Tecstorm

Project Title: FastAid

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Problem Description

FastAid is a technological platform developed with the goal of optimizing the operation of the National Health Service and emergency services through the integration of artificial intelligence into the communication and incident management process.

Problem Being Addressed

The current emergency response system faces several challenges, including service overload, long response times, communication failures between entities, and difficulties in efficiently allocating resources. These issues contribute to widespread public dissatisfaction and reduced effectiveness of the national emergency system.

Commercial Potential

FastAid has strong potential for adoption by public and private entities such as fire departments, police forces, emergency medical services, hospitals, and civil protection agencies. The solution can be licensed as a centralized incident management platform, adaptable to different regions and countries, enabling reduced operational costs and significantly improved emergency response efficiency.

Expected Results

The expected outcomes include reduced emergency response times, improved coordination between services, more efficient use of available resources, and an overall improvement in the quality of service provided to citizens.

Team Motivation

The team participated in this initiative driven by the growing decline of the national health system and a strong desire to actively contribute to a technological solution with real social impact. FastAid reflects the team’s commitment to using innovation and artificial intelligence to address critical societal challenges.

Scientific and Technical Component

The development of FastAid is based on a modern and scalable architecture. The backend was developed in Python using the Django Rest Framework, while the frontend was built in TypeScript using React.

Telephony communication is handled through the Twilio platform, enabling the recording and processing of emergency calls. For automatic call transcription and incident report generation, the Gemini Pro API, powered by artificial intelligence, was integrated. This technology analyzes call content, extracts relevant information, and supports appropriate resource allocation.

The system also includes a real-time interactive map and an operational dashboard for monitoring incidents and team availability.