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Application for Student Document Authentication

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Abstract: *AICTE every year go through over 6 lakhs documents of students and verify them and approved all verified documents. AICTE manually finishes all work like verification and approved them one by one. And now a days the task become very critical and lengthy because the number of increasing documents and manual work without using any modern technical method. Schemes, training, VC, fellowships are increasing due to enrolment of many students every year. AICTE using some technology for forwarding verified applications but all work not become modern and many tasks are not possible without technology. Many research are done on the verification technology before but the verification system shows various security problems, result percentage of verification method by analysing all these technical issues and the recent technology the verification system application is studied.*

Keywords: ADA, Reprography, Reliability, Hash function, Matlab.

I. INTRODUCTION

Need of automatic document analysis and verification

The reprography means industries manufactures some ethical paper for citizens use every day and they have same topics and same logos but the ideal points are different and these documents are very difficult to verified because one mistake of verification makes or create big issue for user and causes very unethical problems. Human verification of documents made mistakes sometime. One single error makes high problems.

About Automatic Document analysis and verification, common techniques, methods

There are many methods for automatic document analysis and the method name ADA. This method is understanding by anyone and easy to accessible on a paper document.

1.1 Analysis

1.1.1 Analysis Model

The SDLC life cycle chosen for the project document verification system is model. The Model which name was waterfall was the first Process Model to be introduced in the analysing the paper. It is also many researchers called as the linear-sequential life cycle model in the verification system. It is easy to understand, implement and use. In a model which name is waterfall, every phase must be completed before the next phase coming in the process can begin and no overlapping happened in the phases. The Waterfall model is chosen for the project because all the requirements of the project is under consideration at the requirement phase and no any additional function is to be added at the middle of the project. The waterfall model was closely matching our project details and implementation. The water model consists of six phases mainly:

1.1.2 Communication

In the communication phase we have discussed about the requirements of the project. Thought of the final output expected after the completion of project. tools and technologies are required to complete the project? The basic requirements to complete the project. The algorithms to be implemented and to design front end and authenticate the user with some extra features is also been discussed.

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1.1.3 Planning

The Planning Phase, we have scheduled the estimated time to complete the project and divided the project in different modules. We all decided according to our capabilities and skills divided the work amongst ourselves. We decided to keep a track on the project how much part of the project is completed and how much part is left to complete. Divided the part of projects and how we can increase the accuracy of project.

II. LITERATURE REVIEW

1. The paper which we have refered is A practical implementation of Automatic Document Analysis and verification using Tesseract. Which was published in 2022 by IEEE. The author of the paper is Saurabh Gupta. The proposed system is implemented in MATLAB2018a. The proposed system verifies the documents automatically.
2. The second paper which we have refered is that A Novel Improvement With An Effective Expansion to enhance The MD5 Hash function for verification of a secure e-document. The author of the paper is Ammar Mohammad. In this paper author discuss that the weakness in the solution that are currently used to solve the weakness of the MD5 algorithm in the web application.
3. The paper which we have refered is Study on a measurement model of putting people first for email Login system. The author of the research paper is Yu Dajin. In this research paper the security system email is used in the verification of documents.
4. The paper which we have refered is Doc-block: A blockchain based authentication system for Digital Documents. The authors of the research paper are IftekherTofique Imam, Yamin Arafat, Kazzishahid, Akhibshahriyan. In this research paper Blockchain based authentication is described for the verification of document system.

III. PROPOSED SYSTEM ARCHITECTURE

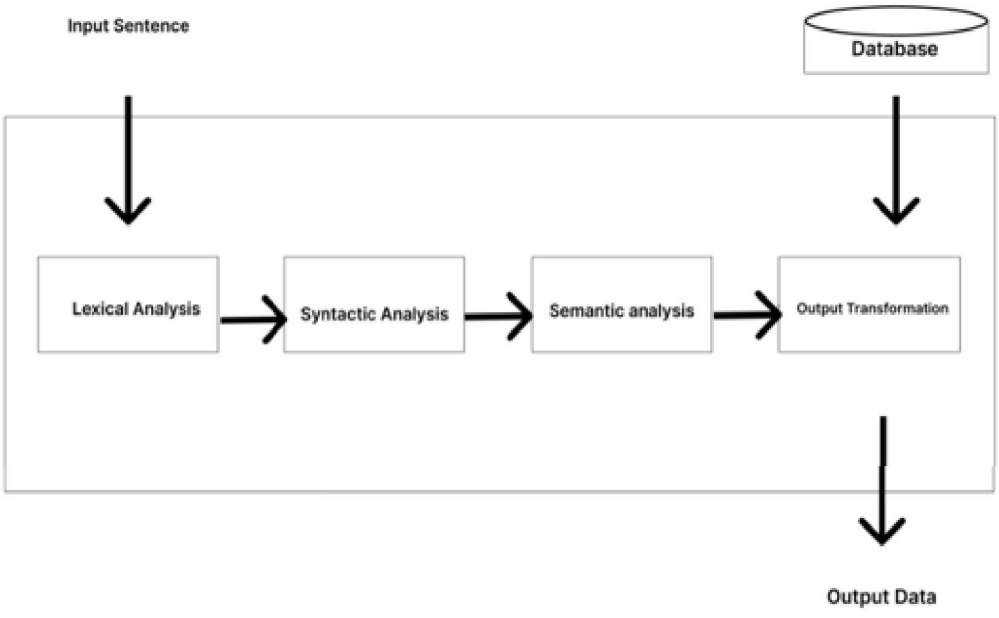

Fig. 3.1 System Design

3.1 System Architecture

Here we have implemented 3 different pretrained deep learning models namely Inceptionv3, Exception and Resnet 50 for identifying the cancer cells presence. And all the 3 models performed well with the accuracy of 80, 92.88 and 98.15 percent respectively.

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3.2 Software Quality Attributes

Correctness The degree to which a system is free from faults in its specification, design, and implementation.
Reusability The ease with which users can learn and use a system.
Minimal use of system resources is the efficiency and including memory at the execution time.
Reliability The ability of a system to perform its required functions understated conditions when- ever required having a long mean time between failures.

IV. APPLICATION FLOW

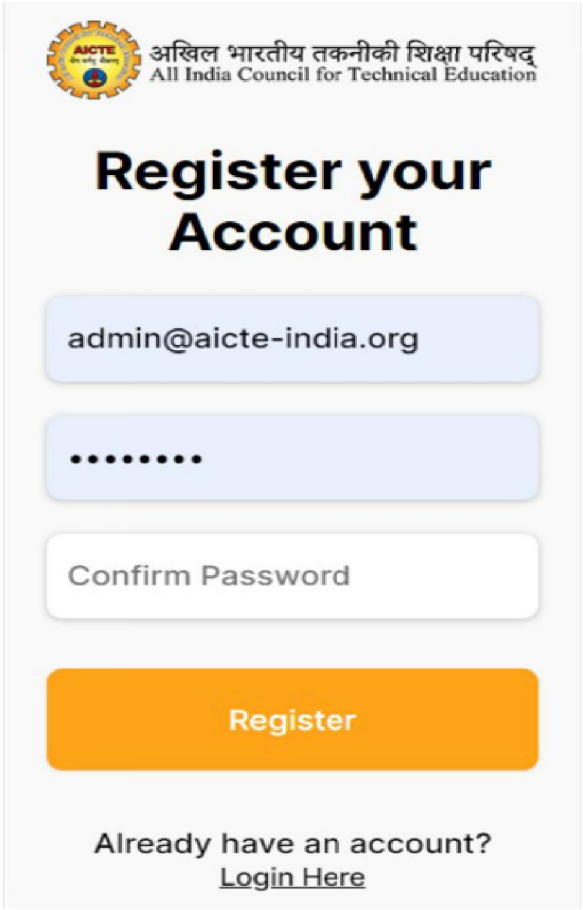

Fig. 4.1 Register

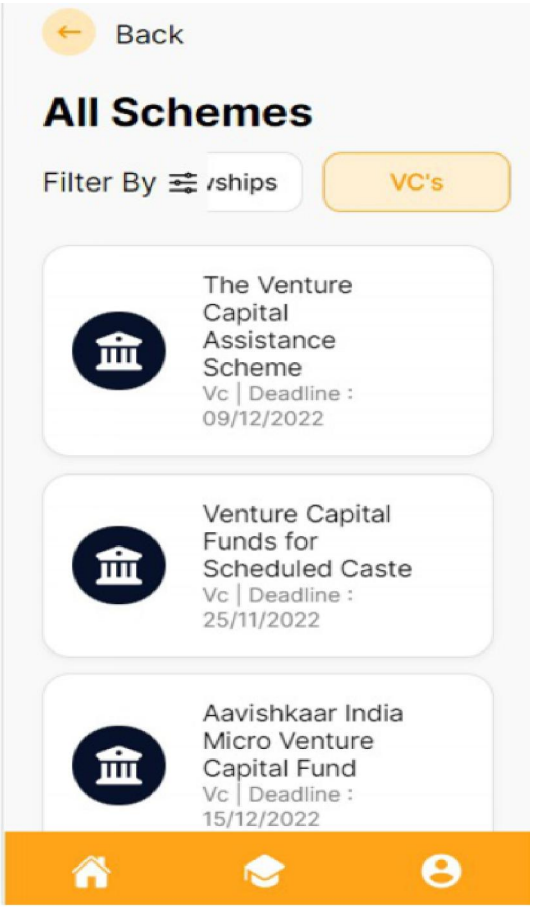

Fig. 4.2 Home Page

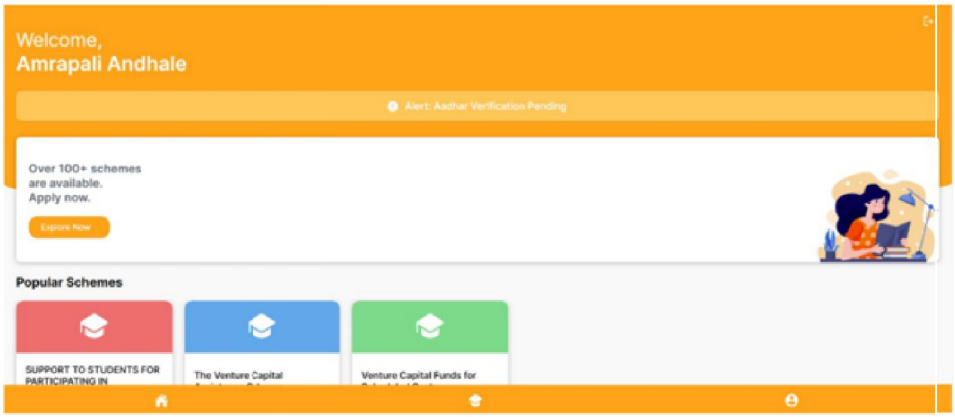

Fig. 4.3 Home Page Desktop

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V. CONCLUSION

In this paper the authors have demonstrated two methods of finding errors in printed documents. Both methods have their own advantages and disadvantages and thus their own avenues of application. The first one may be used where it is required to narrow down as to which pages contain errors say in a book. Following this a human being may check those particular pages to discern the error.

The second method may be used where complete automation is required. Here it may be noted that though both the methods are relatively efficient, for the pre-processing part and the OCR part the inbuilt MATLAB functions have been used, complete source code of which was not available. Hence any overheads present in them could not be avoided. Thus the next step would be write one's own code for carrying out each of the tasks detailed above and to compare the performance of the two.

The system will have high reliability, accuracy and efficiency, less processing time, smaller error. less cost and robust.

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