

Slide 1: Title Slide

Good afternoon esteemed faculty. My name is Umamah Hussain and today along with Aiza and Minaal Khurram, I will be presenting our final year project titled 'Muhaafiz - A Comprehensive Emergency Application for Pakistan'. This project is a collaborative effort to address critical gaps in Pakistan’s emergency response systems. Let's dive into the details.

Slide 2: Introduction

Pakistan’s emergency response systems are fragmented and often ineffective, leading to significant delays during crises. There is no unified platform for reporting emergencies or accessing real-time medical data. Additionally, public awareness of first aid and immediate response measures is minimal. Muhaafiz is designed to solve these problems by integrating emergency services with hospital data in real time, providing users with immediate assistance and guidance. This project combines advanced technology, including AI and real-time synchronization, to bridge the gap between the public and emergency services.

Slide 4: Problem Statement

The current emergency response system in Pakistan faces significant challenges, which we have identified as part of our problem overview. Firstly, there are long delays in response times, which often result in critical situations escalating before help can arrive. Additionally, there is a lack of real-time information regarding hospital beds and medical equipment, making it difficult for emergency responders and the public to locate available resources during times of need."

Another major issue is the absence of a centralized platform for reporting different types of emergencies. At present, people must rely on separate services for incidents like medical emergencies, fires, or thefts, leading to delays and confusion. Finally, there is a widespread public unawareness of first aid measures, which exacerbates the risk of harm in emergencies.

These problems have severe consequences, such as delayed medical care, difficulty in finding available resources, increased risk due to lack of first aid knowledge, and inefficient handling of incidents like fires, thefts, and accidents.

Slide 4: Scope of the Project - Overview

Muhaafiz covers real-time emergency reporting, AI-powered first aid instructions, real-time hospital data integration, and live location tracking. Furthermore, we aim to simplify hospital paperwork to reduce the time it takes for patients to receive care.

Scope - Users

The app will cater to a broad spectrum of users, including the general public, hospitals, emergency responders, and administrators. **Muhaafiz** will be available on both mobile platforms for users and a web-based dashboard for hospital and administrative management. A real-time database will ensure data synchronization across all platforms, and the app will be accessible in underserved areas of Pakistan, promoting inclusivity

Exclusions

It is important to note that Muhaafiz does not provide direct medical consultations or long-term healthcare management. The app focuses solely on emergency response."

Slide 9: Goals of the Project

Our project aims to develop a comprehensive emergency response application with the following key objectives:

- Enable Quick and Accurate Emergency Reporting
- Automated Emergency Calls with Location Details
- Real-Time Hospital Data and Streamlined Admission
- AI-Powered First Aid Assistance
- Facial Recognition for Quick Identification:
- Safety Timer for Personal Security
- Minimize Delays in Emergency Response

Future Goals

Looking ahead, our future goals for **Muhaafiz** include scaling the app nationwide, integrating with more hospitals and emergency services, adding multi-language support to accommodate Pakistan’s diverse population, and advancing our AI algorithms for more sophisticated first aid guidance."