ASSIGNMENT ON COM 423 TASK 2 BY OBIRIJA JEREMIAH ONUABUCHI 2022/HND/35634/CS

1. Medical Diagnosis Expert System

Expert System: DXplain

Domain: Healthcare/Medical Diagnosis

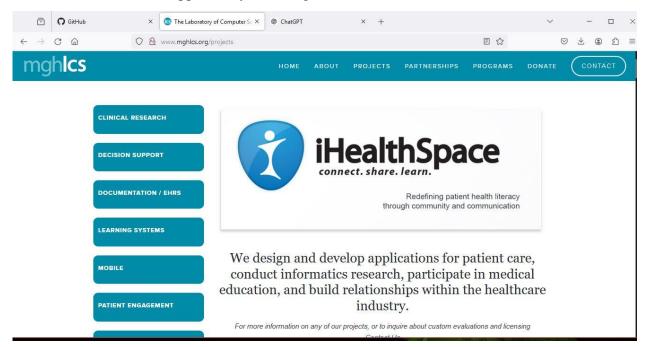
Interaction:

• **Input:** Symptoms and clinical findings entered by the user.

• **Output:** Potential diagnoses ranked by likelihood, along with explanations and supporting medical literature.

Example Interaction:

- User Input: "Patient presents with fever, cough, and chest pain."
- **System Output:** "Possible diagnoses include pneumonia, bronchitis, and influenza. Based on additional symptoms and test results, pneumonia is the most likely diagnosis. This conclusion is supported by clinical guidelines and recent studies."



2. Financial Advisory Expert System

Expert System: Wealthfront

Domain: Personal Finance and Investment

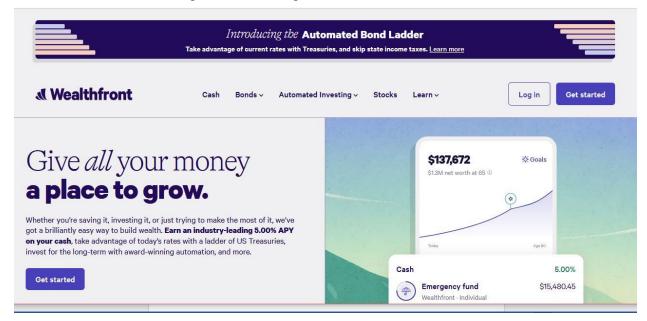
Interaction:

• **Input:** User's financial goals, risk tolerance, current assets, and investment preferences.

• **Output:** Customized investment portfolio recommendations and financial planning advice.

Example Interaction:

- **User Input:** "I am 30 years old, with a moderate risk tolerance, and I want to save for retirement."
- **System Output:** "Based on your age, risk tolerance, and retirement goals, we recommend a diversified portfolio consisting of 70% stocks and 30% bonds. This allocation is designed to achieve long-term growth while managing risk. Additionally, consider contributing to tax-advantaged retirement accounts such as a 401(k) or IRA."



These expert systems utilize knowledge bases, algorithms, and rules to simulate human expertise in their respective domains, providing users with valuable insights and recommendations based on the information provided.