CONVERSION OF IMAGE TO EXCELUSING OCR TECHNIQUE

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ABSTRACT

This paper proposes regarding the image processing of the text conversion and we use images in literacy education. In this research work, a web application is developed to convert the Attendance register image to excel conversion. Further, several approaches for image-to-excel conversion are reviewed in detail. By overcoming the gaps, which are identified by thorough review of the literature, an improved methodology is proposed. As a result, the development of web-application goes through four major phases including: capturing, extraction, recognition and conversion. Moreover, Optical Character Recognition (OCR) algorithm is particularly used for character extraction and recognition with high accuracy under different environmental circumstances. It translates text just by capturing an image and uploading the image with system and conversion instantly appears on user's system screen and can view the extracted text. The proposed solution may particularly be helpful in literacy education and for the teaching staff, for using this web application under different circumstances.

Keywords: Image To Excel Conversion; Opencv; Recognition; OCR: Text Extraction.

I.   INTRODUCTION

In computer science, Image processing is one form of processing for which the input is an image or a series of images or videos, such as photographs or frames of video and the output will be the parameter related to image. First import images with the optical devices like scanner or a camera or make them by computer generated imagery, second, manipulate or analyze the images in some way. For example: metrologists use this processing to analyze satellite photographs. Last output the result of image processing sources. The result might be changed by some way or it might be a report based on analysis the result of the images, capture the text from a scanned image, upload the image file from computer or take a screenshot from desktop by simply right clicking the image and selecting the image and selecting grab text, handwritten character recognition is always a frontier area of research in the field of pattern recognition which has a large demand in image processing, the major steps involved in recognition of characters include, pre-processing, segmentation, feature extraction and classification. Features are a set of numbers that take the salient characteristics of the segmented image used in extraction process, this process makes It possible to read the text and convert it into electronic files which can be edited and many applications has been developed using OCR.

II.   RELATED WORK

In attendance register image to excel conversion project, the objective of study is to develop a system that would take an image as input and uses computer vision to extract the information from the table present in the input image (if any). The task consists can be thought of having four major steps:

- Detecting the presence of a table in an image.
- Localizing the table in the image.
- Decoding the structural relational among table cells.
- Understanding the text inside each cell.

This task may be naïve to a five year old, but if we take a deeper leap in our thought abyss, we will realize that decoding a table, localizing it on a sheet of paper does not follow any hard and fast rules. It gets automatically done by the visual cortex (abstracted from our conscious understanding) as part of our cognition. Regional language extraction from a natural scene image is always a challenging proposition due to its dependence on the text information extracted from Image. Text Extraction on the other hand varies on different lighting