# \*Project Title:

Medical Chatbot

(150 characters)

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# Which real world problem shall be solved by this FYP?

The "Medical Chatbot" aims to provide accessible and reliable medical information and support. It addresses the issue of limited access to healthcare professionals by offering instant, accurate medical advice and answering health-related queries. This tool can assist users in understanding symptoms, finding information on medications, and receiving basic health guidance, thus bridging the gap between patients and healthcare services, especially in underserved areas or during off-hours.

(800 characters)

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**1:** CIIT/FA21-BCS-066/WAH Hussain Ali

**2:** CIIT/FA21-BCS-080/WAH Ali Shan

**Detail of Project Members:**

Ayesha Naeem

**Supervised By:**

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**Project Streams:**

Web-based FYPs Desktop Applications

Mobile Apps FYPs Game-based FYPs

Hardware-based

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# Project Description:

(3000 characters)

**Note:**.

1. **What is the overall working/summary of this FYP?** (1000 characters)

The "Medical Chatbot" uses NLP and machine learning to interpret and respond to medical queries in real time. It offers accurate health information, symptom checking, and medication guidance. Accessible through web and mobile platforms, it improves healthcare accessibility by providing instant support and reducing reliance on in-person consultations.

# Write name and detail of each module in your FYP.

1. **User Query Module**: Captures and interprets user medical queries using NLP.
2. **Response Generation Module**: Provides accurate medical information and advice based on user queries.
3. **Symptom Checker Module**: Analyzes symptoms reported by users and suggests potential conditions.
4. **Medication Information Module**: Offers details about medications, including uses, dosages, and side effects.
5. **User Interface Module**: Provides an intuitive interface for users to interact with the chatbot on web and mobile platforms.
6. **Learning & Feedback Module**: Collects user feedback to improve the chatbot’s responses and accuracy over time.

# Member-wise Module Information

1: Which module shall be developed by student-1?

(500 characters)

1. User Query Module
2. Response Generation Module
3. Symptom Checker Module

2: Which module shall be developed by student-2?

(500 characters)

1. User Query Module
2. User Interface Module
3. Learning & Feedback Module

# Were similar FYPs already developed on the same topic in your department?

Yes No

# (d-1) Copy name(s) of latest one or two similar FYPs from RMS student console and paste below. (150 characters)

Voxie poxie

**(d-2) Mention below the three (3) new, but main, functionalities you are adding to this FYP.** (600 characters)

1. Advanced Symptom Checker

2. Medication Interaction Alerts

3. Personalized Health Tips

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Select tools, DBMS and platform as per above stream that you have chosen.

Tool(s) : Python, TensorFlow, Dialogflow, Flutter

DBMS: Firebase, SQLite

Platform: Windows, Linux

Platform : Web,Mobile

# Development Environment:

* **Tools** (e.g. Python, TensorFlow, NLP Libraries (e.g., Dialogflow, GPT-based models), Flutter, IDEs (e.g., Visual Studio Code, PyCharm)
* **DBMS** (e.g. Firebase, SQLite (for storing user data, conversation logs, and feedback)
* **Platform** (e.g. Cross-platform (Android Studio for mobile development, web platforms)

# Evaluation Criteria for 7th Semester:

(Week 14 - 16)

1. SRDS (Functional & Non-functional requirements, Use case diagram, Sequence diagram, Class diagram, Entity relationship diagram / Detailed hardware configuration)
2. Implementation of ONE major use case (>=30% FYP work), which does not include login/logout.
3. Interface with complete functionality of major use case / In case of hardware, provide configuration of major use case functionality.

# Evaluation Criteria for Internal 8th Viva:

(Week 12 & 13)

* 1. Implementation of all use cases (>=90% FYP work)
  2. Project in running and working form as per Use case, Class and Sequence diagrams as mentioned in SRDS
  3. Initial FYP report
  4. Deployment
     + Web: Your website must be online on any free/paid hosting service
     + Mobile App: Your app must be in APK/iOS form so that it can be installed
     + Gamimg: Your game must be in executable form so that it can be installed
     + Desktop Application: Your application must be in executable form so that it can be installed
     + Hardware: Your final product must be in proper casing and should give look and feel of sellable item