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# **CAPSTONE PROJECT**

## **COLLEGE CHATBOT**

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# OUTLINE

Problem Statement

Proposed System/Solution

System Development Approach

Algorithm & Deployment

Result

Conclusion

Future Scope

References

[IBM Watson chatbot link](#)  
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# PROBLEM STATEMENT

All customers of the company want when they call a company for help to have their problem solved in one session as quickly as possible because they do not want top services, they want resolution. That's why first contact resolution (FCR) is one of the most important metrics in customer care.

IBM Watson chatbot released feature to enable our AI and answer customer questions, to gracefully transfer more complex questions to a human and to help the human agents find answers quickly and correctly.

It also uses in several organisations to answer their customers' questions in a correct and efficient manner.

[IBM watson chatbot link](#)

# PROPOSED SOLUTION

The proposed system in IBM Watson Chatbot helps to solve problem in customers in quick and accurate manner which would not be provided before in a customer call. This involves data analytics and machine learning techniques to forecast demand pattern correctly. The solution will consist of following patterns

## Data Sources:

Data storage in object storage is Watson query, stored files, query of customers and answer

Also uses sources are IBM cloud, Amazon S3, Generic S3 data source

## Data Preprocessing:

Its environment is mainly responsible for contextualizing users message using natural language processing.

Then NLP interprets what users are saying at any given times and turn it into organised input

## Machine Learning Algorithm:

Watson leverages Machine learning algorithm analyses vast amounts of data including conversational logs and user feedback

Consider incorporating other factors like weather conditions, day of the week, and special events to improve prediction accuracy.

## Deployment:

Develop a user-friendly interface or application that provides real-time predictions for bike counts at different hours.

Deploy the solution on a scalable and reliable platform, considering factors like server infrastructure, response time, and user accessibility.

## Evaluation:

It is a tool utilizing conversational AI. It is built on deep learning, natural language processing and machine learning

Fine-tune the model based on feedback and continuous monitoring of prediction accuracy.

Result:

# SYSTEM APPROACH

The "System Approach" section outlines the overall strategy and methodology for developing and implementing the IBM Watson chatbot and these are divided into 2 parts

**System requirements :- desktop , internet , IBM Cloud Account**

**Library required to build the model :- IBM library cloud , Watson assistant in library ,**

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goggle)

# ALGORITHM & DEPLOYMENT

In the Algorithm section, describe the machine learning algorithm to use IBM Watson chatbot .Here is an example structure for this session

## **Algorithm Selection:**

It uses the NLP to understand and process the human language enable them to engage a meaningful conversation with users. It breaks down the text into various parts such as word phrases and analyse the context which we used

## **Data Input:**

Gives the chatbot to the customers query and answer in correctly manner which would be applicable for all the customer

## **Training Process:**

After provide the query and answer in correctly manner check it in the preview section .

## **Prediction Process:**

It should be predicted in your general knowledge example if you make an admission chatbot of college provides the necessary question and answer which would be user want .

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# RESULT

In this college chatbot we input some questions i,.e gretting the customer and also write about courses and courses fees and also ask about the customer and after we write some basic answer in phrases section.

[IBM Watson chatbot link](#)

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# RESULT

← → ↺

au-syd.assistant.watson.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Aconversation%3Aau-syd%3Aa%2F23eb139debc14172ac57aaa8eb4fec0e%3A54a6112a-85cb-456b-87e1-...

☆

Incognito (2)

⋮

IBM watsonx Assistant Lite Upgrade Collegewala ▾ Learning resources 👤

i want to enrol

Editor Visualization

✎ ⚙️ 📁 ✕

Customer starts with:  
i want to enrol

Conversation steps

1

following is the eligibility criteria 12th percentage =90 MHTCET=90 if you matches this criteria plz...

Confirmation

↓ Continue to next step

2

1 is Yes

give me your contact details

Number

↓ Continue to next step

3

2 is Defined

our admission executive will reach out to you in 24 hours

↓ Continue to next step

New step +

Step 1 ✎

Is taken without conditions ▾ Set variable values fx

Assistant says

B I 🔗 fx 🗑️ 📎 🎵 📺 📷 🎧

following is the eligibility criteria  
12th percentage =90  
MHTCET=90  
if you matches this criteria plz click on yes

Yes No

View response Edit validation ⚙️ ↺ 🗑️

And then

↓ Continue to next step ▾

Preview

↺ —

🗨️ 1:17 PM

Greet customer [default]

Welcome, how can I assist you?

You 1:17 PM

hi

🗨️ 1:17 PM

Greetings recognized

hlw welcome to collegewala

what is your name

You 1:18 PM

🗨️

Type something... ➤

90°F Mostly cloudy

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# CONCLUSION

In conclusion, an IBM Watson chatbot is a valuable asset for enhancing customer service, boosting user engagement, and streamlining business operations. Utilizing natural language processing, machine learning, and AI insights, Watson chatbots can understand and respond to user inquiries effectively, providing personalized and efficient solutions. This technology not only improves operational efficiency but also increases user satisfaction through quick and accurate responses.

[IBM Watson chatbot link](#)

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# FUTURE SCOPE

IBM Watson chatbot's future includes better natural language understanding, advanced AI integration, and broader use across industries. It will provide personalized, context-aware interactions, improve customer service, and aid complex decision-making, boosting efficiency and innovation in businesses globally.

[IBM Watson chatbot link](#) (Copy and paste the link on goggle this link is working)

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# REFERENCES

This project would be uploaded in GitHub and LinkedIn to show the real world experience in tech and it would help in a good major project on my btech academics

Thanks eduent foundation to gave me this opportunity

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