Effective Meeting Management Using Android Application with IOT

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ABSTRACT: This project is aimed at developing an android application for an organization which will be useful for meeting management. The smart meeting room is an android application which will be used by all the employees in an organization which will perform functions such as scheduling a meeting, inviting members for meeting, taking attendance of employees, recording meeting, sharing documents and switching on and off lights. This application is very useful and effective for companies were lots of meetings are conducted.

KEYWORDS: IOT, Arduino, Relay, Bluetooth.

I. INTRODUCTION

In our project we are developing an application named Smart meeting Room (SMR). The main aim of this project is to smartly manage meeting etc. Meeting room is a place where no. of deals are cracked, where no. of decisions regarding development of their business are made. So, this place should be smart for good decision making and successful talks. In Traditional meeting rooms every work was done manually such as the organizer has to invite people by making phone calls and there was a need to remind them for the meet where he\she has to specify the meeting agenda, date & time of the meeting, and who is going to lead the meeting. Switching on and off the lights and fans of room was done manually. Attendance of members in meeting was also manually done and many more. So, all these are not a part of smart meeting room. In the traditional system all the things were handled manually. And there is a tendency that when a person handles anything manually then there are chances of errors. There are some drawbacks of No idea whether the room is Booked/in use/Available. Inviting members for meeting takes more time and no reminder for the members for meeting. No smart attendance to check whether every member is present or not. We have proposed a system which will overcome all the drawbacks mentioned above and also make the work easy and smarter. In this system scheduling of meeting is done using the application. One can book the meeting room using the android app. And the app will also show the timetable who has booked the room? What is duration of the meeting? Etc. You can switch ON/OFF lights, using the android application, you can send messages to invite members for meeting using app. The meeting is recorded automatically in the app in text form (Speech to text). All the required documents can be easily shared using this app. In Smart Meeting Room application all the basic meeting requirement are fulfilled. This app can be used by any organization or company. Effective management of meeting minutes and one can easily schedule meetings and invite members for meeting. This app will be very useful for company for managing the meeting schedule etc.

II. RELATED WORK

Smart meeting Room application proposed by us will solve all the problems faced by any organization which are already discussed in the literature survey section. The application is specially made after focusing on the highlighted problems. Some of the challenges are Wasted time, Scheduling errors, Damage to employee morale and client perception, Inefficient use of meeting rooms and resources. The work undertaken is only for making effective meeting scheduling and effective management of meeting minutes. Normally there are many applications similar to smart meeting room application such as MOM(Minutes of Meeting), handy meeting minutes, Google calendar and many more but all these were not so user friendly and not even popular. Hence, after going through all these applications we decided to develop an application which will also cover problems faced in the old application. The main goal behind

developing this application is to manage meeting minutes effectively in an organized manner. Smart meeting room application will perform operations such as meeting scheduling, Inviting members for meeting, taking attendance of the present employees in the meeting, remotely switching On/Off the lights of meeting room, recording meet or taking notes and share required documents.

III. LITERATURE SURVEY

Earlier, every task was completed manually without taking the help of technology at all but it resulted to so many complications, confusions and many more problems. The pen-and-paper method is the old way of scheduling appointments for a workgroup, in which all scheduling is funneled through an appointments secretary with a central calendar. In this model, the people whose time is being booked must check in regularly to find out what their schedule is, and to let the secretary know what times are unavailable. With large workgroups or very busy schedules, this system can rapidly become untenable.

There are various challenges in meeting scheduling process, Meetings are a necessary part of business, but what isn't necessary is the amount of time spent arranging them. According to a study conducted in September 2010, business professionals spend 4.75 hours of a typical workweek arranging an average 8.9 meetings. With the amount of time that business spent scheduling meetings, they could take Friday afternoon off every week.

Some of the challenges are:
1. Wasted time
2. Scheduling errors
3. Damage to employee morale and client perception
4. Inefficient use of meeting rooms and resources

Following are the android applications developed for the purpose of scheduling meeting and maintaining minutes of meetings:
1. Google Calendar: This app is specially developed for event scheduling. It is not compulsory that event must be official event such as business meetings.
2. Handy meeting minutes: This app will only generate a report or notes related to the meeting conducted..
3. Minutes of Meeting (MOM): Creates minutes of meeting easily and share with the stakeholders of meeting.

There are many more applications developed same as mentioned above but all the applications are not effective for meeting management. Most of the applications are static only generate a time table, inviting members was not done. All applications were not working smartly and in organized manner.

So, meeting room should be smarter and meeting management should be smartest which will lead to make effective decisions and conduct a smooth meeting.

The objective of Smart meeting room is:
- To provide better platform for meeting organizers and employees to make successful meeting scheduling and managing meetings.
- To allow an android application to remotely control all the devices present in meeting hall/room.
- To record the meetings or take notes i.e. minutes of meeting.
- To invite members for meeting in an effective manner.
- To take attendance of members who are invited for the meeting
- To share all the documents required among the employees.

IV. PROPOSED METHODOLOGY AND DISSCUSSION

Smart meeting room is an android application specially developed for any particular organization which will perform basic operations while meeting. The main goal behind developing this application is to manage meeting minutes effectively in an organized manner. Smart meeting room application will perform operations such as meeting scheduling, Inviting members for meeting, taking attendance of the present employees in the meeting, remotely switching On/Off the lights of meeting room, recording meet or taking notes and share required documents. The

application has mainly two panels, one is admin and another is employee panel. Admin does not have to register himself, a fix username and password will be provided to the authorized employee of the company but employee has to register himself by filling details such as username, email id, contact number, address, designation and password. According to email id provided a unique QR code will be generated for attendance. Admin panel has full access to the application i.e. admin is free to perform all the operations in the app. Admin is a person who will organize the meeting in companies. By entering into admin panel the person can schedule meeting, invite members for meeting, taking attendance of the present employees in the meeting, remotely switching On/Off the lights of meeting room, recording meet or taking notes and share required documents. Admin dashboard contains 5 blocks in which first is attendance were admin will scan QR code of each employee and present member will be counted and admin can load data to see how many members are present, Second block is of invitation where admin has to enter invitation message with meeting agenda and other details, Third block is notes where meeting can be recorded in speech to text format, Fourth block is schedule where admin create a new schedule of meeting and he can also view the schedule and the last block is for lights on and off where by connecting to Bluetooth one can on and off the room lights. Another is the Employee panel were employees doesn't not have all permissions as admin. Employees can only view the schedule created by the admin, the invitation sent by admin will be viewed as notice by employee. Employee has permission to take notes, share documents and switch on/off lights of the room.
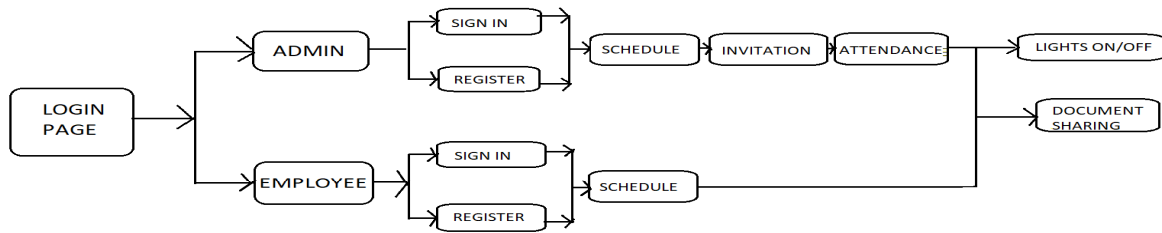
Block Diagram:

Fig. 1. Block diagram of proposed system

V. EXPERIMENTAL RESULTS

This app can be used for :
1 Meeting scheduling
2. Record Meeting
3. Document sharing
4. Inviting members for meeting 5. Switching ON/OFF the light
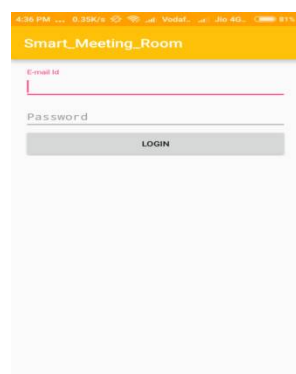

Fig. 2 First Screen (Login Page)

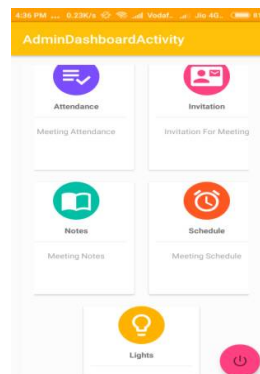Fig. 3 Second Screen (Admin Login)

Fig. 4Third Screen (Admin Dashboard)

Fig. 5 Fourth Screen (Scheduling)

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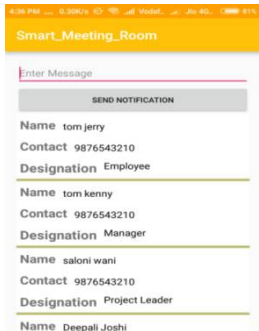*Website:* www.ijircce.com

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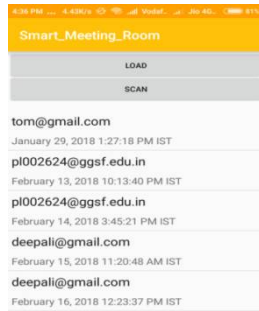Fig. 6 Fifth Screen (Send Notification)
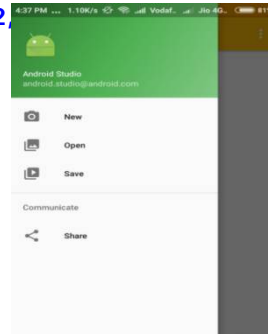

Fig. 7 Sixth Screen (Attendance)
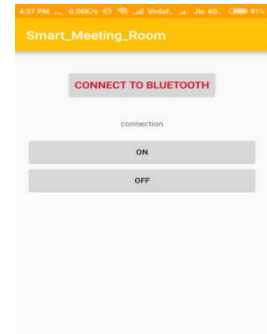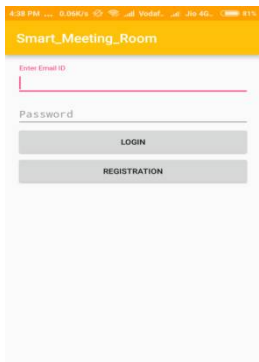

Fig. 8 Seventh Screen (Notes)

Fig. 9 Eighth Screen (Lights On/Off)

Fig. 10 Ninth Screen (Employee Login)
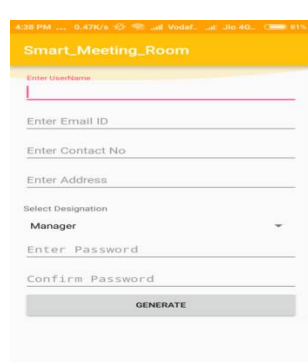
Fig. 11 Tenth Screen (Registration)
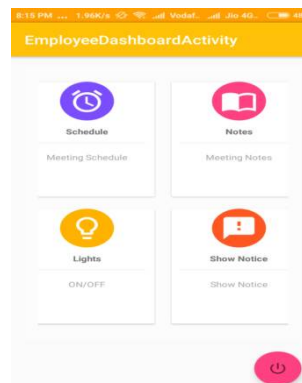
Fig. 12 Eleventh Screen (Employee Dashboard)

Fig. 13 Twelfth Screen (Meeting Schedule)

VI. ADVANTAGES

1. Easy meeting scheduling
2. Inviting members for meeting to easily
3. Easy document sharing
4. Saves time in employee communication and collaboration
5. Result oriented process and practices
6. Cost and time saving with greater efficiencies and effectiveness

VII. DISADVANTAGES

1. There is no facility for video conference
2. Scheduled meeting cannot be extended
3. Internet connection required

VIII. APPLICATIONS

1 Meeting scheduling
2. Record Meeting
3. Document sharing
4. Inviting members for meeting
5. Switching ON/OFF the lights

IX. FUTURE SCOPE

It is not possible to develop a system that's makes all the requirements of the user. User requirements keep changing as the system is being is used. Some of the future enhancements that can be done to this system are:
1.Can implement fire alert system.
2.Make video conferencing.
3.Implement alarm system.
4.Remotely controlling all the appliances.
5.We can develop application in iOS.

X. CONCLUSION

This is based on the hypothesis that traditional systems can be re-engineered with aspects of social networking keeping in view the potential benefits and success of social networking websites in capturing user attention and involvement. After implementation system will provide a platform for controlling the devices remotely and can share documents easily through the application. Also the basic requirements which are useful for the meeting are fulfilled. This app is very useful for an organization or company for managing the meeting scheduling. Through this app there is effective management of meeting minutes and one can easily schedule meetings and invite members for meeting.

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