MINI PROJECT

C2 PRESENTATION

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Handwritten and Machine Printed Text Detection

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Introduction

- Nowadays, one can observe a rapidly growing number of digitization initiatives in libraries and archives, involving a variety of document types.
- The presence of printed and handwritten text in the same document image gives rise to significant issues since each modality requires different treatment to recognize the corresponding characters.
- So, it is necessary to separate the machine printed and handwritten text before applying different recognition methodologies to each.

THE PROPOSED APPROACH

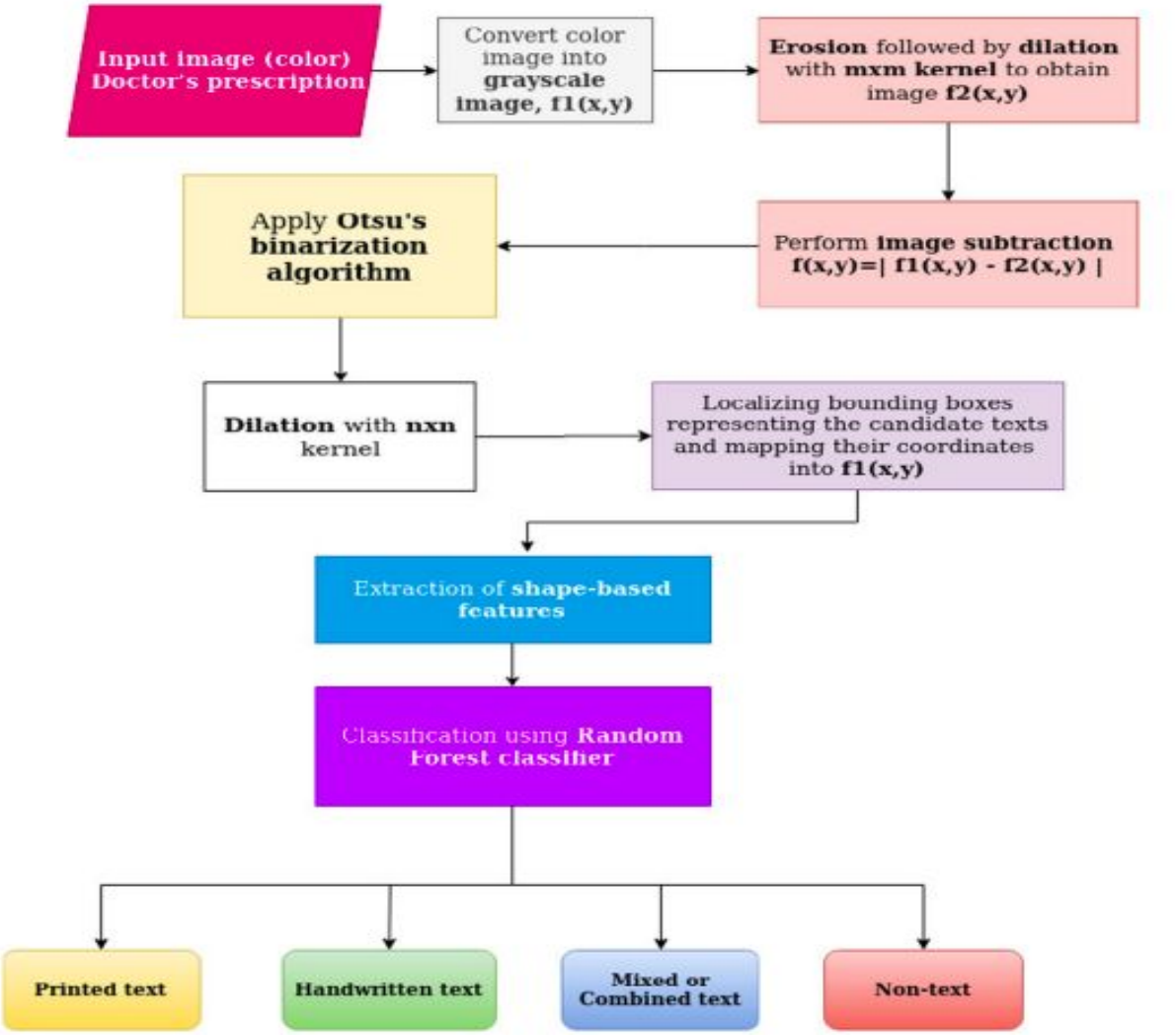
- **OCR (optical character recognition)** is the use of technology to distinguish printed or handwritten text characters inside digital images of physical documents, such as a scanned paper document.
- The basic process of OCR involves examining the text of a document and translating the characters into code that can be used for data processing.

Optical Character Recognition

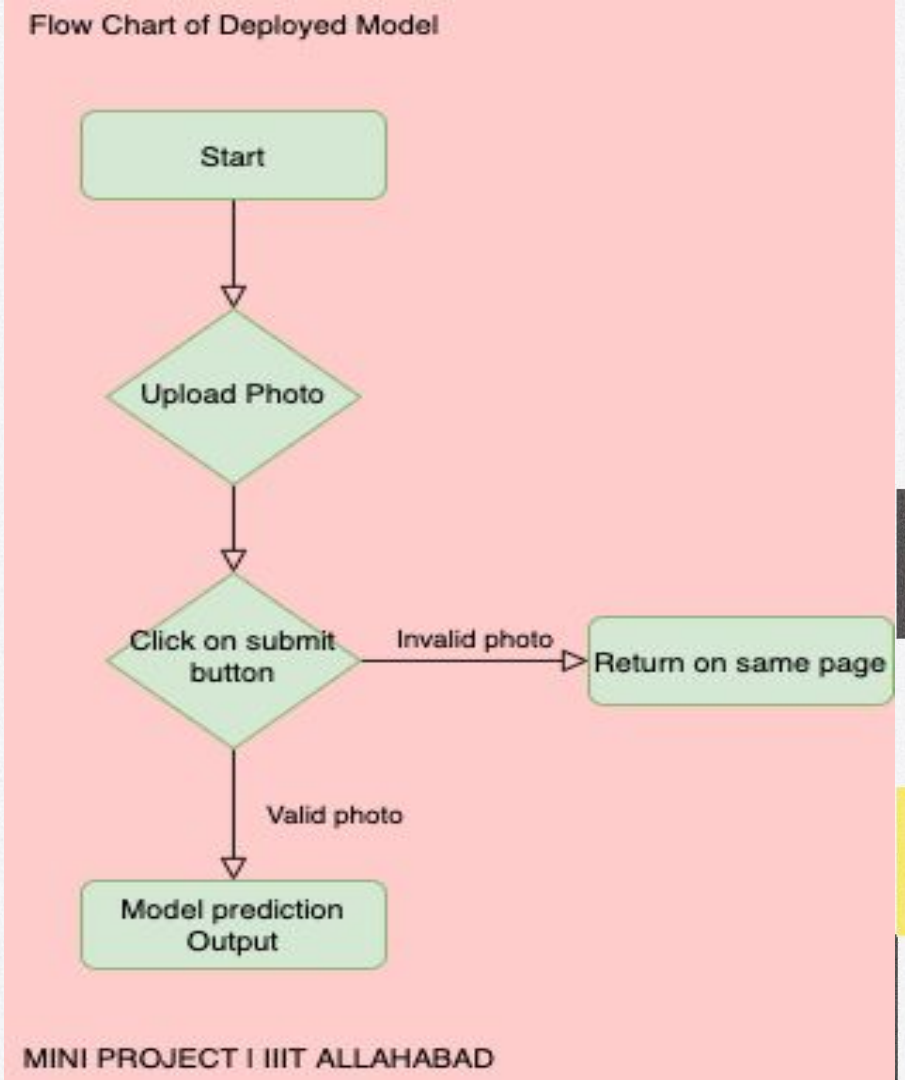
The proposed methodology consists of two stages.

- Localize the possible text regions from the documents
- Then classify the localized portions of the image as handwritten, printed, non-text or in a few cases, mixed/combined text

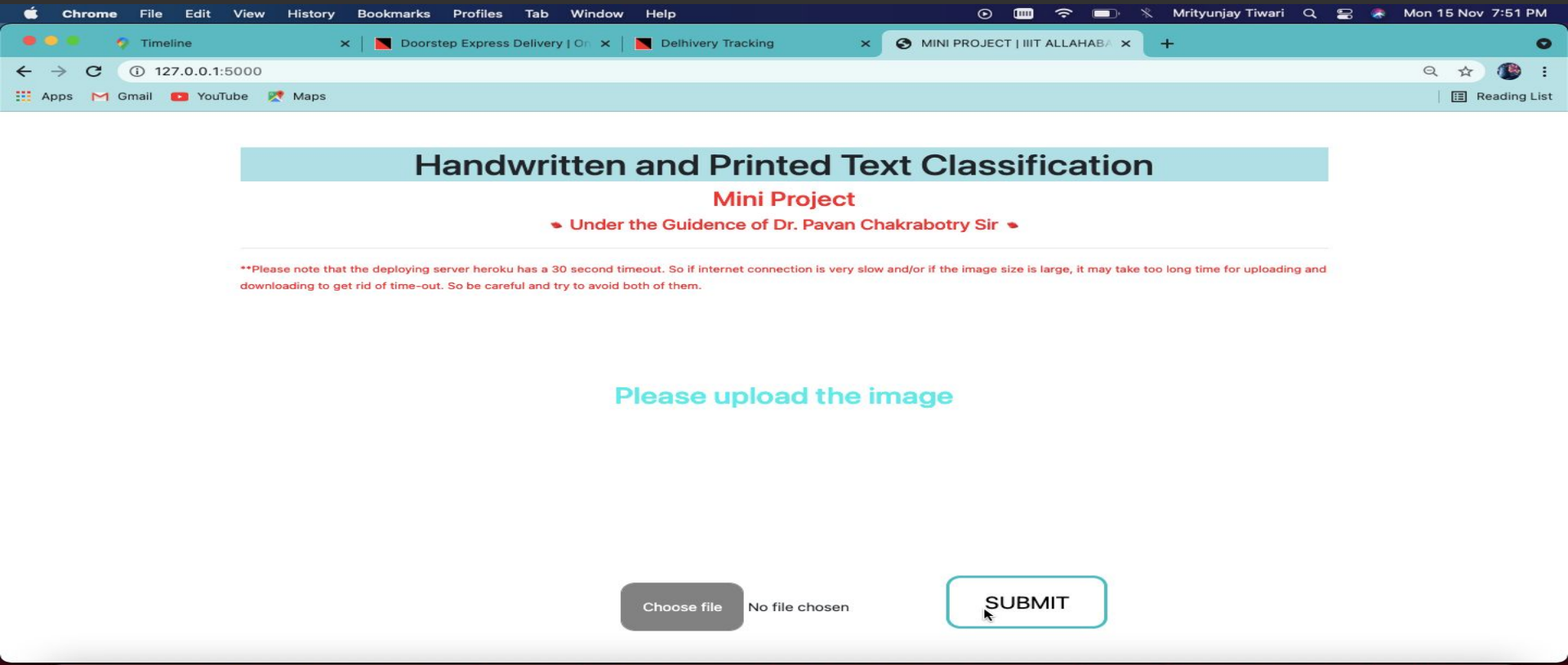
FLOW CHART OF PROPOSED METHOD



FLOW CHART OF DEPLOYED MODEL



Screenshots of deployed model



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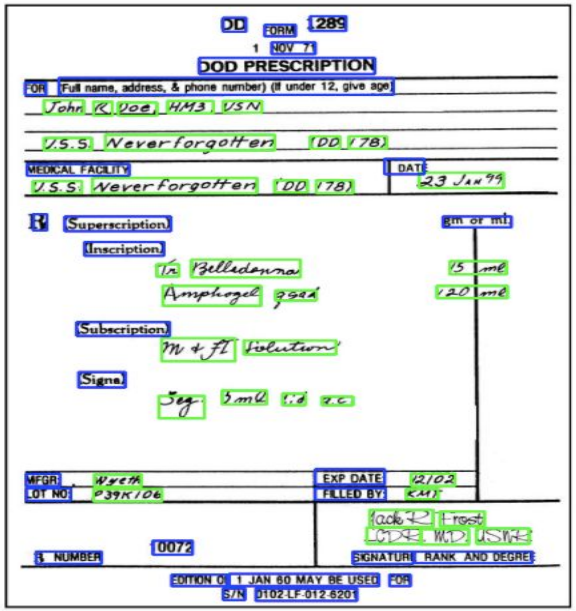
Model Prediction



Output of our trained model

TIMELINE

1.Work done so far:

- Selected a specific approach to solve the given problem of Handwritten and Machine Printed Text Detection.
- Selected a dataset for the given problem.
- Till now, we have deployed our model on our local system.It runs properly with good accuracy and in very less efficient time . Now, we are working to deploy our model in live servers like AWS, Heroku .

2.Future work :

- Host on live server (like Heroku, AWS, azuse, Google cloud etc...)

Conclusion

- In this project, a method has been proposed to classify printed and handwritten texts in documents.
- As the proposed method has successfully classified the printed and handwritten texts in the documents and with a very low complexity, this can easily be embedded with a recognition module as an additional resource requirement.
- The scope of the present work can be used for direct application by the researchers and the netizens according to their requirements.

References

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THANK YOU