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## EXAM HALL TICKET VERIFICATION AND AUTHENTICATION SYSTEM

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DOI : <https://www.doi.org/10.56726/IRJMETS59923>

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### ABSTRACT

The "QR Code-based Exam Cell" system is an automated system specially designed and developed for institutions that follow CGPI/SGPI grading patterns. Generation of results, Hall tickets, and other activities are manually done which is a very tedious and time-consuming job that might lead to flaws in the result. Keeping in mind the problems of the previous system we came up with "QR Code based Exam Cell" which is an automated system that is very easy to use and saves time.

QR Code-based Exam Cell is a computerized system through which results can be provided smoothly without any error. Online form filling, Revaluation form filling, ATKT form filling, and Hall ticket filling can be done by students easily once registered as the system is reliable, secure, robust, and efficient. Once the student has filled in all the details the hall ticket is sent to the student's registered e-mail where the student can print it and come for verification later. The main focus of this system is to provide remote access to the users.

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### I. INTRODUCTION

The large amount of data being analyzed on paper results in a tedious task, apart from the unmanageable amount of data that is generated in an institution from various departments.

The following are some problems:

- 1) Photos are not clear
- 2) No image is inserted
- 3) Form filling up in queue of students
- 4) Office recovery fee issues
- 5) Duplications can be created of hall tickets create

With the increase in Competitive Exams, many candidates are struggling for good marks and grades.

But nowadays, it is noticed that in the exam center, the Dummy Examinee is placed by editing the original hall ticket photo which is replaced by another one.

Examiners also don't know the actual details of each candidate. He/she just verifies the hall ticket and the examinee's face. Once the hall ticket photo and real student match, he considers that the student is right.

In this way, a Dummy examinee can be replaced and a fake examination is done.

Automated solutions using this system will make exam department activities more efficient by covering the most important drawbacks of the manual system, namely speed, precision, and simplicity. A centralized system will ensure that the activities in the context of an examination can be managed effectively, while also making it more accessible and convenient for both students and staff. The system is a new concept that came into existence because of the large amount of data being on paper and it made analysis of results a tedious task, apart from the unmanageable amount of data that is generated in an institution from various departments. The Automation system is like an intermediary between staff and students, thus easing the activities of each regarding examination. This keeps paperwork to its minimum, leading to ease of accountability, reducing confusion, and increasing work rate and efficiency. The project will address firstly, access to various users including students, teachers, exam cell staff, and admin. Then customization is based on the requirements of the College. And finally, automated result analysis and ancillary services. The proposed system overcomes all these drawbacks and provides a paperless authentication facility. It introduces the new QR-code authentication system using graphical Cryptography. Cryptography includes techniques that merge words with images. The proposed system provides registration and easy identification of vehicle documents by using the QR code. The

workflow of the system is shown in Figure 1. First, the user uploads a document in the user panel. These documents are verified by the admin panel and a unique QR code is generated dynamically. The generated QR code softcopy is provided to the particular user. The examiner will scan the QR code using a scanner, authenticate a user through web services, and get all the documents of the respective user.

## II. PROPOSED APPROACH

The general structure of the system:

The system is composed of three-layered structures:

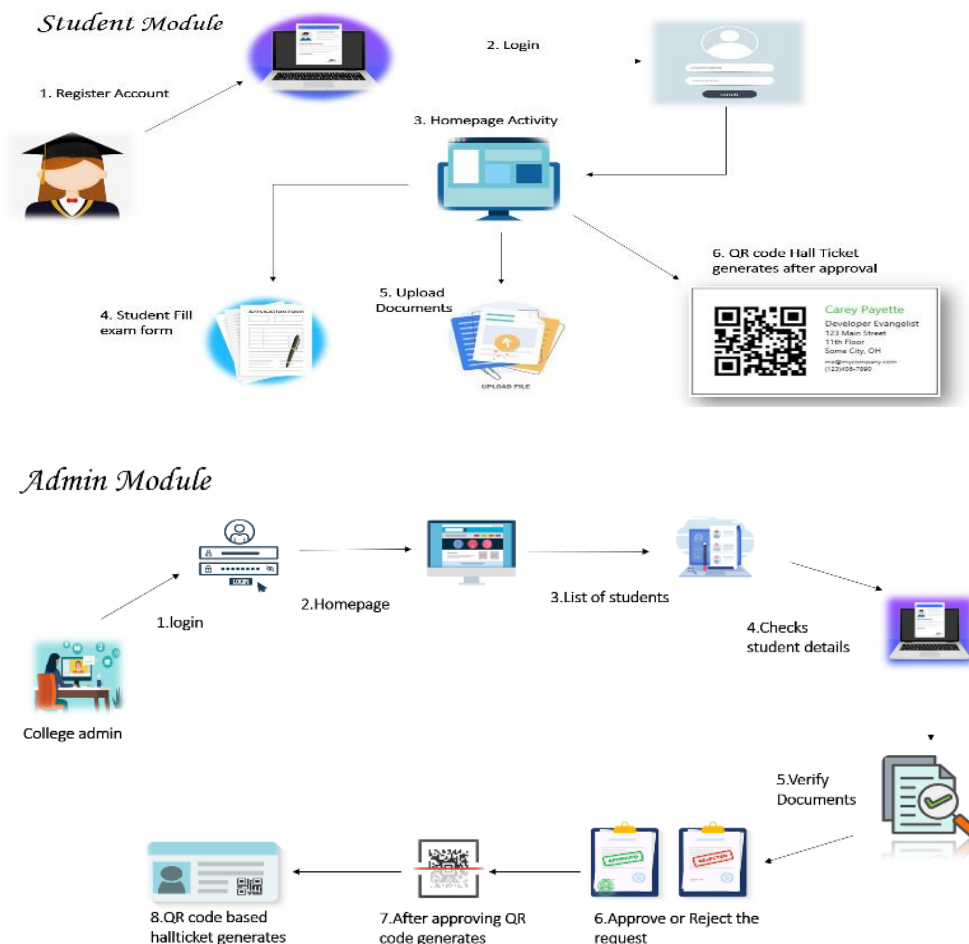
- 1) A database for data storage
- 2) A server for application and A web portal-based application
- 3) Clients

Objectives:

- To reduce paperwork
- To reduce operational work (client & admin both)
- To Be aware of dummies in any competitive exams
- Useful for the examiner to check details about specific student

There are a total 3 modules such as-

- 1) Student
- 2) Admin
- 3) Examiner



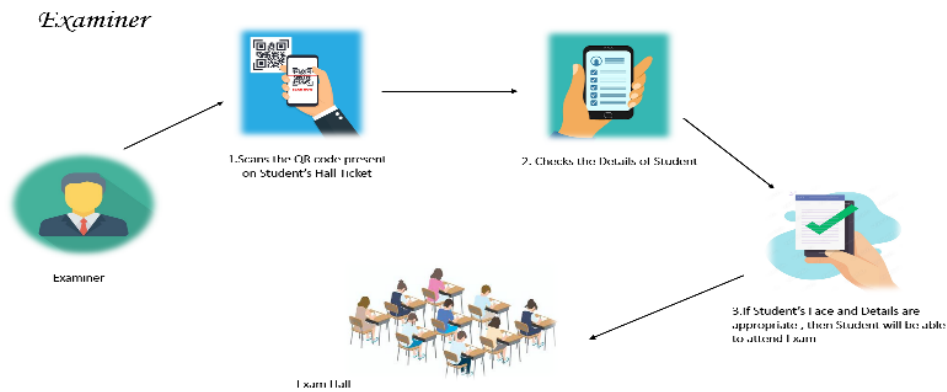


Figure 1- System design

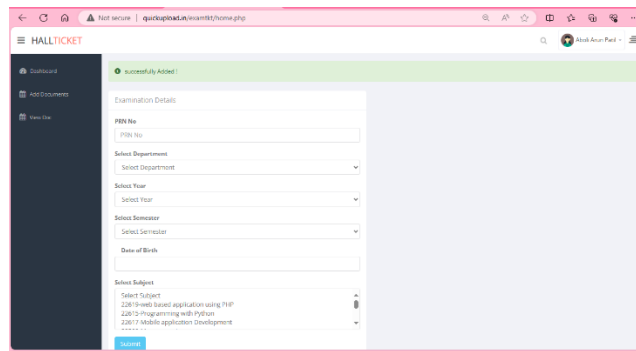


Figure 2- Student panel

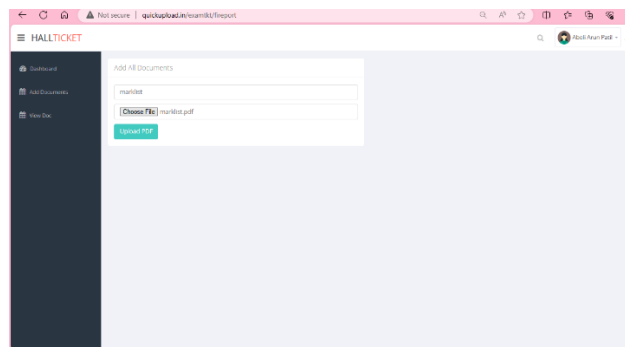
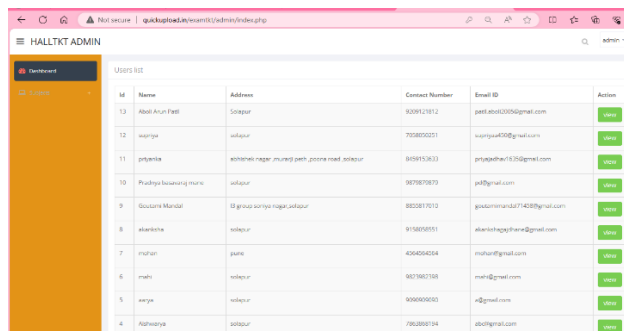


Figure 3- Upload Documents



HALLTKT ADMIN

Users list

ID	Name	Address	Contact Number	Email ID	Action
13	Abhil Ashu Path	Solapur	909112112	path.abhil009@gmail.com	View
12	satyaje	Solapur	705850001	satyaje00@gmail.com	View
11	pratikha	kolhapur nagar, munde path, purna road, Solapur	8058153633	pratikha1510@gmail.com	View
10	Pradyumn Keshavnagar	Solapur	987867879	pk@gmail.com	View
9	Gourav Mandali	D group pariyat nagar, Solapur	882817010	gouravmandali7442@gmail.com	View
8	sharadha	Solapur	913803051	sharadha1999@gmail.com	View
7	muskan	parne	456456454	muskan@gmail.com	View
6	madhvi	Solapur	987867879	madhvi@gmail.com	View
5	arjun	Solapur	909090900	arjun@gmail.com	View
4	Ashwiniya	Solapur	789098765	ashwiniya@gmail.com	View

Figure 4- Admin panel

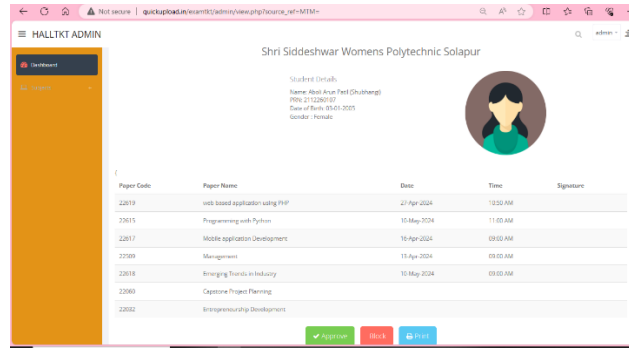


Figure 5- Approving student by admin

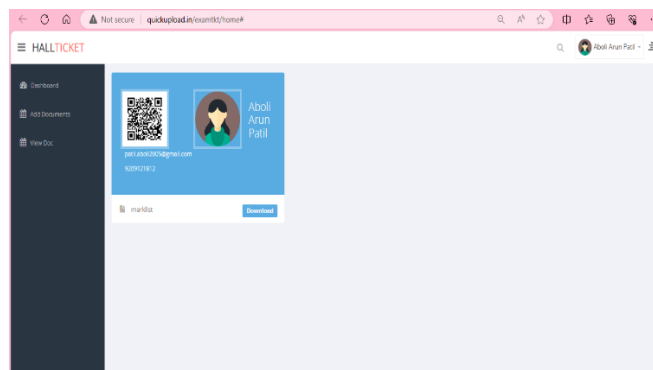


Figure 6- Generated QR code after approving student



Figure 7:- Signing student using password



Figure 8: Student details showed after scanning the QR code

### III. CONCLUSION

Considering the extremely interwoven nature of exam cell activities, an automated solution to important activities like result analysis and report generation would greatly benefit the institution. The use of up-to-date open-source software ensures a great cost-benefit measure while maintaining productivity, thus improving the

student experience and value of education. Further, the implementation of this system can perpetuate the automation of other important activities in the institute, thus making the college more student and staff-friendly. We have been successful in deploying the entire form-filling and hall ticket module on the intranet.

#### **IV. REFERENCES**

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