A Special Topic Report

ON

PARIKSHA -
(AN EXAMINATION SEAT ALLOCATION MECHANISM)

BY

Bhavani B **1PI11IS027**
Anushree Prasanna Kumar **1PI11IS017**
B Swathi Manaswini **1PI11IS022**

Under the guidance of

Dr. Viraj Kumar

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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

PES INSTITUTE OF TECHNOLOGY
100 FEET RING ROAD, BANASHANKARI III STAGE
BANGALORE-560085

PES Institute of Technology,
100 Feet Ring Road, BSK 3rd Stage, Bangalore-560085

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

CERTIFICATE

This is to certify that the Special Topic entitled **Pariksha** is presented by **Anushree Prasanna Kumar, B Swathi Manaswini, Bhavani B with USNs 1PI11IS017, 1PI11IS022, 1PI11IS027** in partial fulfillment for the award of degree of **Bachelor of Engineering in Information Science of the Visvesvaraya Technological University, Belgaum during the year 2014-2015**. It is certified that all corrections / suggestions indicated for Internal Assessment have been incorporated in the report. The Special Topic has been approved as it satisfies the academic requirements in respect of Special Topic prescribed for the Bachelor of Engineering Degree.

Signature of the Guide
Dr. Viraj Kumar

Signature of the HOD
Dr. Shylaja S.S

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ABSTRACT

During an examination, the administrator manually generates the seating arrangement of the students. Also, the same is made available only a few minutes before the examination. This creates commotion and chaos near the notice board where students rush to see their classrooms and seating arrangement. In order to make this an easy task, Pariksha enables students to check their examination classroom and seating layout on their android phone.

Considering the issues mentioned above, Pariksha aims to eliminate the manual work of the administrator and provides an automated way of viewing the classroom and seating arrangement to the students. It provides an android interface to the admin and students as well as a web interface for the department faculty and the admin.

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1. INTRODUCTION

Pariksha is an Android app developed to ease the process of generating and viewing seating arrangements during examinations. This takes too much of the administrator's effort as it involves manual creation of seating arrangement. And on the examination day, to view their classrooms, students gather near the notice board leading to last minute confusions. Also a student who might be late to the examination will have to run to the notice board to view his classroom and seating layout.

In order to serve the issues mentioned above, Pariksha provides an automated way of generating the classrooms and seating layout. Departments upload the files containing the USNs for the examination. Administrator has to only click on a button to generate the seating layout. Once the administrator has clicked on the button, a background computation on the server is performed to generate the seating layout. Corresponding URLs are generated for each USN. On the student's side, students have to enter their USN on the Android app which performs a background computation to return a downloadable link containing the classroom and seating layout for their USN.

Pariksha aims to eliminate manual work on the admin side, and provides a convenient way of viewing seating layout on the student's side.

The problem addressed is to automate the process of generating classroom seating arrangement during examinations. The input to the process is the USN files and the output is the seating layout corresponding to the student's USN. The problem definition is partitioned into two parts: Android app to generate and view the classroom and seating layout for a particular USN; Web server to perform the background computation to display the seating layout on the web interface as well as the android interface.

For the admin to log in, a username and a password is required. Once the username and password are entered, he has the privilege to generate the seating layout. The generation takes place as a part of the backend computations. After the seating layout generation, the admin gets a list of downloadable links through which he can view the layout for any particular classroom.

The web server performs the backend processing to generate the seating layout and display it to the students. Processing is done using server side scripting language php.

2. MOTIVATION AND AIM

During examinations, the classrooms and seating arrangement are made available only half-n-hour before the examinations and only on certain notice boards in the college. This causes a huge crowd to be formed in those areas and thus creating a commotion. Also, the examination administrator has to manually create the seating layout for the student USNs.

In order to prevent students from crowding and creating last minute confusions near the notice board, we have automated the process that will enable students to view their examination classroom and the seating arrangement on their Android phone. This reduces the crowd near the notice boards. The app also reduce the tension a student who is late to an examination would otherwise take. We also aim to reduce the manual effort the administrator puts in creating the seating layout.

3. DESIGN

Development of Pariksha consists of two parts: Android interface, and Web Server

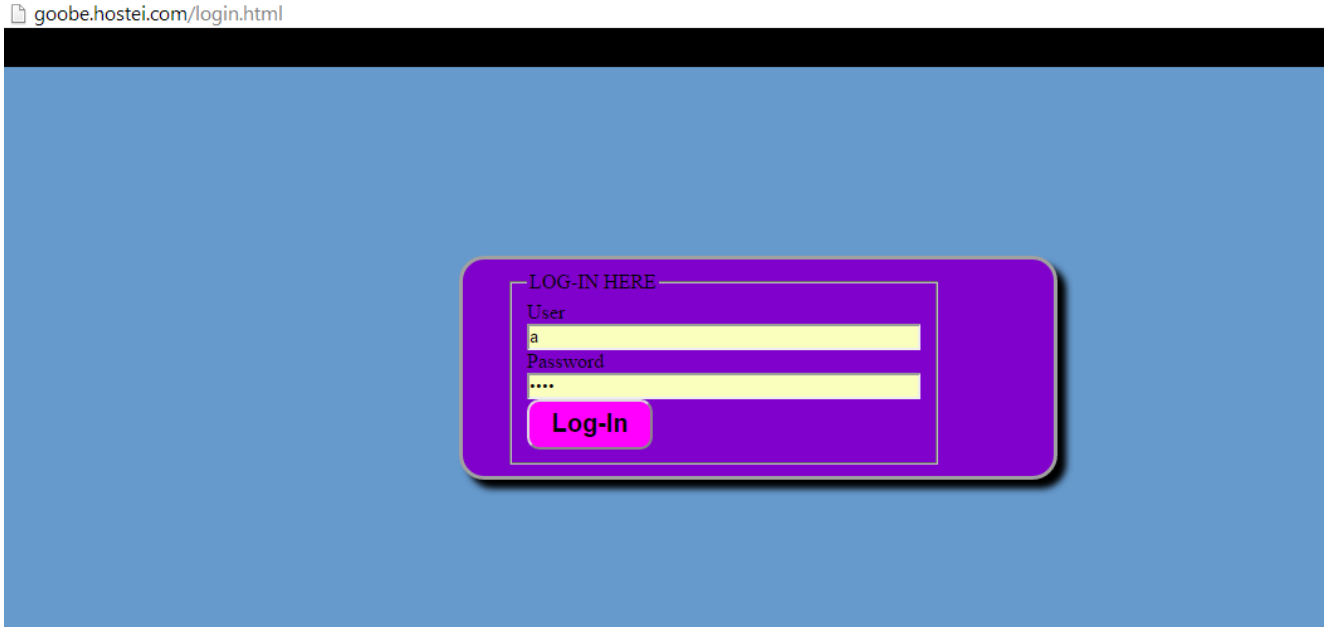
The Android interface is used by the students to view the seating arrangement. It is also used by the admin to generate the seating layout.

The web server is used to make all the computations and is considered as the backend to the app. The web interface is used by teachers to upload the files containing student USNs. All the departments upload their USN files onto the server. Once the files are uploaded, the examination department administrator generates the seating layout for the uploaded USNs. The seating layout is generated on a button click. All the backend computations are performed on the server using the server side scripting language- php.

The design of the web server consists of an initial login page where the administrator has to log in. Once the administrator has logged in, he has the privilege to generate the seating layouts for the uploaded USNs. The URLs corresponding to the USNs will then be inserted into the database. When the student requests for the seating layout, a link will be downloaded onto the student's phone which contains the seating layout of his classroom.

4. SNAPSHOTS

goobe.hostei.com/login.html



www.goobe.hostei.com/index.php

Welcome to Pariksha Desktop Application

multiple Files Upload

Select file Choose File No file chosen

Select file Choose File No file chosen

Select file Choose File No file chosen

Upload

Generate

www.goobe.hostei.com/docx_read.php

F101

BLACK BOARD

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F102

BLACK BOARD

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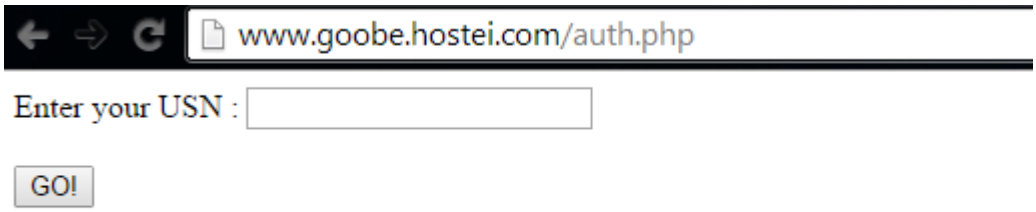

Click to download

Room no : F201

Blackboard		
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1pi11is039,1pi11me009	1pi11is044,1pi11me014	1pi11is049,1pi11me019
1pi11is040,1pi11me010	1pi11is045,1pi11me015	1pi11is050,1pi11me020
1pi11is041,1pi11me011	1pi11is046,1pi11me016	1pi11is051,1pi11me021
1pi11is042,1pi11me012	1pi11is047,1pi11me017	1pi11is052,1pi11me022

5. FUTURE ENHANCEMENTS

The functionalities that are considered to be the future enhancements to the app are:

- Automation of invigilation for teachers – The app should enable the teachers to know which classroom they have to invigilate during an examination
- Accommodation of changes made in the last few minutes prior to the examination
- Server scalability
- Accommodating more classroom configurations
- Keeping track of the classrooms in which the students are writing a particular exam, so that in case of any doubts or changes in questions, the teacher can reach the classroom directly without any confusion.

CONCLUSION

Pariksha is an Android app that aims to reduce the manual effort of the administrator required in generating the seating arrangement of classrooms during examinations. It also reduces the effort a student takes in walking up to the notice board to view his examination classroom and seating layout. This in turn reduces the crowd and commotion near the notice boards.

Thus, Pariksha provides an automated way of generating and viewing examination classrooms and seating arrangements.

REFERENCES

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[3] http://goobe.hostei.com/slogin.php