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### **Health Care ChatBot**

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**ABSTRACT:** AI tech in healthcare has changed patient care and communication. These technologies have facilitated the development of healthcare chatbots that used artificial intelligence algorithms to deliver fast and personalized healthcare services to clients. This paper describes making a healthcare chatbot using AI to boost patient interaction, better medical questions, and help healthcare.

#### I.NTRODUCTION

Healthcare everywhere has lots of problems. There are more patients, not enough resources, and a need for better and more personal care AI healthcare chatbots are a good solution to help with these issues. They can chat like humans and assist people right away They help patients, caregivers, and healthcare workers. The chatbot will answer medical questions, give health tips, and help with appointments or medication reminders. Also, this chatbot helps patients get more involved and happy by providing an easy way to access healthcare. Patients can talk to the chatbot using websites, apps, or messaging, making healthcare info and help available anytime, anywhere. This paper talks about making a healthcare chatbot and adding it to healthcare systems We will learn how to design, construct, and deal with any problems that come up. Also, we will think about the good things it can bring and the important things to think about, like being fair and keeping information safe. In total, this study shows how AI tech can change healthcare for the better. It can make healthcare better for people and help make healthcare info better.

#### II. RELATED WORK

Understanding How People Talk: We studied how people express themselves when talking about health issues. This helped us teach the chatbot to understand different ways people might ask questions or describe their symptoms. Learning from Medical Information: We gathered and organized a lot of medical information, like what different symptoms could mean or how certain treatments work. This data helps the chatbot give accurate and helpful advice These algorithms enable the chatbot to continuously improve its knowledge base, enhancing its ability to respond to queries and offer informed guidance. To ensure its effectiveness, the interface was rigorously tested with actual users to gauge their ease of use and understanding. Keeping Your Information Safe: We made sure that the chatbot keeps your personal health information private and secure. This means only you and authorized healthcare professionals can access your data. Checking if it Really Works: We tested the chatbot with real users and healthcare experts to see if it gives accurate advice and helps people with their health concerns. Speaking Your Language: We made sure the chatbot can understand different languages and adapt to different cultural preferences.

#### III. METHODOLOGY



Access the healthcare chatbot through your computer, smartphone, or preferred messaging platformAsk Your Question: Type in or talk about your health question or problem.Get Instant Answers: The chatbot will understand what you're

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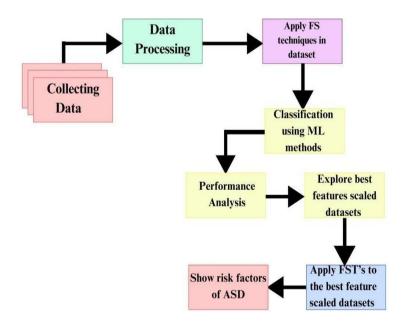


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asking and give you helpful information right away. It's like having a friendly expert available to answer your health questions anytime. Explore Extra Features: Some chatbots can do more than just answer questions. They might help you book appointments, set reminders for medications, or connect you with a real doctor if needed. Keep Your Info Safe: Your privacy is important. The chatbot keeps your health information safe and only shares it with you or trusted healthcare professionals. Share Your Thoughts: If you liked using the chatbot or have suggestions for improvement, you can share your feedback. This helps make the chatbot even better for everyone.



#### IV. PROPOSED METHODOLOGY

Set Clear Goals: Start by figuring out what you want the chatbot to do. Do you want it to answer health questions, help schedule appointments, or remind people to take their medicine? Define what the chatbot should focus on and who it's for.Gather user requirements by consulting with healthcare professionals, affected individuals, and other stakeholders to determine the essential functionality of the chatbot This helps you figure out what people want and need from the chatbot. Choose the Right Tech Tools: Pick the tools and technology that will help build the chatbot. The capabilities of this system encompass the following: - Comprehension of human speech (natural language processing) - Continuous enhancement and evolution (machine learning) - User-friendly appearance and operation (user interface design)Plan How People will Talk to the Chatbot: Map out how the chatbot will talk to people. Think about how it will understand questions, give helpful answers, and have conversations that feel natural and easy for users. Start Building: Create a basic version of the chatbot with the chosen technology. This is like building the first version of a new gadget to see how it works. Teach the Chatbot about Health: Give the chatbot access to medical information and guidelines so it can give accurate and reliable advice. Make it Smarter with Technology: Use smart technology like natural language processing to help the chatbot understand and respond better to what people say. Machine learning can help it learn from conversations and get better at helping users over time. Test, Test, Test: Try out the chatbot with different scenarios and real users. See how well it understands questions, gives good answers, and handles different situations. Gather user feedback and use it to enhance your product or service. Launch and Keep an Eye on it: Once the chatbot is working well, launch it for people to use Monitor its performance, resolve any problems, and enhance it for optimal functionalityKeep Learning and Improving: Listen to what users say and learn from their interactions with the chatbot. Employ this feedback to continuously improve the chatbot's intelligence, usefulness, and accessibility to users

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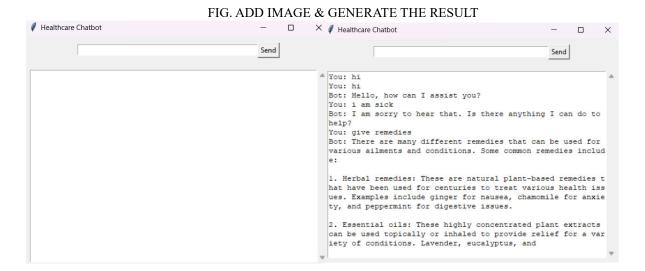
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#### VI. CONCLUSION AND FUTURE WORK

Utilizing a healthcare chatbot can offer substantial benefits: Expanded availability of medical knowledge \* Enhanced patient involvement \* Improved efficiency in healthcare delivery Using advanced technologies like NLP (which analyzes language) and ML (which makes computers learn on their own), we can build a chatbot that offers trustworthy and easy-to-reach help to users looking for health advice and support.By using our approach, we've developed a chatbot that: \* Comprehends users' questions and intentions. Offers tailored and precise responses based on each user's needs. \* Continuously adapts and enhances its knowledge to stay up-to-date and provide optimal assistance." By integrating medical knowledge, implementing advanced NLP and ML models, and focusing on user experience, we have created a valuable tool for healthcare communication and assistance.

#### REFERENCES

- 1. Shabeena Lylath, Laxmi Rananavare, "Efficient Approach for Autism Detection using deep learning techniques: A Survey" REVA University Bangalore, India.
- 2. Shahad Sadeq Jaffar, Huda Abdulbaqi, "Facial Expression Recognition in Static Images for Autism Children using CNN Approaches" Mustansiriyah University, Baghdad, Iraq
- 3. Varun Ganjigun Prakash, Man Kohli, Swati Kohli, A Prathosh, Tanu Wadhera, Debasis Panigrahi, John Vijay, Sagar Kommu, Varun Prakash, "Computer Vision-Based Assessment of Autistic Children: Analyzing Interactions, Emotions, Human Pose, and Life Skills", the Biotechnology Industry Research Assistance Council (BIRAC).
- 4. Kainat Khan, Rahul Katarya, "Machine Learning Techniques for Autism Spectrum Disorder: current trends and future directions" Delhi Technological University New Delhi, India.
- 5. S Mahedy Hasan, A Mamun, Anwaar Ulhaq, Govind Krishnamoorthy, "A Machine Learning Framework for EarlyStage Detection of Autism Spectrum Disorder," Regional Australia Mental Health Research and Training Institute, Manna Institute, NSW, Australia.
- 6. Manu Kohli, Arpan Kumar Kar, Shuchi Sinha., "The Role of Intelligent Technologies in Early Detection of Autism
- 7. Spectrum Disorder
- 8. (ASD): A Scoping Review", Indian Institute of Technology Delhi, Hauz Khas, New Delhi 110016, India.
- 9. LinkedIn Page "Autism Speaks





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