

WIEHACK 2.0

ROUND 1: ABSTRACT SUBMISSION

Team Whack - Healthcare monitoring system

- **What**

To build a system for patients and hospitals to improve efficiency and patient convenience by pre-registering important information regarding patient data to assist hospitals in initial manual time-consuming tasks like filling forms. It can help medical personnel categorise patients to respective departments in the hospital and prioritize patients based on their symptoms.

- **Why**

The problem addressed is the time and information lag that occurs in filling forms in hospitals. We propose a system where a form can be filled beforehand. The data of patients will be easily available to the hospitals and that can be utilized for efficient monitoring and better treatment.

In a densely populated country like India, hospitals are always overcrowded and unnecessary time is wasted in filling forms. This issue is especially relevant in the current period where availing necessary facilities from any hospital is considered to be an arduous task and the admission system is not very feasible.

This is a common issue and we have been analyzing the problems faced by the patients and communication lag and have attempted to find a generalised solution.

- **How**

The patient is required to fill a common form online and it will be sent in real time to the hospital where the patient details will be saved under a patient ID.

The project can be classified into two components:

Patients Base:

The details of the patient are to be filled according to the person filling the form.

1.Patient/Guardian/Family Member

Input past medical records and present medical conditions of the patient. A section to input any immediate medication that was provided to the patient just before the incident.

2.Unknown Witness

Optional input for features like name and age. Allows input of accident details and any visible symptoms.

3.Ambulance Staff

Monitor the patient's condition and add necessary details like blood pressure, pulse, first aid etc. He/she will fill in the medical details and can give feedback.

Hospitals Base:

According to the details and symptoms the system will recommend and classify a particular department and also classify the priority of the patient as high or low risk. These recommendations will be made on the basis of factors with classification algorithms.

If the current hospital cannot adhere to the patient's needs, the form will be sent to another hospital taking the patient's consent.

By the end of the hackathon, we aim to deploy a web application online that allows specified user to input the details of the form which can be stored in a database for hospitals to refer to in future. We would also like to deploy the recommender system.

- **Who**

1. Bhumika Bhatia
2. Anushka Lal
3. Anushka Gupta
4. Diksha Chugh

Our expertise:

1. Problem solving
2. ML
3. NLP
4. Programming Skills

We study Computer Science Engineering from DTU. We have tried to implement our skills and expertise through this project. We came up with a real world problem and have tried our best to come up with an innovative, feasible and efficient solution.