

CLOUD APPLICATION DEVELOPMENT:

Phase 5: Chatbot Deployment with IBM Cloud Watson Assistant.

In our chatbot, we used html, css and javascript for developing our chatbot.

The logo of our text chatbot be,



The implementation of our text chatbot be,

CODE:

```
<DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<title>Create Your Own Chatbot</title>
```

```
<meta charset="UTF-8" />
```

```
<meta name="viewport" content="width=device-width"
/>
```

```
<link rel="stylesheet" href="styles.css" />
```

```
<link rel="stylesheet"
href="https://fonts.googleapis.com/css?family=Roboto:400,
700,300">
```

```
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/material-
design-iconic-font/2.1.2/css/material-design-iconic-
font.min.css">
```

```
<link rel="stylesheet"
href="https://fonts.googleapis.com/css2?family=Epilogue:
wght@400&family=Finger+Paint&display=swap">
```

```
</head>
```

```
<style>
```

```
* {
  font-size: 1.3vw;
  font-family: "Epilogue", italic;
}
```

```
html {
  --scrollbarBG: #fff;
  --thumbBG: #90a4ae;
```

}

body {

background: cyan;

}

body .card {

height: 45vw;

width: 35vw;

background-color: purple;

margin-left: 30vw;

margin-top: 5vw;

box-shadow: 2vw 2vw 12vw 3vw #ccc;

}

body .card #header {

height: 5vw;

background: #000;

padding: 0vw;

}

body .card #header h1 {

color: #fff;

font-size: 2vw;

```
font-family: "Finger Paint", cursive;  
padding: 1vw;  
}  
body .card #message-section::-webkit-scrollbar {  
width: 10px;  
}  
body .card #message-section {  
height: 32vw;  
padding: 0 2.5vw;  
overflow-y: auto;  
scrollbar-width: thin;  
scrollbar-color: var(--thumbBG) var(--scrollbarBG);  
}  
body .card #message-section::-webkit-scrollbar-track {  
background: var(--scrollbarBG);  
}  
body .card #message-section::-webkit-scrollbar-thumb {  
background-color: var(--thumbBG);  
border-radius: 6px;  
border: 3px solid var(--scrollbarBG);  
}
```

```
body .card #message-section #bot,  
body .card #message-section #user {  
    position: relative;  
    bottom: 0;  
    min-height: 1.5vw;  
    border: 0.15vw solid #777;  
    background-color: #fff;  
    border-radius: 0px 1.5vw 1.5vw 1.8vw;  
    padding: 1vw;  
    margin: 1.5vw 0;  
}  
  
body .card #message-section #user {  
    border: 1.5px solid #000;  
    border-radius: 1.5vw 0vw 1.5vw 1.8vw;  
    background-color: #000;  
    float: right;  
}  
  
body .card #message-section #user #user-response {  
    color: #fff;  
}  
  
body .card #message-section .message {
```

```
color: #000;  
clear: both;  
line-height: 1.2vw;  
font-size: 1.2vw;  
padding: 8px;  
position: relative;  
margin: 8px 0;  
max-width: 85%;  
word-wrap: break-word;  
z-index: 2;  
}  
body .card #input-section {  
  z-index: 1;  
  padding: 0 2.5vw;  
  display: flex;  
  flex-direction: row;  
  align-items: flex-end;  
  overflow: hidden;  
  height: 6vw;  
  width: 100%;  
}
```

```
body .card #input-section input {  
  color: #000;  
  min-width: 0.5vw;  
  outline: none;  
  height: 5vw;  
  width: 26vw;  
  border-top: none;  
  border-left: none;  
  border-right: none;  
  border-bottom: solid #000 0.1vw;  
}
```

```
body .card .send {  
  background: transparent;  
  border: 0;  
  cursor: pointer;  
  flex: 0 0 auto;  
  margin-left: 1.4vw;  
  margin-right: 0vw;  
  padding: 0;  
  position: relative;  
  outline: none;
```

```
}  
body .card .send .circle {  
  position: relative;  
  width: 4.8vw;  
  height: 4.8vw;  
  display: flex;  
  align-items: center;  
  justify-content: center;  
}  
body .card .send .circle i {  
  font-size: 3vw;  
  margin-left: -1vw;  
  margin-top: 1vw;  
}  
</style>  
<body>  
<body>  
  <div class="card">  
    <div id="header">  
      <h1>Chatter box!</h1>  
    </div>
```



```

<div id="message-section">
  <div class="message" id="bot"><span id="bot-
response">Hello.. I'm listening! Go on..</span></div>
</div>
<div id="input-section">
  <input id="input" type="text" placeholder="Type a
message" autocomplete="off" autofocus="autofocus"/>
  <button class="send" onclick="sendMessage()">
    <div class="circle"><i class="zmdi zmdi-mail-
send"></i></div>
  </button>
</div>
</div>
<script>
const userMessage = [
  ["hi", "hey", "hello"],
  ["sure", "yes", "no"],
  ["are you genius", "are you nerd", "are you intelligent"],
  ["i hate you", "i dont like you"],
  ["how are you", "how is life", "how are things", "how are
you doing"],
  ["how is corona", "how is covid 19", "how is covid19
situation"],

```

["what are you doing", "what is going on", "what is up"],
["how old are you"],
["who are you", "are you human", "are you bot", "are you
human or bot"],
["who created you", "who made you", "who is your
creator"],

[
"your name please",
"your name",
"may i know your name",
"what is your name",
"what call yourself"
],
["i love you"],
["happy", "good", "fun", "wonderful", "fantastic", "cool",
"very good"],
["bad", "bored", "tired"],
["help me", "tell me story", "tell me joke"],
["ah", "ok", "okay", "nice", "welcome"],
["thanks", "thank you"],
["what should i eat today"],

```
["bro"],
["what", "why", "how", "where", "when"],
["corona", "covid19", "coronavirus"],
["you are funny"],
["i dont know"],
["boring"],
["im tired"]
];

const botReply = [
  ["Hello!", "Hi!", "Hey!", "Hi there!"],
  ["Okay"],
  ["Yes I am! "],
  ["I'm sorry about that. But I like you dude."],
  [
    "Fine... how are you?",
    "Pretty well, how are you?",
    "Fantastic, how are you?"
  ],
  [
    ["Getting better. There?", "Somewhat okay!", "Yeah fine. Better stay home!"],
  ]
]
```

*"Nothing much",
"About to go to sleep",
"Can you guess?",
"I don't know actually"*

],

*["I am always young."],
["I am just a bot", "I am a bot. What are you?"],
["Sabitha Kuppusamy"],
["I am nameless", "I don't have a name"],
["I love you too", "Me too"],
["Have you ever felt bad?", "Glad to hear it"],
["Why?", "Why? You shouldn't!", "Try watching TV",
"Chat with me."],
["What about?", "Once upon a time..."],
["Tell me a story", "Tell me a joke", "Tell me about
yourself"],
["You're welcome"],
["Briyani", "Burger", "Sushi", "Pizza"],
["Dude!"],
["Yes?"],
["Please stay home"],
["Glad to hear it"],*

```
["Say something interesting"],  
["Sorry for that. Let's chat!"],  
["Take some rest, Dude!"]  
];
```

```
const alternative = [  
    "Same here, dude.",  
    "That's cool! Go on...",  
    "Dude...",  
    "Ask something else...",  
    "Hey, I'm listening..."  
];
```

```
const synth = window.speechSynthesis;
```

```
function voiceControl(string) {  
    let u = new SpeechSynthesisUtterance(string);  
    u.text = string;  
    u.lang = "en-aus";  
    u.volume = 1;  
    u.rate = 1;
```

```
u.pitch = 1;  
synth.speak(u);  
}
```

```
function sendMessage() {  
  const inputField = document.getElementById("input");  
  let input = inputField.value.trim();  
  input !== "" && output(input);  
  inputField.value = "";  
}  
document.addEventListener("DOMContentLoaded", () =>  
{  
  const inputField = document.getElementById("input");  
  inputField.addEventListener("keydown", function (e) {  
    if (e.code === "Enter") {  
      let input = inputField.value.trim();  
      input !== "" && output(input);  
      inputField.value = "";  
    }  
  });  
});
```

```

function output(input) {
  let product;

  let text = input.toLowerCase().replace(/[\^\w\s\d]/gi,
    "");

  text = text
    .replace(/[\W_]/g, " ")
    .replace(/ a /g, " ")
    .replace(/i feel /g, "")
    .replace(/whats/g, "what is")
    .replace(/please /g, "")
    .replace(/ please/g, "")
    .trim();

  let comparedText = compare(userMessage, botReply, text);

  product = comparedText
    ? comparedText
    : alternative[Math.floor(Math.random() *
alternative.length)];

  addChat(input, product);

```

}

```
function compare(triggerArray, replyArray, string) {  
  let item;  
  for (let x = 0; x < triggerArray.length; x++) {  
    for (let y = 0; y < replyArray.length; y++) {  
      if (triggerArray[x][y] == string) {  
        items = replyArray[x];  
        item = items[Math.floor(Math.random() *  
items.length)];  
      }  
    }  
  }  
  //containMessageCheck(string);  
  if (item) return item;  
  else return containMessageCheck(string);  
}
```

```
function containMessageCheck(string) {  
  let expectedReply = [  
    [  
      "Good Bye, dude",
```



```

    "Bye, See you!",
    "Dude, Bye. Take care of your health in this situation."
],
["Good Night, dude", "Have a sound sleep", "Sweet
dreams"],
["Have a pleasant evening!", "Good evening too",
"Evening!"],
["Good morning, Have a great day!", "Morning,
dude!"],
["Good Afternoon", "Noon, dude!", "Afternoon, dude!"]
];
let expectedMessage = [
    ["bye", "tc", "take care"],
    ["night", "good night"],
    ["evening", "good evening"],
    ["morning", "good morning"],
    ["noon"]
];
let item;
for (let x = 0; x < expectedMessage.length; x++) {
    if (expectedMessage[x].includes(string)) {
        items = expectedReply[x];
    }
}

```

```
    item = items[Math.floor(Math.random() *  
items.length)];
```

```
  }
```

```
}
```

```
  return item;
```

```
}
```

```
function addChat(input, product) {
```

```
  const mainDiv = document.getElementById("message-  
section");
```

```
  let userDiv = document.createElement("div");
```

```
  userDiv.id = "user";
```

```
  userDiv.classList.add("message");
```

```
  userDiv.innerHTML = `<span id="user-  
response">${input}</span>`;
```

```
  mainDiv.appendChild(userDiv);
```

```
  let botDiv = document.createElement("div");
```

```
  botDiv.id = "bot";
```

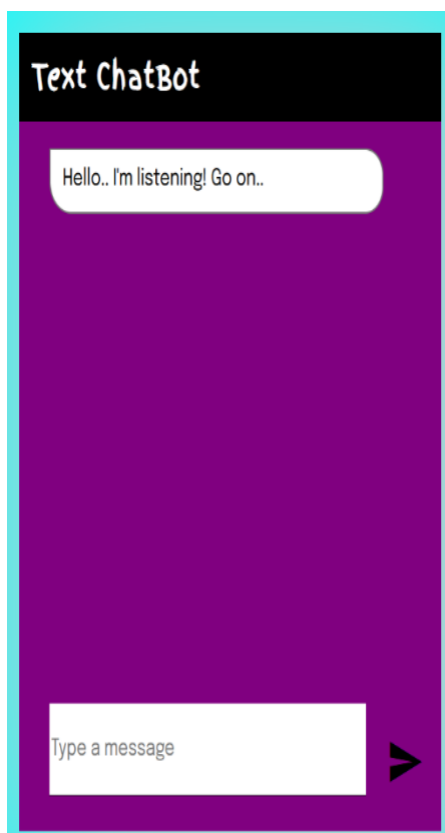
```
  botDiv.classList.add("message");
```

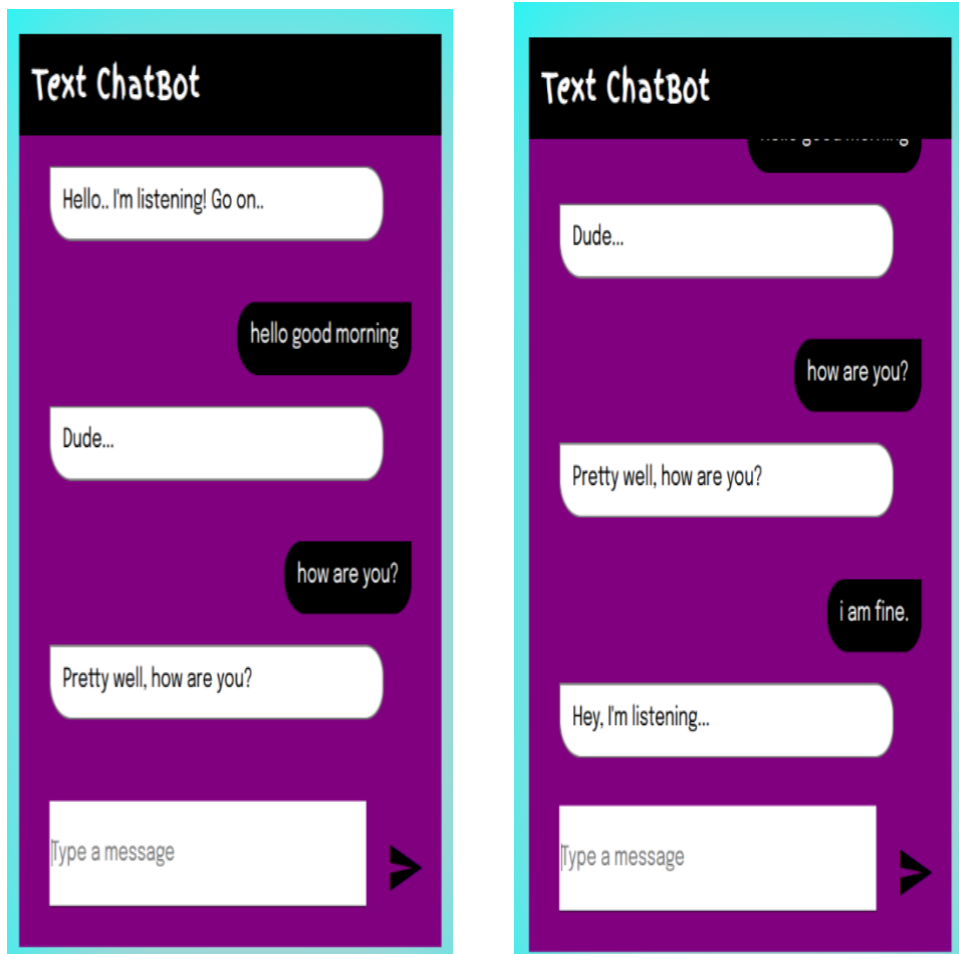
```
  botDiv.innerHTML = `<span id="bot-  
response">${product}</span>`;
```

```
  mainDiv.appendChild(botDiv);
```

```
var scroll = document.getElementById("message-section");  
scroll.scrollTop = scroll.scrollHeight;  
voiceControl(product);  
}  
</script>  
</body>  
</html>
```

Output of our text chatbot:





The above mentioned is our chatbot working mechanism.

<i>S.No</i>	<i>Name</i>	<i>Email Id</i>
1	Amirthasri A	amirthasriarul2324@gmail.com
2	Janani S	jandharsh@gmail.com
3	Harini M	harini662004@gmail.com
4	Srisubhiksha S	srishaxyz@gmail.com