-header {
    text-align: right;
    width: 100%;
    margin-bottom: 0.5rem;
}
.text-editor {
    min-height: 18rem;
}
.messages-list li.messages-you .messages-title {
    float: left;
}
.messages-list li.messages-you .message-img {
    float: left;
}
.messages-list li.messages-you p {
    float: left;
    text-align: left;
}
.messages-list li.messages-you .message-header {
    text-align: left;
}
.messages-list li p {
    max-width: 60%;
    padding: 5px;
    border: #e6e7e9 1px solid;
}
.messages-list li.messages-me p {
    float: right;
}
.q1-editor p {
    font-size: 1rem;
}
.logout{
    size: 60px;
}

<?php
    $conn=mysqli_connect("localhost","root","","youtube");

```

```

        if($conn-> connect_error){
            die("connection failed:".$conn-> connect_error);
        }
        $rn=$_GET['rn'];
        $ques=$_GET['ques'];
        $rep=$_GET['rep'];

?>

<!DOCTYPE html>
<html>
<head>
    <title>Update</title>
<style >
    input{
        font-size: 1vw;
    }

    table{
        color: white;
        border-radius: 19px;

        background:linear-gradient(blue,black,blue);
    }
    #button
    {
        background-color:rgba(0,0,0,0.6);
        color: white;
        height: 32px;
        width: 125px;
        border-radius: 25px;
        font-size: 16px;
    }
    body{
        background:linear-gradient(black,black);

        background-repeat: no-repeat;
        background-attachment: fixed;
        background-size: 100% 100%;

    }
</style>

</head>
<br><br><br><br><br><br>

<form action="" method="GET">
    <table border="0" bgcolor="black" align="center" cellspacing="50">
        <div id="main-wrapper">

```

```

        <center>

            <div class="imgcontainer">
                
            </center>
        </div>

        <tr>
            <td>Id</td>
            <td><input type="text" value="<?php echo "$rn" ?>" name="id" required></td>

        </tr>
        <tr>
            <td>Question</td>
            <td><input type="text" value="<?php echo "$ques" ?>" name="question"
required></td>

        </tr>

        <tr>
            <td>Reply</td>
            <td><input type="text" value="<?php echo "$rep" ?>" name="reply"
required></td>

        </tr>

        <tr>
            <td colspan="2" align="center"><input type="submit" id=button name="submit"
value="Update Details"/></td>
        </tr>

    </table>
</form>

</body>
</html>

<?php
if($_GET['submit'])
{
    $id=$_GET['id'];
    $question=$_GET['question'];
    $reply=$_GET['reply'];

$query="UPDATE CHATBOT_HINTS SET id='$id',question='$question',reply='$reply' WHERE
id='$id' ";
$data=mysqli_query($conn,$query);
if($data){

echo "<script>alert('Record Updated')</script>";

```

```

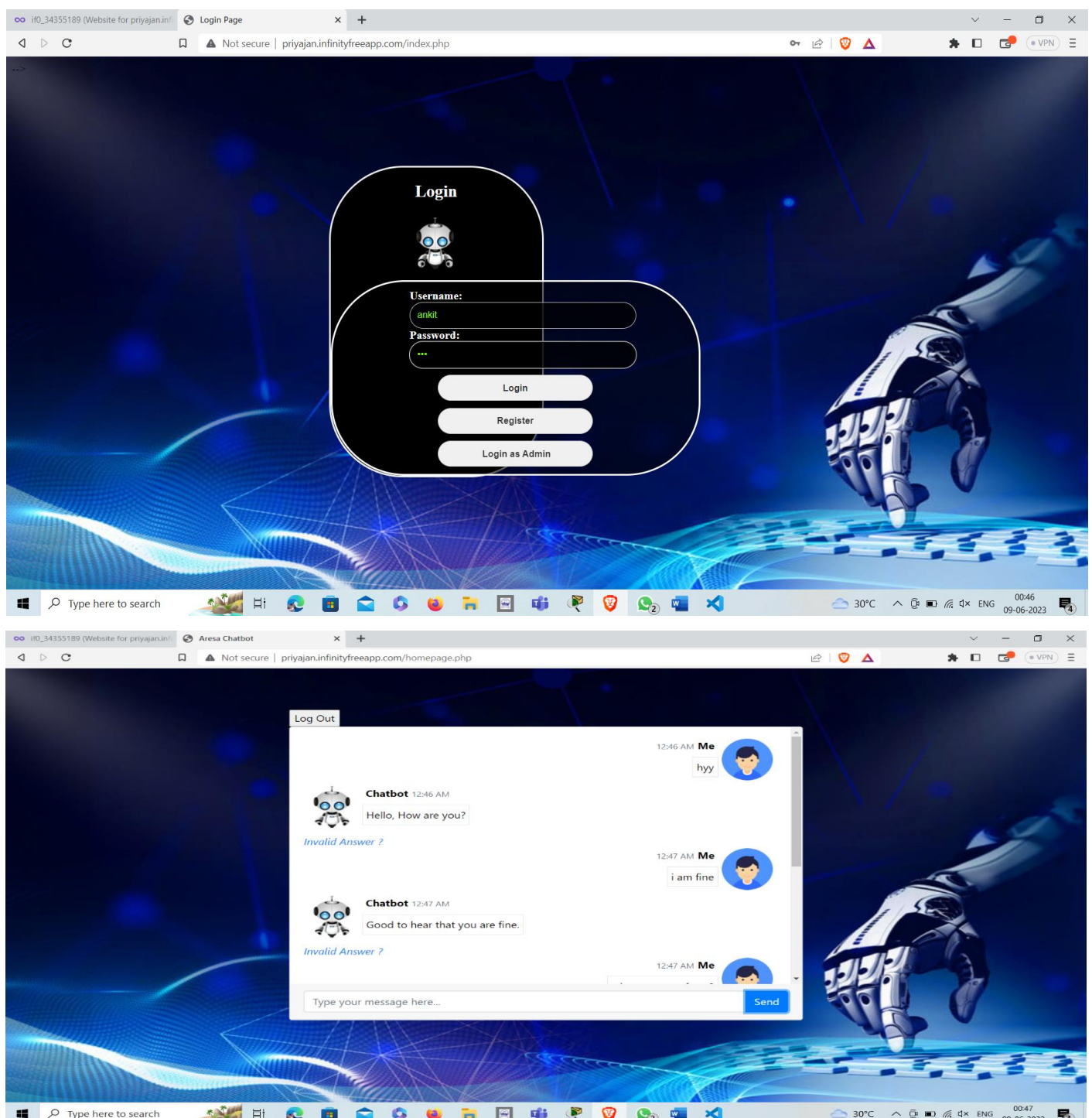
?>

<META HTTP-EQUIV="Refresh" CONTENT="0; URL=http://localhost:7882/qna.php">
<?php

}
else
{
    echo "Failed To Update Record";
}
}
?>

```

## RESULT



if0\_34355189 (Website for priyajan.inf...)

Admin Portal

+

Not secure | priyajan.infinityfreeapp.com/adminlogin.php

VPN

ARESABOT

ChatsDatasetInvalidSign Out

Chat record

id	message	Added on	Type
409	How are you?	2023-06-08 03:50:47	user
410	I am Good. How can I help you?	2023-06-08 03:50:47	bot
411	How are you?	2023-06-08 11:37:09	user
412	I am Good. How can I help you?	2023-06-08 11:37:09	bot
413	hyy	2023-06-08 11:40:44	user
414	HEllo, How are you?	2023-06-08 11:40:44	bot
415	Hello	2023-06-08 11:41:55	user
416	Hello, How are you?	2023-06-08 11:41:55	bot
417	I am fine	2023-06-08 11:42:03	user
418	Good to hear that you are fine.	2023-06-08 11:42:03	bot
419	hello	2023-06-08 11:42:54	user
420	Hello, How are you?	2023-06-08 11:42:54	bot
421	hello	2023-06-08 11:43:23	user
422	Hello, How are you?	2023-06-08 11:43:23	bot
423	hyy	2023-06-08 11:45:04	user
424	Hello, How are you?	2023-06-08 11:45:04	bot
426	Sorry not be able to understand you	2023-06-08 11:45:18	bot
427	i am fine	2023-06-08 11:45:52	user
428	Good to hear that you are fine.	2023-06-08 11:45:52	bot
429	hyy	2023-06-09 12:46:53	user
430	Hello, How are you?	2023-06-09 12:46:53	bot
431	i am fine	2023-06-09 12:47:01	user
432	Good to hear that you are fine.	2023-06-09 12:47:01	bot

Type here to search

30°C00:4809-06-2023

if0\_34355189 (Website for priyajan.inf...)

Admin Portal

+

Not secure | priyajan.infinityfreeapp.com/qna.php

VPN

ARESABOT

ChatsDatasetInvalidSign Out

Insert/Add

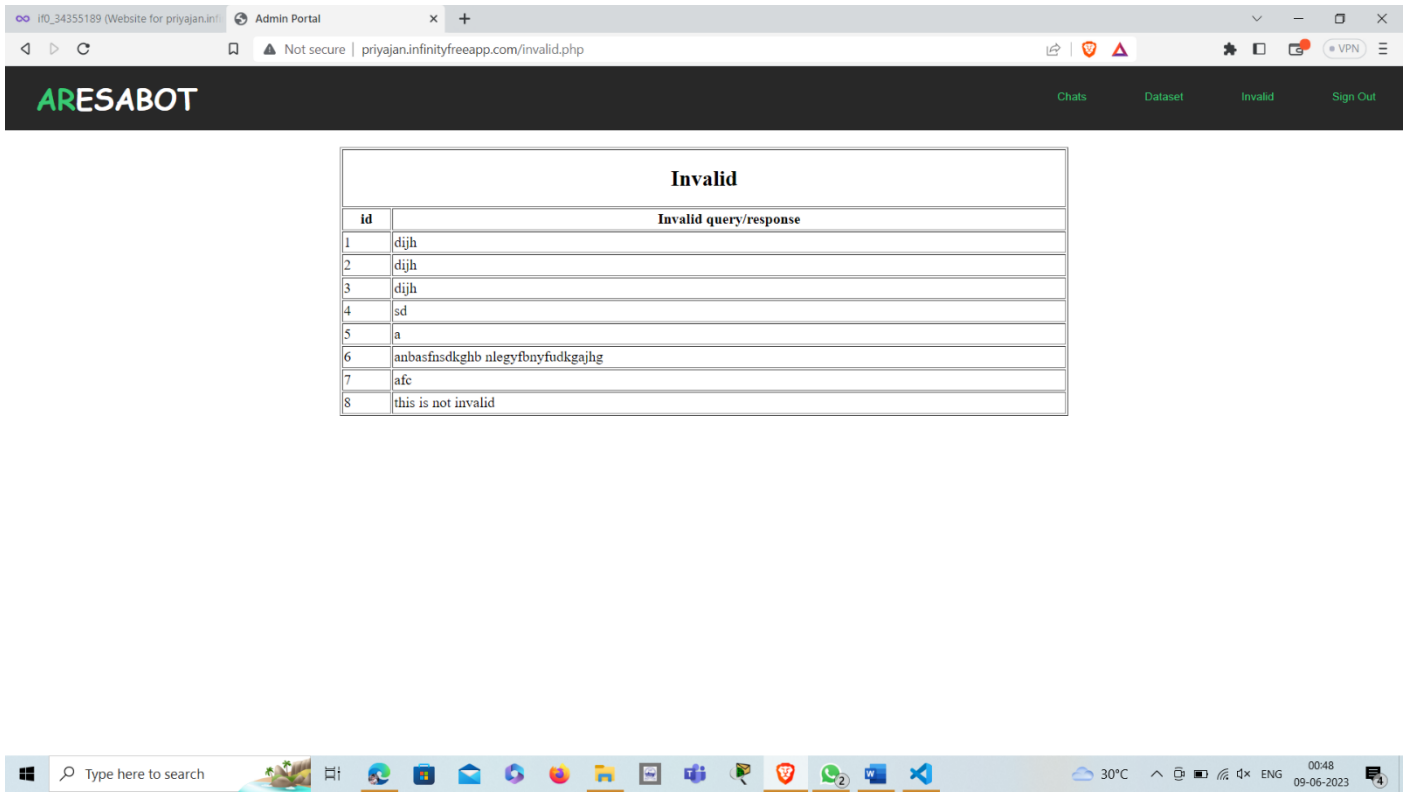
Chatbot Dataset

id	Query	Reply	Operation
----	-------	-------	-----------

Type here to search

30°C00:4809-06-2023





## CONCLUSION

In conclusion, the architecture of a cloud-based chatbot system, comprising the front-end interface, chatbot engine, and back-end services, provides a powerful and scalable solution for businesses to interact with their customers. By leveraging technologies like Python and cloud services such as AWS, developers can create sophisticated chatbot systems that employ natural language processing and machine learning algorithms. This architecture enhances user experiences, streamlines operations, and enables businesses to gain valuable insights through chatbot-powered conversational interfaces.

THANK YOU