



Exact Sciences OCR Hack

Ideation Presentation

Team
TheRenaissance

Introduction

We are the final year students of Computer Engineering from Anand(Gujarat). We all have skills in different domains like frontend, backend development and Machine Learning. Here we present our idea for Optical Character Recognition Hackathon.

Team **TheRenaissance**

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THE CHALLENGE

**HOW MIGHT WE GET
EFFECTIVENESS IN
AUGMENTING THE
EXTRACTION OF DATA
FROM STANDARD FAX
ORDER FORM?**

Overview

In the era of digitalization, most of the things are done on digital devices and platforms. But many areas there are still manual work is used like form fillings of any individuals. There is technologies like Optical Character Recognition to convert image format into text but lake of effectiveness it doesn't use. Here we try our best to make an effective product which used to take standard fax formatted form of patients and store it in database for future use.

Ideate Solution

- We can use currently available Optical text and handwritten characters Recognition technologies and make one web based system.
- It is used by hospital staff to entry of patient information in database.
- Any individual can upload or scan documents on system and it form will be filled automatically.
- System has many feature for other operations on digital form.

What is different?

- It gives effective recognition result of both text and handwritten characters.
- User friendly & responsive GUI through which any individuals can upload patient information on database.
- No dependency on staff for manual entries.
- System which gives many effective & useful features like -
 - Upload or scan the document easily
 - Automated form fillup
 - Preview of original form for cross check
 - CRUD operations.
 - Store information on database

Tools and Technologies used

For Optical Character Recognition(OCR) -



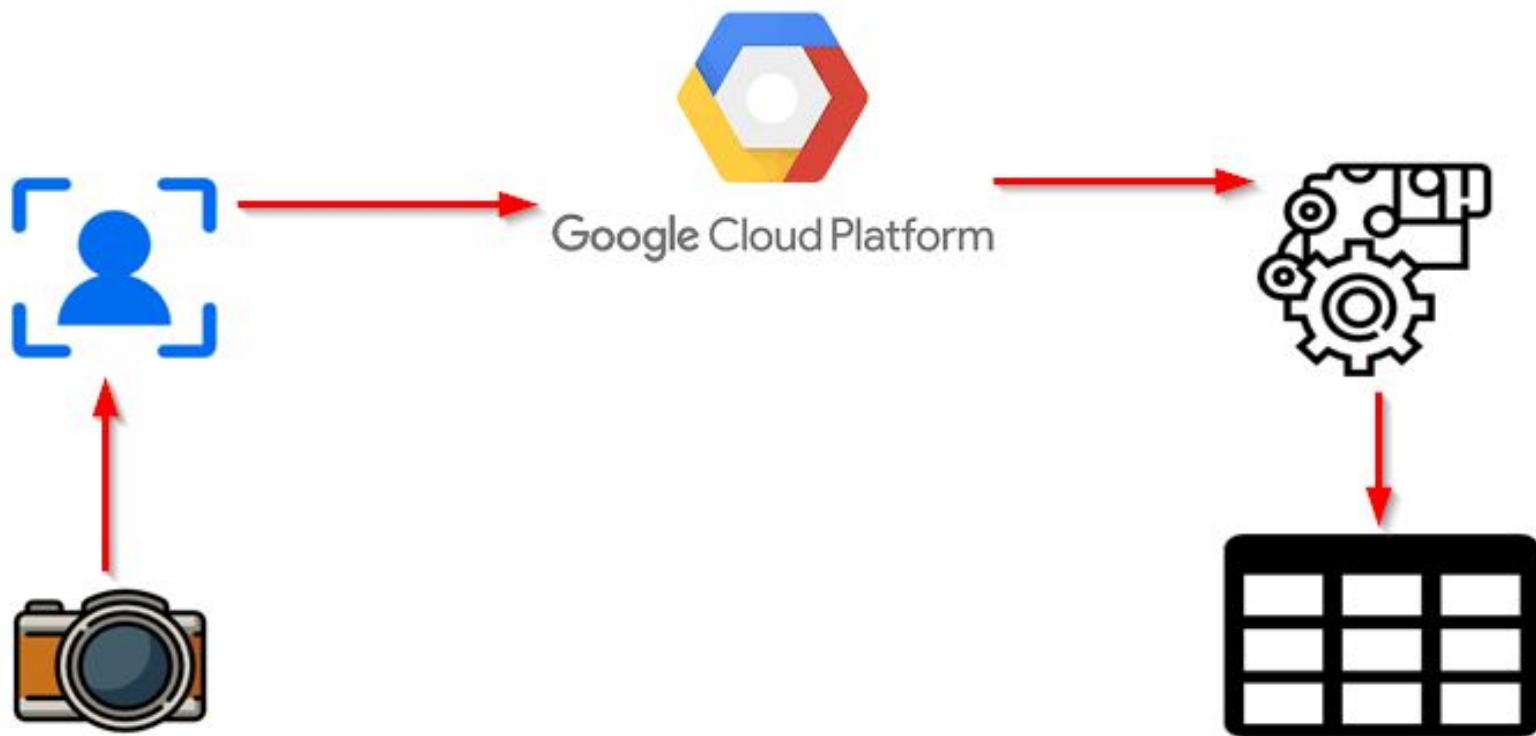
**Google Vision
API**



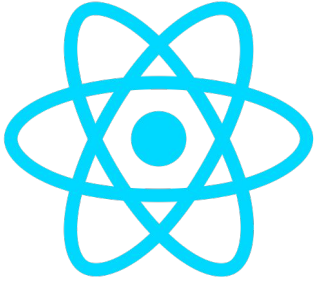
OpenCV



Python



For Web Application -



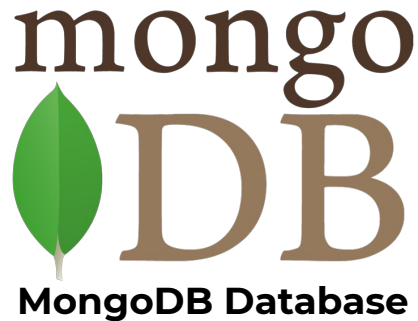
**React
Framework**



**Flask(Python)
Framework**



**HTML,CSS,
JavaScript**



Cost of Implementation & Feasibility

- All the tools and technologies which are used to develop this system is free of cost except Google Vision API.
- Google vision API gives free access for some API calls, after it charges minimal which is affordable for any organization, specially hospitals.
- We can make our own OCR system but lake of datasets, there are high chances to get error in recognized result.
- So, Google Vision API is the best of all available softwares.
- All revivify requires is an good internet connection, which makes is affordable for everyone.



Thank You