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AI Based Chatbot for Engineering Admission System

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ABSTRACT

Interactive College Admission Enquiry controlled by AI and the web Chatbot is a basic, online application that attempts to give Admission-related data. Right now, our chatbot includes the salvage. A chatbot is much of the time considered joined of the premier promising methodologies for artificial intelligence based correspondence among people and machines. It's a computer code program that utilizes linguistic communication process (NLP) and profound learning procedures to direct a web talk spoken correspondence through text and voice. As a GUI, it offers direct correspondence with a live human specialist. By posing a couple of inquiries. It examinations the client's inquiry and concentrates the significant data passages. The deep learning methods used during this chatbot square measure responsible for actually comprehencing the client plans and staying away from any errors. The chatbot answers the client's inquiry demand with the most applicable reaction once the client's purpose has been determined. The client then, at that point, gets each of the information concerning the confirmation enquiry Query and reaction language is English. Project targets settling the inquiries of the clients (parents /students) that are asked with respect to looking for admission to Engineering. It is completely a Web based Application.

Keywords:-*Classification, Convolutional Neural Network, Deep Learning, Autism Spectrum Disorder*

INTRODUCTION

Autism Spectrum Disorder (ASD) is a type of neurodevelopmental disorder. It is a developmental disability caused by the differences in the brain. Prominantly, a child is believed to have an ASD disease if he or she is showing the deficiency in social communication and atypical attention to others and objects in the surrounding.

For instance, during the social conversation, any individual carrying the symptoms of this disease tend to avoid eye contact and their eye gaze shows visual field scanning pattern which is substantially different from normal person. However, any child can get affected with this disorder but the percentage of boys getting affected is four times likely to be detected than among girls.

Nowadays doctors and specialists review the behaviour and growth of the children to identify them as autistic or normal ones. This is very slow and time-consuming method to detect this disorder. Noticing ASD among the children in short span of time is a very challenging task in front of medical healthcare unit.

It is very crucial to detect this disorder at early stages, the sooner it is identified the faster it can get cured. Many people are still unaware that their child is suffering from autism disorder which intensify due to improper care and lack of treatment

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leading to family, domestic and social unrest.

Due to technological enhancement many researchers have started developing computer-aided decision support systems using machine learning techniques, methods to detect the ASD symptoms among the children to ease early treatment. Researcher collected the data based on children's behavioural activities by conducting various questionnaires and interviews, developed various automatic prediction model based on machine learning methods and algorithms which will tend to diagnose ASD at initial phase.

But this method is error prone and inaccurate as children below four years may not understand many things or may give wrong answer out of nervousness in the interviews. This will create bias in the prediction model and reduce prediction accuracy.

LITERATURE REVIEW
The project is concerning interaction between users and chatbot which may be accessed from anyplace anytime. The chatbot will be simply hooked up with any university or school web site with few straightforward language conversions. Chatbot provides numerous info associated with university or school and conjointly students-related info. The chatbot can be used by anyone who can access the university's website [1].

During this paper we offer the planning of a chatbot, that provides associate degree associate degree and correct account any question supported the dataset of FAQs exploitation Intelligence language (AIML) and Latent linguistics Analysis (LSA). example based mostly and general queries like welcome/ greetings and general queries are going to be responded exploitation AIML and different service based queries uses LSA to produce

responses at any time which will serve user satisfaction. This chatbot are often employed by associate degree University to answer FAQs to curious students in an inter- active fashion [2]. In this paper, we have a tendency to propose and describe a replacement recommendation approach, focused totally on the utilization of a custom chatbot which might be coupled to Model's platform employing a net configuration. A chatbot is an automated communication tool, based on intents and designed to emulate communication capabilities and conduct a conversation with individuals. The projected system ought to be able to answer learner's queries in real-time and able to offer a relevant set of suggestions in keeping with their needs [3]. In the gift paper, we've targeted on coming up with a matter communication application particularly chatbot within the academic domain. The projected chatbot assists in responsive queries provided by the users. To develop the system, we've utilized associate ensemble learning technique as random forest within the presence of extracted options from our ready dataset. Besides, the validation system offers a mean F-measure zero. 870 score on varied K-values beneath random forest for the projected chatbot. Finally, we've deployed the pro-posed system in a very variety of wire bot [4]. This project aimed to implement online chatbot system to assist users who access college website, using tools that expose Artificial Intelligence methods such as Natural Language Processing, allowing users to speak with school chatbot exploitation natural language input and to coach chatbot exploitation acceptable Machine Learning strategies therefore it'll be ready to generate a response [5].

PROPOSED METHODOLOGY
Online Enquiry:-Students will enquire regarding admission related question and additionally queries relating to library, bus,

fee structure, etc. Students may also raise queries associated with placement activities and also admission method.

Online Chatbot:-The result are often showed in text format. The question are going to be answered on the basis of queries asked and therefore the additionally the language model engineered and also the response media created. Users that need to enquire regarding the school at the time of admission will question to the chatbot.
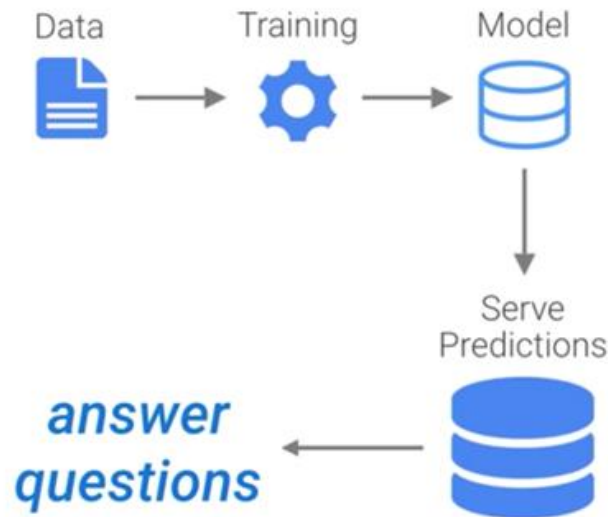

Fig 1: Proposed Methodology

RESULTS AND DISCUSSIONS
EXPERIMENTAL SETUP
1.1   Data Set We had generated our own dataset.

1.2   Performance Parameters The experimental result evaluation, we have notation as follows:

TP: True positive (correctly predicted number of instance)

FP: False positive (incorrectly predicted number of instance),

TN: True negative (correctly predicted the number of instances as not required)

FN: false negative (incorrectly predicted the number of instances as not required),

On the basis of this parameter, we can calculate four measurements

Accuracy= $TP+TN \div TP+FP+TN+FN$

Precision= $TP \div TP+FP$

Recall= $TP \div TP+FN$ F1-

Measure= $2 \times Precision \times Recall \div Precision + Recall$.

Efficiency Issues
- Over all traffic load
- Feeble monitoring system
- Data loss, inaccuracy, inconsistency
- Hacking attacks may cause technical failure
- Mathematical challenges
- Information security and security on technical like network, device, O Set c. Data damage
- Qualitative and quantitative risks

Software Testing
Acceptance Testing User Acceptance Testing is acritical phase of any project and requires significant participation by the end user. It also ensures that the system meets the functional requirements. Test Results all the test cases mentioned over passed successfully.

Test Results: All the test cases mentioned above passed successfully. No defects encountered.

Test cases and Test Results:
Testing of project problem statement using generated test data (using mathematical models, GUI, Function testing principles, if any) selection and appropriate use of testing tools, testing of UML diagram's reliability.
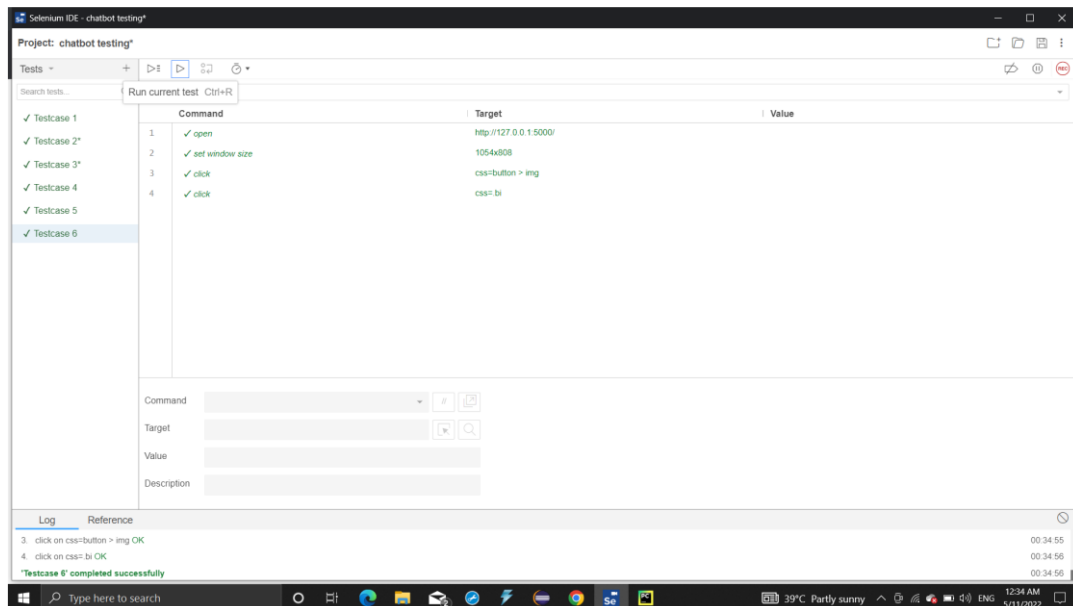

Fig.2: Screenshot

APPLICATION
• Enhance Artificial Intelligence Based Chat Bot System, it will be used in most of the colleges and also it can be used in various firms and business-related industries.

CONCLUSION
With the proposed approach, significant blemishes in current Chatbots, for example, their failure to grasp the connection among substances and their properties, can be tended to and settled. The proposed framework effectively maps and recovers information from various sources. By using the discoveries of this review, we can keep on creating clever visit bots that can help clients in tracking down the suitable data.

It likewise helps clients in acquiring replies without hanging tight for the administrator staff to answer. We are currently ready to effectively connect with philosophy bots in the wake of getting adequate preparation from ontology bots.

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