

# Automatic Answer Sheet Checker

Gunjal M.S., Sanap K.N., Sable R.G., Nannaware P.S., Ghuge R.B.

**Abstract**— An automating the task of scoring subjective answer is considered. The goal is to assign score which are comparable to those of human score by coupling AI technologies. In this process involves many image level operation i.e. removal of pre printed matter, extraction and segmentation of words. Scoring is based on machine learning of parameter and natural language processing. System checks answer and score as good as human being.

**Keywords:** Data-mining, Stop word Selection, Text Classification, Stemming Algorithm and Stripping Algorithm.

## I. INTRODUCTION

The answer sheet is widely used for student performance in exam in school and college. The main approach is to evaluation is efficient and reliable. An automatic answer sheet checker checks the answer sheet and written mark as similar to human being. This software is built to check the subjective answer. The system consist of in build artificial sensor that verify answer and allocate marks according as good as human being accessing large number of handwritten answer sheet is relatively time consuming task there is an intense need of speed up and enhance a process of rating handwritten words while maintaining cost effectiveness. It is relatively inexpensive answer written by hand. The primary means of testing the student on state assessment of reading comprehension motivation of these system is mainly always we have seen the online OMR sheet checker or objective answer sheet checker but the main goal is to develop subjective answer checker.

### Objective.

The system calculate score and provides result instantly. Examiners get bored by checking many answer sheet, hence the system reduces their workload by automating the manual checking process accurately. It removes human errors that commonly occur during manual checking.

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### Need:

The answer sheet is widely used for student performance in exam in school and college. The main approach is to evaluation is efficient and reliable.

Examiners get bored by checking many answer sheet, hence the system reduces their workload by automating the manual checking process accurately.

## II. LITERATURE SURVEY

"The paper on the automatic scoring of handwritten essay" is proposed by sargur shrihari,rohini shrihai, Pavithra babu, harish shrinivasan. Automatically evaluating handwritten essays involves the integration of optical handwriting recognition and automatic essay scoring methodologies. Handwriting recognition is assisted by constraints provided by the reading passage, question and rubric. Scoring based on latent semantic analysis (LSA)is robust with respect to recognition inadequacies. Results on a small testing set show that with manually transcribed (MT) essays, LSA scoring has on an average less than a two-point difference from human scoring.

"Recognition of object in image of paper based line drawings is proposed by kiyko v. presented algorithm works fine in a case of objects images of paper based drawings."Towards an automated system for short answer assessment using ontology mapping. The paper is owned by v.senthil kumaran and a.sanker.

Assessment is used to assess the learners' understanding on the concept learnt. E-assessment is a powerful tool that automates the assessment task. There are several tools, e-learning systems and Intelligent Tutoring Systems available in the market which uses e-assessment to assess their learners' knowledge level. Most of the systems use only Multiple Choice testing to test their learners. But it is not enough to assess the student thoroughly. For in- IAJET Towards an automated system for short-answer assessment using ontology mapping depth assessment we need to use subjective type questions. In this paper, we proposed and implemented a technique to assess the short answer automatically using ontology mapping. We used the data set to evaluate our system and compared our system with some existing systems. Experimental results show that our system outperforms some existing systems. Results are encouraging. In the future work, we would like to improve the accuracy of results. We are planning to construct the knowledge base and use that knowledge base to evaluate the answer.

### Proposed System

The answer sheet is widely used for student performance in exam in school and college. The main approach is to evaluation is efficient and reliable. An automatic answer sheet checker checks the answer sheet and written mark as similar to human being. This software is built to check the subjective answer. The system consist of in build artificial

sensor that verify answer and allocate marks according as good as human being accessing large number of handwritten answer sheet is relatively time consuming task there is an intense need of speed up and enhance a process of rating handwritten words while maintaining cost effectiveness .It is relatively inexpensive answer written by hand .The primary means of testing the student on state assessment of reading compression motivation of these system is mainly always we have seen the online OMR sheet checker or objective answer sheet checker but the main goal is to develop subjective answer checker.

### Problem statement

An automatic subjective answer sheet checker that checks and marks written answer using in build Artificial Intelligence technologies that verify answer and allocate marks accordingly as good as human being.

### Existing System

Till today there are system developed for essay recognition short answer scoring.

The goal is to as- sign scores which are comparable to those of human scorers by coupling two AI technologies: optical handwriting recognition and automated essay scoring.

## III. SYSTEM MODULE

**Registration And Login Module :** In this module simply new user is going to register first for this system and existing user are login for accessing the system.User is must going through biometric validation for this we have used SQL server database for storing user details.

**Exam Paper Module:**In this module teacher is going to set the exam paper for the subject for each & every department.

**Examination Module:**Mainly in this module user or students is going to appearing the exam by student type whether it is blind or not exam type get change.

**Final Result Module:**Result can be shown by this module.Result is first calculated in this & then directly getting show to the user on their screen only.

### A. Figures

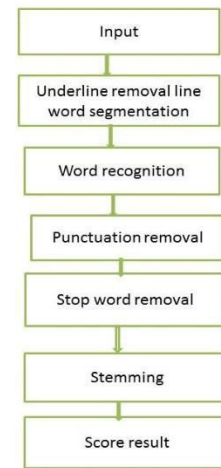


Figure 1.Architecture

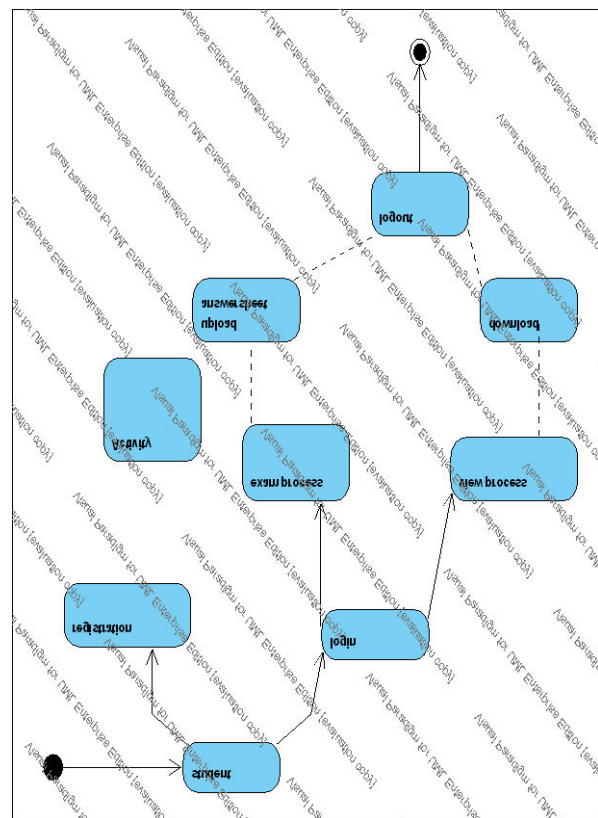


Figure 2.DFD Level 1

## IV. METHODOLOGY

System consists of following methods:

1. Student Registration
2. Admin Registration
3. Teacher Registration

## V. ALGORITHM

1) Key word search algorithm-

A search algorithm is an algorithm that retrieves information stored within some data structure. Data structure can include linked list, array, search tree, hash table or various other storage methods the appropriate search algorithm often depends on the data structure being searched. Searching also

encompasses algorithm that query the data structure such as SQL SELECT command.

Search algorithm can be classified based on their mechanism of searching. Linear search algorithm check every record for the one associated with target key in a linear fashion.

Binary search repeat target the center of the search structure and divide the search & digital search algorithm. Hashing directly maps keys to record based on a hash function .searches outside of a linear search require that the data be sorted in some way.

Search functions are also evaluated on the basis of their complexity or maximum theoretical runtime.

Keyword search:

Keyword search is the most popular information discovery method because the user does not need to know either a query language or the underlying structure of the data.

The search engine are available today provide keyword search on top of sets of document when a set of keyword is provided by the user search engine return all document that are associated with these keywords. Typically two keyword & a documents are of associated with keywords are contained in the document & their degree of associatively is often distance from each other. Keyword research is a practices search engine optimization professionals use to find & research actual search terms that people enter into search engine optimization professional research keyword which they use to achieve better ranking in search engines.

2) Stemming Algorithm-

It is the process for removing the commoner morphological & In flexional ending from words in English. It is main use is as part of a term normalization process that is usually done when setting up information retrieval system. Stemming refers to the process of removing affixes (prefixes & suffixes) from words. In the information retrieval context, stemming is used to conflate word from to avoid mismatches that may undermine recall.

As a simple example consider searching for a document entitled "How to write" if the user issues the query "writing " there will be no match with the title .however if the query is stemmed so that "writing "becomes "write" then retrieval will be successful. Stemming is the process of finding the route word.

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