

Project Proposal

Name of the Project: AI Health System for Doctors and Patients

The URL of the Project Web Page: <https://truepositive-bitirme.github.io/truepositive.github.io/>

Names of the Team Members:

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Project Description (1-2 paragraphs):

This project focuses on the design and development of a web-based AI Health System that supports both doctors and patients through artificial intelligence-driven medical analysis. The system is built with a dual-role architecture, offering role-specific interfaces and outputs. For doctors, the platform provides AI-assisted diagnostic support by analyzing medical images such as X-rays, CT scans, MRIs, and ultrasound images using deep learning-based computer vision models. These outputs are designed as decision-support tools, including confidence scores and explainable visual cues, to assist clinicians in early disease detection and clinical evaluation without replacing professional medical judgment.

For patients, the system offers a simplified and ethically controlled interface that allows users to describe their symptoms in natural language. Using natural language processing techniques, the system generates basic, non-alarming health suggestions accompanied by clear medical disclaimers that emphasize the necessity of consulting licensed healthcare professionals. Special attention is given to privacy, security, and ethical responsibility: sensitive diagnoses are withheld from patient-facing views, and all data is processed in compliance with healthcare regulations such as GDPR and KVKK. By combining image-based and text-based AI modules within a secure, role-aware framework, the project aims to improve healthcare accessibility, reduce diagnostic oversight, and demonstrate responsible use of AI in medical applications.