International Journal of Gender, Science and Technology
ISSN: 2040-0748
UGC Care Group I Journal.
Vol-13 Issue-01 April 2024
https://ijgst.com.2024.v13.i1.pp106-110

Seating Arrangement System for Examination

SYED RESHMA [1] G.SIDDHANTH [2] Y. YESU BABU [3]
[123]ASST.PROFESSOR, DEPARTMENT OF ARTIFICIAL INTELLIGENCE,
[1,2,3] SRI MITTAPALLI COLLEGE OF ENGINEERING

Abstract - The goal of this project is to make the college's manual processes for allocating test rooms and seating arrangements more efficient. The test details of a certain student in a specific class may be easily accessed. Making it possible to assign exam rooms to students without causing any conflicts is the main goal of this seating arrangement method. Students often have a hard time locating the exam room, but a recently developed idea makes it easy for teachers to plan the rooms. Additionally, this initiative assigns a specific invigilator to each hall. Additionally, the program may provide reports about hall separation and other relevant topics, which is highly helpful for colleges. So, depending on their departments and registration numbers, the Excel sheet and paper work are automated.

1. INTRODUCTION

Automating the test process necessitated a unique seating arrangement. Instead than handling the Seating Arrangement procedure manually, our technology does it online. Based on the number of students, the number of courses, and the number of benches in each class, this program will automatically arrange the seats. The impact of classroom seating arrangement on student performance has received comparatively less study than the vast corpus of literature devoted to the dissemination of course information and content. The impact of classroom setting and furniture type on students' academic achievement is the focus of this research. The current method of test sitting requires a specialised individual. At the outset, this individual must gather student data, including names and exam attendance. Additionally, this individual should be familiar with all classroom seating arrangements. Every every bench has to have its seat number written on it. The next step is for someone to physically assign seats to each student, which is a time-consuming and laborious operation in and of itself. After that, he has to post the papers where the students can see it. In order to find their seats, students must arrive around one hour before the test. Not to mention how long and tedious this is.

In order to get around this, we built a website that automatically updates the details and shows where students' seats are. One person is responsible for filling out the forms and uploading them to the server, which then updates all the data in real-time. Students can then check their exact location simply by entering their roll number. All of the student data is saved in a database.

2. Literature review

A student's day is greatly impacted by the school building and classroom environments. In this literature review, we will look at some of the studies that have shown how different parts of schools and classrooms affect students' behaviour and learning. The literature review has been organised into seven parts to help readers better grasp the many aspects of this issue. School building environment, classroom

https://ijgst.com.2024.v13.i1.pp106-110

environment, seating choice, classroom spatial demands, seating arrangement, the classroom environment and special needs children, and case studies. Kaya and Burgess investigated the level of territoriality among students in various classroom layouts, taking into account their gender and seat choice. Some examples of classroom layouts include rows of tables with individual seats, clusters, U-shaped, and rows of tablet-arm chairs. The research was conducted by means of a survey at a sizable public university situated in the American southeastern area.Students who liked to sit at the very end of rows of tables with individual chairs or tablet-arm arrangements performed better on the task of claiming a certain seat than those who liked to sit in the very centre of a row, according to their data [11]. Students who favoured sitting towards the ends of rows at tables with individual chairs also felt a greater desire to establish personal space compared to those who favoured seats in the centre of the row. The U-shaped and cluster layouts did not provide any noteworthy outcomes. Regardless of the seating arrangement, females performed better than males when it came to claiming a certain seat in the classroom.Additionally, this study discovered that when students are allowed or expected to bring multiple items to class, such as a jacket, a handbag, a backpack, and textbooks, it might be more important to establish personal space so that students can actively participate in class. The investigations were conducted in a college-level classroom, which might lead to contradicting results when applied to primary school levels. Classroom layout and seating configurations have been the subject of shifting opinions throughout the last few decades. The conventional row was the primary emphasis of the classroom in the 1970s.arrange the study area. According to Weinstein, there was a huge uptick in curiosity on how classroom environments affect pupils [1, 2].

3. PROBLEM STATEMENT

As time goes on, more and more schools are showing little interest in adopting a centralised examination system. One important reason is that it becomes very impossible to assign appropriate test seats as the number of students, courses, and departments increases. When dealing with a big class size and students from diverse academic backgrounds, it may be rather challenging to distribute seats fairly. To ensure fair distribution of test seats, we must adhere to certain prerequisites. Verifying the optimal use of the seats is necessary.

Some schools advocate for a decentralised test system as an alternative to a centralised one in order to eliminate these problems. Teachers in the same course might take advantage of their offer to have students take exams at their own convenience. However, a course instructor will have a very hard time ensuring high-quality examinations while using this method. Some schools provide a single exam room every session so that students don't have to worry about making seating arrangements for the central test. Consequently, many schools begin to doubt the reliability of their exams. We will allocate seats and rooms for this test. Finding a solution to the issue of test seating or room assignment in order to avoid cheating in examinations is our research target.

4. WORKING OF SYSTEM

There are distinct features that each part uses to carry out its designated role. In the course of carrying out their duties, administrators have complete permission to view and display the data. The

https://ijgst.com.2024.v13.i1.pp106-110

administrator will be unable to view the data if the user authentication is faulty.

Administrator:

To perform its function, each component makes use of its own unique set of characteristics. Administrators have full access to see and display the data as part of their job responsibilities. Faulty user authentication will prevent the administrator from accessing the data.

Step :1 you'll need two datasets: one containing room information (i.e., the room id, column and row sizes), and another including test information (i.e., the topic id, number of students). The total number of seats and students will be determined by processing room and test information.

Step 2: It's possible to have one or more additional rooms when the number of extra seats exceeds the capacity of any room. During this phase, it will look for exam rooms that will be left vacant.

step 3: Since assigning columns to subjects is essential to our notion, we must first determine how many columns there will be and how many rows each column may hold. It attempts to guarantee that students with the same query set are at least one column apart in order to avoid copying from other students. For this reason, it can determine the maximum valid column size and capacity for each given topic.

step 4: is for it to assign columns to each topic. We may choose the set of columns that will be given to subjects by combining column size (row). Then, for every topic, it will provide a set of columns. Assigning additional seats to subjects in order to secure a set of columns for exams may be necessary in the worst case scenario, but in the best case scenario, it is not necessary.

step 5: This topic has a variety of column sizes and numbers. The room's identity is likewise stored in the columns, with the column size representing the row number. As a result, column size is a constant. By keeping one column apart from columns with the same topic, it gives a room and column number to each subject. It will provide you the whole exam seating arrangement when you finish the room and column distribution.

5. MODULE DESCRIPTION

1. Student/Candidate:

In this Module First Students can login into this application with their login credentials. After Login into the Application Student can search their exam center with their Roll No.

Faculty:

Here also same the faculty will login into the application first after that they will get the few operations like: - Add Student

- See Students
- Allot the Exam Center
- Update the Exam Center

Admin:

In this admin can login into the application with their login credentials. After Login Into the Application he will get some options like:

- Add Faculties
- See Faculties

6. ADVANATAGE AND FUTURE SCOPE

- As compared to existing system our system take very less time to execute all the data and display

onthe student's panel.

- This system reduces a lot of burden to the people in examination department. While any exam will be going to conduct in that time examiner have to check the entire classroom and also count the number of desk and benches on its own. Also according to exam time table examiner create all these data on its own. So that's why creating this application is very helpful for the exam controller.
- The randomizing of students roll numbers is going to be very effective.
- The system that has created take the backup of previous data for future purpose. The newly advance system has developed which take backup automatically as soon as the data of examination is generated its store the data related to time table in the form of html file that will use for printouts, hard copy manual further use.
- It can be used in various colleges, institutes, school and university level also.
- All types of exam can be conducted under this system so that there is no any specific limit ofstudents.
- In the future system will be generated that after conducting an exam on university level that exam seats will be allocated dynamically so that only administrator must have to fill the data.
- With the help of 3D graphics, it will shows the class architecture more effectively.
- While implementing a project on university level, system will add number of colleges at a time. So that different college administrator will be having an authority to conduct their exam
- We can create android application too

7. CONCLUSION

As per the given proposed system, seats can be allocate dynamically in a classroom. In an admin panel, there are number of section in which every section has a unique functionality. On the basis of which , students class id, roll, building, subject and respective shift. Son that these information is going to very helpful for the admin. For the security purpose there is change password section in which admin having an authority to change the password. One of the important part in admin panel is that it will display only tomorrows paper and also it will provide a backup plan of the existing paper that will be very useful for conducting next paper.

REFERENCES

[1] Algorithm for efficient seating plan for centralized exam system Prosanta Kumar Chaki ; Shikha Anirban 2016 International Conference on Computational Techniques in Information and Communication Technologies

https://ijgst.com.2024.v13.i1.pp106-110

(ICCTICT)

[2] Automatic Exam Seating & Teacher Duty Allocation System Apurva Inamdar ; Anand Gangar ; A

[3] Ashti Fatima Alam , " Seating Arrangemnet Tools for Examinations", International Journal Of engineering Appliedscience and technology

[4] VOL:1 2016 Prof S.S.Aravinth, G. Pavithra, "Exam Hall Seating Arrangement System Using PHP", Ap/Cse Knowledge Institute Of Technology VOL:1 2014

[5] Kanetkar, Yashwant P., Let Us C, BPB Publications, Fourth Edition, pp. 251-262, pp. 138-143, pp. 147-150, 2002

[6] Anusha, Pureti, T. Sunitha, and Mastan Rao Kale. "Detecting and Analyzing Emotions using Text stream messages." *ECS Transactions* 107.1 (2022): 16913.

[7] Aharonu, Mattakoyya, et al. "Entity linking based graph models for Wikipedia relationships." *Int. J. Eng. Trends Technol* 18.8 (2014): 380-385.

.