**ABSTRACT**

*The healthcare industry has been greatly impacted by the rapid advancement of information technology in recent years, along with other different businesses. Web-based medical appointment booking systems have become increasingly popular due to their ability to improve patient happiness, streamline procedures, and make healthcare more accessible. This is one noteworthy advancement in this regard. In the past, making medical appointments was typically done over the phone, with manual record-keeping and lengthy waits. These methods resulted in a delay in patient care, more administrative work, and maybe mistakes. This project, which focuses on the case study of Federal Teaching Hospital, Gombe, aims to create and deploy an online medical appointment booking system in response to these shortcomings in conventional medical booking systems.The project's frontend was built with HTML, CSS, and Javascript; PHP handled the middleware, and Bootstrap acted as a bridge between the frontend and backend. Flexibility, usability, adaptability, and scalability are given top priority in the design. The system also has the ability to recognize incorrect entries, validate user inputs, and display error warnings to assist users.*