Pre-Project Presentation TOOL FOR HANDWRITTEN RECGONITION

Programme: B.Tech in CSE

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Group No. : 7

Team Leader : Saurav Kumar

Department :Computer Science and

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Project Team

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Outline

- Motivation/Need for study
- Title and Aim
- Objectives
- Methods and Methodology
- Expected Outcomes
- Cost Estimation
- Gantt Chart
- Work load allocation
- References



Motivation

- Earlier, in field of studies and documenting, if someone were presented with a large amount of handwritten text to edit, they would have to input it manually into the computer which is time consuming.
- These handwritten or printed documents stay in a large pile of pages at workplace, instead now they can be turned into digital information that can be easily interpreted by the computer.
- This project holds great significance since it aims to assist in easing the conversion from manual to digital text type



Motivation continued...

- Process of editing and searching in the documents get easier.
- Handwritten notes and important documents are prone to getting lost or destroyed, saving a digital copy is much more efficient and helpful.



Title

Tool for Text recognition



Aim

To design and develop an algorithm for Character recognition/ textual image processing



Objectives

- To conduct literature survey on Character Recognition/ textual image processing
- To design the methodology to be followed for developing the character recognition algorithm.
- 3. To develop and implement the algorithm that recognizes a manual character into a digital text document.
- 4. To test and validate the developed algorithm for various textual images
- 5. To document the report by unifying all the results and outcomes.



Methods and Methodology

- 1. To conduct literature survey on Character Recognition/textual image processing
 - 1.1: Existing books, papers and articles surveyed for character recognition and machine learning (TensorFlow and deep learning-codeblocks)

(Handwritten character recognition using machine learning methods- Comenus university)

1.2 Review the literature and summarize various techniques to design develop and implement the tool. List the advantages and disadvantages for the same.

Offline Handwriting Recognition using Neural Networks-University of Manchester



- 2. To design the methodology to be followed for developing the character recognition algorithm.
 - 2.1: Design the flow chart and High-level ad Low-level diagrams for the developing algorithm, based on the literature survey conducted.
 - 2.2: List out the different algorithms and software required for the application to be built.



- To develop and implement the algorithm that recognizes a manual character into a digital text document.
 - 3.1: Develop the algorithm using the flow chart and the diagrams.
 - 3.2: Implement the developed algorithm that recognizes a manual character into a digital text document



- 4. To test and validate the developed algorithm for various textual images
 - 4.1: Collecting various test samples for the input.
 - 4.2: Conducting unit testing and software testing.
 - 4.3: Checking the performance and accuracy of the algorithm for test inputs.



- 5. To document the report by unifying all the results and outcomes.
 - 5.1: Based on the literature survey done, the requirements are reported.
 - 5.2: Demonstration of the developed algorithm with the test data
 - 5.3: After the design, implementation, verification, testing and validation, results of the system are reported.
 - 5.4: Analyze performance of the algorithm and report the performance test results.



Expected Outcomes

- Demonstration of Working Algorithm
- Report generation



Cost Estimation

Component	Units	Cost
Man power	16weeks*4people	₹2,00,0000
Laptop (Hardware and software)	4 Units	₹10,000
Internet and Electricity	4	₹5,000
Total		₹2,15,000



Gantt Chart

Project Work (UG) 16weeks																
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Major Activities																
Project Selection																
Objective 1																
Objective 2																
Objective 3																
Objective 4																
Objective 5																



Work Load Allocation

	Saurav K	Satyam A	Ashish K	Sarah Anwar
Literature Survey				
Documentation				
Requirements analysis				
Designing				
Implementation				
Testing				
Performance Analysis				



References



Thank You

