



#### **TEAM MEMBERS:**

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**Final Project** 



# HOSPITAL SUGGESTION SOFTWARE

# **AGENDA**

- 1. Understanding user needs
- 2. Overview of Hospital Suggestion Software
- 3. Technical Architecture
- 4. Data Collection
- 5. Development process
- 6. User interface Design
- 7. Geological integration

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## PROBLEM STATEMENT

Accessing suitable medical assistance efficiently poses a challenge for individuals unfamiliar with their local healthcare landscape. In response to this, the need for a user-friendly and location-aware solution arises. Current options lack personalization and may not consider the specific medical concerns of users. To address these issues, our goal is to develop a Hospital Suggestion Software that utilizes geolocation and machine learning, offering tailored recommendations based on the user's location and reported medical issues.



## PROJECT OVERVIEW

#### **Key Features:**

**Geolocation Retrieval:** The frontend seamlessly retrieves the user's latitude and longitude using the browser's geolocation API.

**Nearby Hospitals Retrieval:** The backend queries the Google Maps Places API to identify and retrieve information about nearby hospitals.

User Input Collection: A user-friendly interface allows users to articulate and describe their medical issues effectively.



**Machine Learning Integration:** Machine learning algorithms categorize and classify user-inputted medical issues, forming the basis for accurate hospital recommendations.

**Hospital Suggestions:** Based on the categorized medical issue, the backend provides users with tailored hospital suggestions.

#### **System Components:**

**Frontend:** Responsible for user input collection and displaying hospital suggestions.

**Backend:** Processes geolocation data, interacts with external APIs, and integrates machine learning algorithms.



**External Interfaces:** Interfaces with browser geolocation APIs, Google Maps Places API, and machine learning models.

#### **Requirements:**

**Functional Requirements:** Include geolocation retrieval, nearby hospital retrieval, user input collection, machine learning integration, and hospital suggestions.

**Nonfunctional Requirements:** Include performance, safety, security, and software quality attributes to ensure a positive user experience and data protection.



#### WHO ARE THE END USERS?

The end users of the Hospital Suggestion Software are individuals seeking medical assistance. These users could be patients looking for healthcare services for themselves, caregivers seeking medical help for others, or concerned individuals trying to find appropriate medical assistance.

The software is designed to cater to users with varying levels of technical proficiency, ensuring that anyone in need of medical help can easily use the application to receive personalized hospital recommendations based on their location and reported medical issues.

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### YOUR SOLUTION AND ITS VALUE PROPOSITION



Personalized Recommendations: The software provides personalized hospital recommendations based on the user's location and reported medical issues, ensuring that the suggestions align closely with the user's specific healthcare needs.

**Enhanced User Experience:** By offering a user-friendly interface and intuitive design, the software enhances the user experience, making it easy for individuals to find relevant hospital recommendations quickly and efficiently.

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Efficient Access to Medical Assistance: The software helps individuals access suitable medical assistance efficiently, reducing the time and effort required to find relevant healthcare services.

Improved Healthcare Accessibility: By providing information about nearby hospitals and their specialties, the software improves healthcare accessibility, helping users make informed decisions about their healthcare options.

Streamlined Healthcare Process: The software streamlines the process of finding the right healthcare provider by leveraging machine learning to analyze and categorize medical issues, saving time and resources for both users and healthcare institutions.

## THE WOW IN YOUR SOLUTION

The "wow" factor in this solution lies in its ability to provide highly personalized and relevant hospital recommendations to users based on their specific location and reported medical issues.



By leveraging geolocation APIs and machine learning techniques, the software can offer suggestions that are tailored to the user's individual healthcare needs, enhancing the user experience and potentially improving health outcomes.

Additionally, the integration of machine learning adds a layer of intelligence to the system, allowing it to continuously improve and refine its recommendations over time.

This level of customization and sophistication sets the software apart and makes it a valuable tool for individuals seeking medical assistance.



By providing users with information about nearby hospitals and their specialties, the software can help individuals make more informed decisions about their healthcare options.

# **RESULTS**



