Green University of Bangladesh
Department of Computer Science and Engineering (CSE)
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Course Title: IDP 1
Course Code: CSE 308
Section: 232-D2

Lab Experiment Name: Draw an Use Case diagram for your project

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Lab Report Status

Marks: …… **Signature: .....**
Comments: ..... **Date: .....**

1. INTRODUCTION

This lab experiment involves creating a Use Case Diagram (UCD) for the LifeLink system to visualize the interactions between users and admins with system modules. The LifeLink system allows users to manage their health through features like disease prediction, doctor suggestions, and emergency contacts. Admins can update system data and manage user interactions.

The use case diagram outlines key functionalities and the relationships between system actors (Users and Admin), helping us understand how data flows and how the system's processes are organized.

2. OBJECTIVES

- Identify key features of the LifeLink system for users and admins.
- Analyze user interactions with system modules like Disease Prediction, Doctor Suggestions, and Emergency Contact.
- Understand admin functionalities, including Login, Doctor Management, and User Updates.
- Explore relationships between system components and their extend and include interactions.

3. PROCEDURE

In this experiment, we carried out the following steps:

- **Identified actors: Users and Admin.**
- Defined system modules: Profile, Disease Prediction, Doctor Suggestions, Blood Donor, Emergency Contact, etc.
- Mapped relationships: Used extend and include relationships to show optional and mandatory actions.
- Illustrated user interactions: Determined how users and admins interact with system modules (e.g., Profile, Doctor, Logout).
- Created Use Case Diagram: Visualized user and admin processes, focusing on data flow and system interaction.

4. IMPLEMENTATION

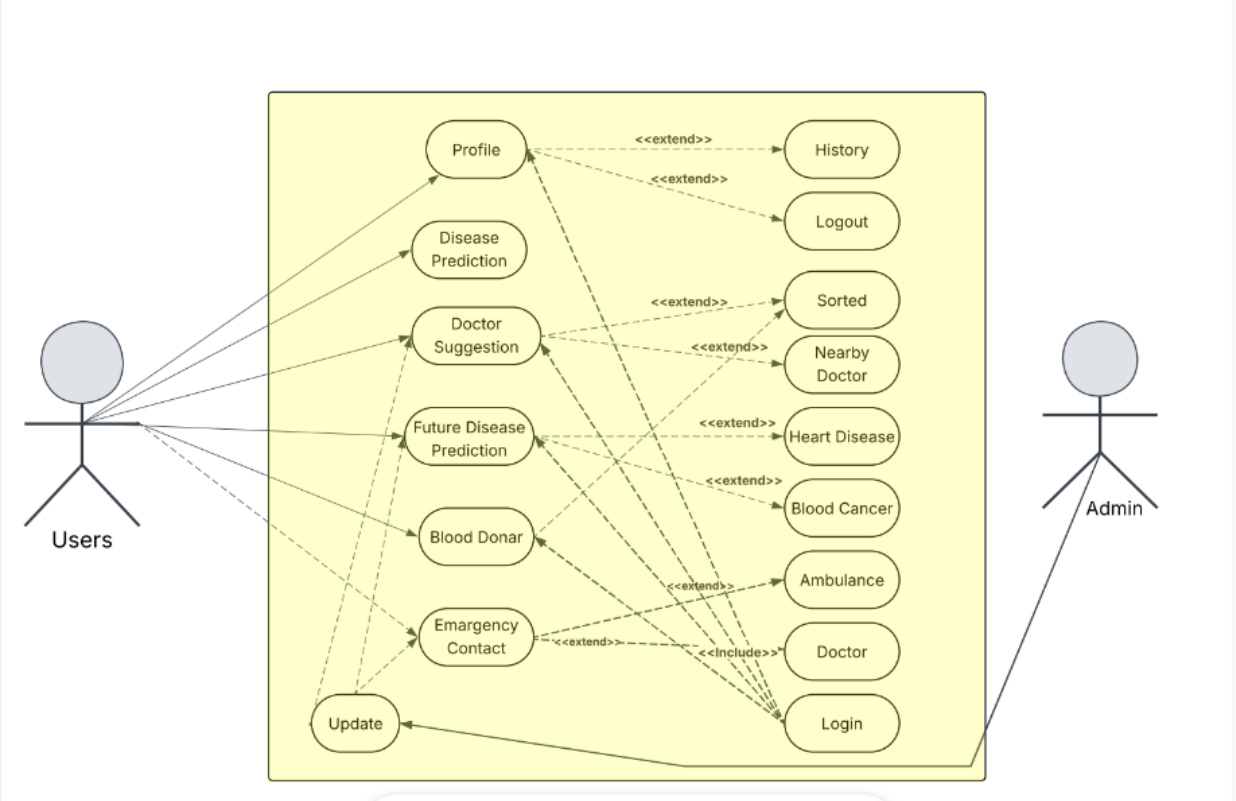

Fig: Use Case Diagram

6. ANALYSIS AND DISCUSSION

The Use Case Diagram effectively illustrates the interactions between Users and Admins with the LifeLink system. It shows how users interact with core features such as Disease Prediction, Doctor Suggestions, and Emergency Contact, while admins have more control over system management tasks like Doctor Management and Login functionalities.

The use of extend relationships highlights optional features that enhance the user experience, such as Heart Disease and Blood Cancer predictions, while include relationships demonstrate mandatory actions, such as accessing the Doctor feature. The inclusion of features like Profile, Update, and Logout ensures that both users and admins have essential controls for managing their data and system access.

This diagram is crucial for understanding the system's high-level functionality, as it clearly identifies the key actions, user roles, and dependencies between features. It also helps in

visualizing how different system components interact, making it easier to plan future improvements and ensure efficient data flow across various modules. The diagram lays a foundation for developing more detailed system designs and enhancing the overall user experience by emphasizing the relationships between the system's features.