**CSCE 5214 -Software development for AI**

**AI BASED HEALTHCARE CHATBOT**

**Project Proposal**

**Team Members**

1. Sai Charan Divi – 11594741
2. Swapna Priya Pala Chitti Babu – 11609223
3. Lakshmi Hima Bindu Meda – 11619641
4. Hari Chandana Eluri – 11660554
5. Chandrika Vasantha – 11608413

**Github Link:** <https://github.com/topics/healthcare-chatbot>

**Abstract:**

In today's healthcare environment, AI-based healthcare chatbots have become an essential option, providing a conversational interface for medical information, symptom analysis, appointment scheduling, and health coaching. This study carefully examines the evolution, design, and significant influence of artificial intelligence and natural language processing on user experience and accessibility in healthcare. We examine how they fill in healthcare service gaps, maintain round-the-clock availability, and encourage user-friendly interactions. Additionally, the ethics of user data security and privacy are looked at.

**Introduction:**

Access to timely medical advice and healthcare information can be a key factor in determining one's wellbeing in today's fast-paced society. The traditional healthcare system, however, frequently encounters difficulties like lengthy wait periods, a lack of accessibility, and the requirement for quick aid in non-emergency cases. Healthcare chatbots powered by AI are becoming a game-changing solution to these problems.

**Project objectives:**

1) Examine the architecture of AI-based healthcare chatbots to comprehend their structure and operation.

2) Create a user-friendly interface that enables smooth user interactions.

3) Integrate AI-driven functionalities, such as symptom analysis and medical recommendations, into existing systems.

**Timeline:**

* Architecture Analysis
* User Interface Design
* Development and Integration
* Testing and Validation
* Documentation and Deployment

**Expected Deliverables:**

1) A user-friendly chatbot interface for healthcare.

3) An AI-driven healthcare chatbot that can analyze symptoms and offer suggestions on treatment.

**Conclusion:**

In summary, AI-based healthcare chatbots are essential for ensuring prompt medical advice and accessibility to healthcare. The ultimate goal of this project is to improve user interactions with healthcare by offering insightful information about their evolution, architecture, and effects.

**References:**

[1] Hsu, J., & Huang, J. (2020). Artificial Intelligence and Healthcare. Annual Review of Biomedical Data Science, 3(1), 35-52.

[2] Choi, J., & Lee, W. S. (2021). Chatbots in Healthcare: A Comprehensive Review. Healthcare Informatics Research, 27(2), 115-126.

[3] Rajkomar, A., & Dean, J. (2019). AI in Health Care: Anticipating Challenges in Ethical AI Deployment. JAMA, 322(23), 2377-2378.