Automatic and Effective Allocation for Examination Seats using Android Application

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Abstract*— This paper is dedicated to simplify the task of manually seating arrangement of students in an examination hall. To develop an android app for automatic examination seating arrangement to reduce the manual work of staff. A PDF which containing student exam number with paper code and subject name is sent by the university will be received by the admin staff and will be converted into suitable format. Then an algorithm will be used to automatically allocate the students to the suitable block according to their strength. Then the staff will randomly be allocated to particular block. Alternate staff allocation will be done according to department. The students and the staff will receive a notification regarding the block where they have been assigned. In this paper we can further add features to improve the flexibility.

Keywords— Android, MySQL Database, Parsing, PHP

I. INTRODUCTION

In every engineering institute held the examination at a regular interval of time. Allocating the students to different blocks according to their strength is the main job .But manually allocating of students is a hectic job for the staff. So to remove this disadvantage this paper is designed to eliminate the manual work of the staff. We are going to design an android application for this.

In this a database will be maintained with student record with their seat number, staff database and the number of blocks database. When the subject PDF will be sent by the university to the college the admin will process this PDF. An algorithm will be fired and the arrangement of seat will done.

This information will be sent to the android application of the staff and student. They first need to login in. The staff and students will get the notification that which block they are allocated too. The students and staff need not to search different floors or building as they will get the notification about it.

This application can be greatly used in every institution for any kind of exam or in future for event management. It decreases our time and makes the procedure very systematic.

This paper focuses on improving the efficiency of the seat allotment system and the tedious task of manually allocating seats to each individual. And also for students to easily find their class rooms for exam so that they can reach the examination hall at time.

II. PROPOSED SYSTEM

In the proposed system we are going to develop an application in android along with back end in PHP. In this there will be multiple databases containing related information about student, teachers and number of classrooms.

During the examination time a PDF is sent by the university to college. This PDF is parsed into a suitable format. Then an algorithm is used to check if the condition if yes then automatic allocation is performed. The algorithm is selected depending on the situation such as for natural selection etc.

The allocation is performed along with detail like number of student, block size, paper code. The staff allocation is also done randomly but the same department staff will not be allocated to same department. When the process is done then the notification will be sent to the staff regarding the block they are allocated.

The same message is also send to the students that which block they are assigned to and on which building or floor.
So they need not to search different buildings.

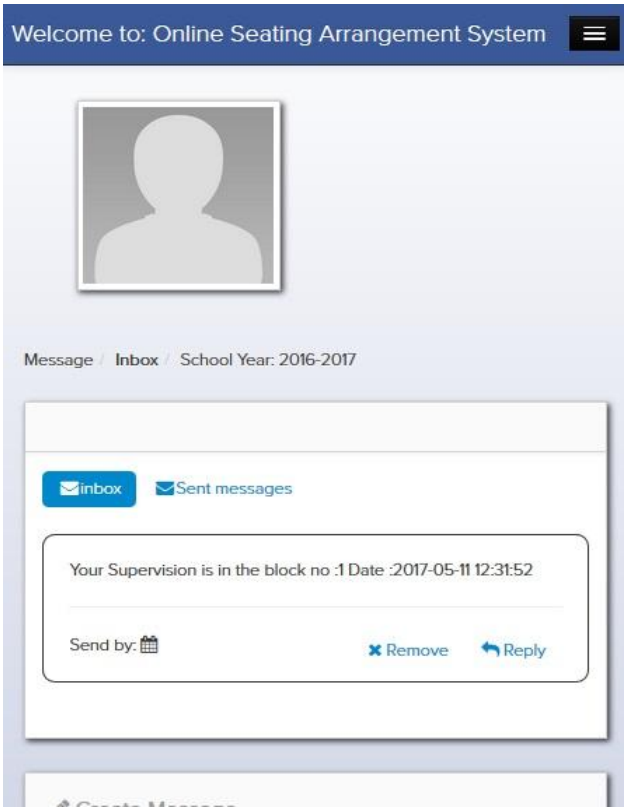
III.RESULT

In the final output we can see that the seat are allocated to the student and teacher.

	A	B	C	D	E	F	G	H
1	2222221	B500069	computer					
2	2222222	B500002	computer					
3	2222223	B500003	computer					
4	2222224	B500004	computer					
5	2222225	B500005	computer					
6	2222226	B500006	computer					
7	2222227	B500007	computer					
8	2222228	B500008	computer					
9	2222229	B500009	computer					
10	2222230	B500010	computer					
11	2222231	B500011	ETC					
12	2222232	B500012	ETC					
13	2222233	B500013	ETC					
14	2222234	B500014	ETC					
15	2222235	B500015	ETC					
16	2222236	B500016	ETC					
17	2222237	B500017	ETC					
18	2222238	B500018	ETC					
19	2222239	B500019	ETC					
20	2222240	B500020	ETC					
21								
22								
23								

In the above image we created the CSV file of the student seat number with there branch and given input to the system.

In above image we can see that student is given the information about the block allocated to him with date



Now finally in the above image we see that the staff is also allocated the block.

This is just a demo of system with 20 input seat numbers but in future we can give it more input to system for whole college or university.

IV. ADVANTAGES

1) The main advantage is that it's feasible and reduces the manual work.
2) Everyone will be notified time to time about their seating allotment.

V. ACKNOWLEDGEMENT

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VI. FUTURE SCOPE

In the future we can use different strategies to find block number of students who does not have that android phone or no internet connectivity. We can also use the message facilities for students who don't have an android smart phone or else we can mail them.

VII. CONCLUSION

Here by we conclude that this paper will reduce the work load of the staff. This application further can be adapted by different institutes to reduce their work. It can be used further for different purpose also. This paper can be evaluated for more features

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