



Project Proposal

# AI Powered Medical diagnosis Assistant

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# 1 Problems

A medical error is a preventable adverse effect of medical care, whether or not it is evident or harmful to the patient. The problems that commonly occur during providing health care are:

- Adverse drug events and improper transfusions
- Misdiagnosis, under and overtreatment
- And mistaken patient identities

# 2 Solution-Project Idea

This project will mainly articulate on building a software to help medical staff to improve the care of patients and enhancing safety by using technology to avoid errors.

AI is being used in the medical industries for layering risk, identifying hotspots in chronic disease, and accounting for the social determinants of health.

Use accurate machine learning Algorithm to help medical professional to diagnose. The main goal is to help diagnose patients more accurately and also prescribe the most suitable treatment.

# 3 Objectives

This software will help medical professional to make decision when diagnosing patients. The software should be able to:

- **1-Identify the disease the patient are suffering from** (Panic disorder, Metabolic disorder, Eating disorder, Asthma, Teething syndrome ect) according to the symptoms described by the doctor.
- **2-Classifies Benign or Malignant cancer by processing photos of skin lesions.**

## 4 Project Approach

### 4.1 Methodologie

In order to run through this Project, we will grasp together all our knowledge to build and test **differeents machine learning Models**, Inside a [Jupyter Notebook](#),I will use mainly 3 programming languages :

- [Python](#)
- [Julia](#)
- [R](#)

### 4.2 Software interface

Moreover we will use those **Frameworks** below to build the FrontEnd and the desktop app.

- [Visual Studio](#)
- [Flutter SDK and Dart Packages to build the desktop Software](#)
- [Firebase API and Node Js](#)

### 4.3 Deployment

To end up I will Deploy our models on edge devices as embedded models.Indeed the best methods for me is to use a cloud service for continuiuous Deployment.

- [Microsoft Machine Learning Studio or Azure End-point](#)
- [Git CI/CD Workflows](#)
- [Firebase Hosting services](#)