

Examination Branch-Omr And De-Forms Generation

D. Ramana kumar^{1*}, P. Manideep Pasuladi², Afreen Shaik³, Nimish Reddy⁴

Email: ramanacse@cvsr.ac.in, 16h61a0593@cvsr.ac.in, 16h61a05b3@cvsr.ac.in, 16h61a05a5@cvsr.ac.in.

Department of Computer Science and Engineering, ANURAG GROUP OF INSTITUTIONS

Abstract: OMR and De-form generation system is helpful to easily generate OMR sheets during examination for each and every subject and for each and every student uniquely which is identified by barcode. OMR is the process of capturing human-marked data from document forms such as surveys and tests. The main aim is to make the job easy by automatically identifying student from his unique barcode. De-Forms helps to enter the details of absentees, malpractice student details during examination. It is a web application where we retrieve the data of the registered students from the payment module. We assign a unique OMR code for each student and generate barcode for unique OMR sheet. We then place the template and other components required and generate OMR by assigning the OMR status to true. We generate PDF file for all the OMR sheets and assign the OMR printing status to true. It helps the examination branch to make job easy by automation and reduces manual work and improves efficiency and time.

1. Introduction

1.1 Motivation

With a risk to security and storage in the traditional paper storage system, a majority of organizations has switched to the use of OMR sheets. OMR is considered to be the fastest, efficient, accurate means of conducting any examination. It helps the Examination Branch for speedy data collection from OMR sheet and checking of OMR. The generation of the OMR and De-forms was time taking process which had a complex structure. The process involved in the generation was slow and was not efficient and also involved more human effort and time.

1.2 Problem Definition

The process for generation of OMR and DeForms used by the Examination branch is slow and time taking process which involves more human effort. Thus to improve the efficiency and to save time, our system makes job easy by automation and by reducing manual work. Our proposed system is a Web Application using PHP – codeigniter framework with MySQL database. It prints OMR dynamically and generate de-forms accordingly based on rooms and generates Barcode which are used for post-examination purpose. It helps in the rapid generation of OMR with simplicity and with minimum economy.

1.3 Objective of the Project

The Web Application retrieves the registered students' data from the registered students table from the payment module. It assigns unique OMR code for each student and also generates a unique barcode for each OMR sheet. Then, it loads the template for the OMR sheet and place all the required components upon the OMR sheet template. After the OMR is generated, it assigns the OMR status to true where it generates a PDF file for all the OMR sheets and then assigns the OMR printing status to true. In the similar manner, user enters the details of the absentees and based upon the absentees list, a PDF file is generated and the printing status is assigned to true.

2. Analysis

2.1 Existing System

Earlier, a third party software was used by the examination branch which was not very easy to customize and therefore it resulted in taking a lot of time to generate the OMR and De-Forms. Also, it was not economical and had a complex structure.

2.2 Proposed System

As mentioned in the introduction, the web application is used to make the job easy of the Examination branch and reduce the human work. The web application comprises of PHP Codeigniter framework with MySQL database which helps in the rapid generation of the OMR and De-forms through automation with simplicity and minimum economy. The details of the

students is retrieved from the payment module and a unique OMR code and a barcode is assigned for the unique OMR sheet. The OMR is generated by loading the OMR template and later a PDF file is generated for all the OMR sheets and printing status is assigned to true. In a similar manner, the user needs to enter the details of the absentees and then the PDF file is generated based upon the absentees list and the printing status is assigned to true.

2.3 Software Requirement Specification

2.2.1 Purpose

The purpose of the software is to digitize campus and reduce the work load for staff and automate things which helps in reducing redundancy. It helps college to focus on all round improvement of resources as well as generating the OMR and De forms rapidly. The system helps to generate OMR and De-forms with greater efficiency and hence the system for the College management has been designed to remove all the deficiency from which the present system is suffering and to ensure.

2.2.2 Scope

The scope of the project is very much useful. It helps in generating OMR and De-forms effectively. The OMR Generation module helps to retrieve the data from the payment module and generate the OMR sheet with unique barcode associated to it. The economy for the OMR Generation is also very less compared to other aspects. The scope is very high such that it also future enhanced for other aspects. OMR and De-forms Generation System provides a lot of facility to their user. It will simplify the task and reduce the complexity.

2.2.3 Overall Description

The web application is used to make the job easy of the Examination branch and reduce the human work. The web application comprises of PHP - Codeigniter framework with MySQL database which helps in the rapid generation of the OMR and De-forms through automation with simplicity and minimum economy. The details of the students is retrieved from the payment

module and a unique OMR code and a barcode is assigned for the unique OMR sheet. The OMR is generated by loading the OMR template and later a PDF file is generated for all the OMR sheets and printing status is assigned to true. In the similar manner, the user needs to enter the details of the absentees and then the PDF file is generated based upon the absentees list and the printing status is assigned to true.

1. **USER FRIENDLY** This system is user friendly for the retrieval of data from the payment module and it is maintained efficiently. The graphical user interface is implemented in this proposed system. It is more efficient than existing system.

2. **PDFS ARE EASILY GENERATED** PDFs for OMR sheets and De-forms can be easily generated in this proposed system by the user.

3. Implementation

3.1 OMR Generation Module

This module generates OMR sheets during examination for each and every subject and for each and every student uniquely which is only identified by barcode. The details of the students is retrieved from the payment module and a unique OMR code and a barcode is assigned for the unique OMR sheet. The OMR is generated by loading the OMR template and later a PDF file is generated for all the OMR sheets and printing status is assigned to true Steps for generating OMR sheets:

1. Select Notification
2. Select Semester Notification
3. If OMR sheets already generated, download OMR sheets
4. Select OMR type
5. Generate OMR sheets

De Forms Generation Module After examination, the user enters the details of the absentees and based upon the absentees list, a PDF file is generated and the printing status is assigned to true. The De-forms are generated based upon the rooms and these De-forms helps to know the details of the students who malpractice during the examination.

Steps for generating De-Forms:

1. Select Notification
2. Select Semester
3. Select exam date
4. Select exam session
5. Add absentees
6. Print Absentees list in Deform

4. Conclusion

It helps the examination branch to make job easy by automation and reduces manual work and improves efficiency and time. This Software will be very useful because not only is it efficient but a great method to reduce work. It eases our workload and gives us an accurate measure to resolve seating arrangement. Most institutes should install this software and it can be a great help to them. Apart from that, it can be extended to creating android application for filling data of absent and present student by invigilator from their room. It gives us an organized graphical structure of our work. Some of the few benefits of this model is that it is very fast, reliable and robust. The importance of this software is to make your tasks faster and more reliable. In today's day and age work-reducing applications are much required because of the increasing demands of new trends.

5. Bibliography

- [1] M. Yağci and M. Ünal. Designing and implementing an adaptive online examination system. *Procedia Social and Behavioral Sciences*. 2014 Feb, 116:3079-3083.
- [2] <https://codeigniter.com/docs/> Designing Hybrid MVC architecture
- [3] C. Ramanathan, S. Banerjee, and N.J. Rao. OAES: Scalable and secure architecture for online assessment and evaluation system. In *IEEE 4th International Conference on MOOCs, Innovation and Technology in Education (MITE)*, 2016, pp 296-301.
- [4] <https://tcpdf.org/examples/> Responsive pdf generator
- [5] R.M. Borromeo. Online exam for distance educators using Moodle. In *IEEE 63rd Annual Conference International Council for Educational Media (ICEM)*, 2013 Oct, pp 1-4.
- [6] Moodle. Available from <https://moodle.org/> [last accessed December, 2018].
- [7] M. Kaiiali, A. Ozkaya, H. Altun, M.H. Haddad, and M. Alier. Designing a secure exam management system (SEMS) for M-learning environments, 2016, 9(3):258-271.
- [8] <https://api.jquery.com/>
- [9] O. Adebayo, and S.M. Abdulhamid. E-exams system for Nigerian universities with emphasis on security and result integrity. *International Journal of the Computer, the Internet and Management (IJCIM)*, 2014 Feb, 2(18):1-12.
- [10] <https://github.com/dompdf/dompdf>
- [11] M. Mathapati, T.S. Kumaran, A.K. Kumar, and S.V. Kumar. Secure online examination by using graphical own image password scheme. In *IEEE International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials (ICSTM)*, 2017 Aug, pp 160-164.