



AUTOMATED MESS MANAGEMENT FACILITY USING SMS AUTHORIZATION

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Abstract: Mess management gives an idea about boarding details as well as stock utilization maintenance. Sometimes there is in need about current status of mess groceries and another ingredients record. In the academic institution, the students dine in the same mess throughout the month. In such case an account of students is maintained manually. Mess manager records the details of the students who dine in the mess on daily basis and at the end of the month total expenses is calculated. This method of maintaining paper-based records is not feasible. The idea of the paper is providing an automated way for recording student attendance at boarding and expense calculation process is thought to be feasible and accurate solution which saves time too. Whenever student login with roll no as an identity for boarding then immediately an acknowledgement is sent in the form of an SMS to the mobile registered which makes the boarding process for authentication. The details are respective student after login is reported to mess manager for authorization. On the manager level the application provides the details about stock consumption, balance ETC. which helps in making stock management decisions in dynamic. This also provides effective maintenance of mess. The administrator provides separate unique identity and privileges for mess manager, stock manager as well as for student.

Keywords: Mess management, Mess manager, mobile, Administrator

1. INTRODUCTION

Automated mess management system is really helpful for top level management as well as boarders in making decisions at different levels. Some of the academic institution which has mess facility are running their mess with manual process. To eliminate manual mistakes and time consumption the mess management application serves a better way. The accountability in all aspects is achieved through automated application which is not so accurate in manual system. Mess management application is engaged in providing up to date information about the details of mess boarders and stock availability. The boarding authentication is provided through SMS service. It includes option such as adding, deleting information about the students and stock items. The delete option is applicable to a single record or multiple. It also has a facility to print the status of boarding during a certain period. The other feature of this project is to provide hard copy of the total stock consumed during a given period. This project usage has scope at academic institutions, health care organizations, Industries etc.

2. LITERATURE SURVEY

Ankita Chawla, Priyanka Joshi, Sanjana Panjwani, Surbhi Sontakke, discussed about the importance of automation of mess management system. The authors illustrated the procedure through use case diagram and flow chart. The paper has expressed the advantages like time consuming, man power reduction and also manual mistakes. Thus they explained the automated mess management in broad sense which helps in giving an idea for writing this paper. This paper has used the proposed steps and identified other steps in the process [1].

B Muniraja, J Rajanikanth, discussed about the canteen facility provided in various campus. The paper has quoted drawback in the payment process. In it, usually cash or credit card transactions are carried which has serious drawback. Some times the canteen owner records the order details on paper and bill calculation will be at the end of the month. The authors explained the process of payment with recharge card through postpaid or prepaid facility [2].

B Muniraja, J Rajanikanth, demonstrated the procedure of payment process in the canteens through RIFD cards. This eliminates the cash carry. The paper explained the drawbacks of existing system and proposed features and RTC (Real Time Clock) architecture components. It has the information about the PIR (Passive Infrared) sensor working [3].

Salman Beg, discussed the factors which have influenced the transformation in technology advancement, professionalism as important resources. A computer based environment is suitable to calculate the statement of bills. Separate database is very much important to maintain the files with authorized validation [4].

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3. PROPOSED APPROACH Admin

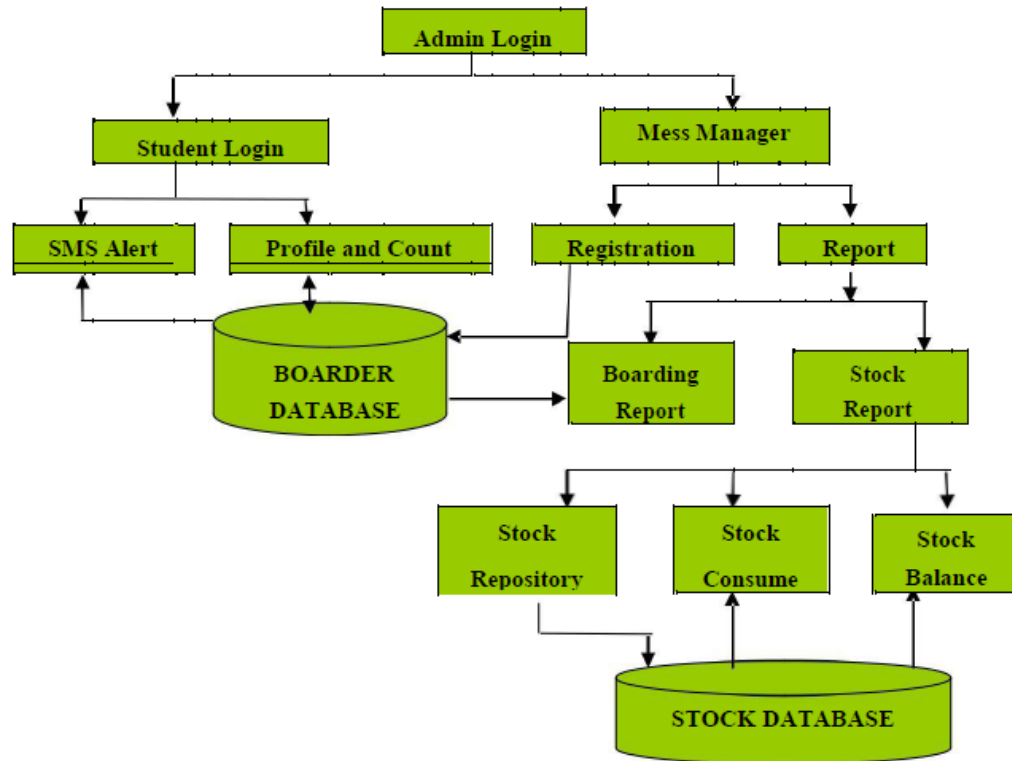


Fig. 3.1 Flow chart describing system process

4. APPLICATIONS

Mess management is used in wide variety of applications such as

1. In academic institutions
2. In secondary schools
3. In production industries
4. In Health care organizations ETC

5. RESULTS AND DISCUSSION

The screen in fig 5.1 of this application will be admin login who logs-in with valid username and password. It is simply for the security purpose. After successful login of Admin, fig 5.2 screen appears with be Student login and Mess Manager Login. In the student login the student after entering roll no, immediately the respective student details will be pop up and also an SMS alert will be sent based on time of entry to the registered mobile. At the same time details will be updated in the database. In the Mess manager login, mess manager can view the student details and also has a feature to register the new boarder in the mess. When the submit button is clicked fig 5.3 appears with the details of particular student who has enter the roll no along with their photograph for authentication and authorization. The mess manager login (fig 5.4) screen appears with Stock report and boarding report. Fig 5.5 is the Stock report with three options Stock Repository, Consumed stock and Balance stock. The stock repository allows to store the stock details that are required for mess shown in fig 5.6, consumed stock will provide the details of stock consumed during the availed time period shown in fig 5.7 with report in fig 5.8 and with balance stock is used by the manager to know the current stock in the store room in fig 5.9.

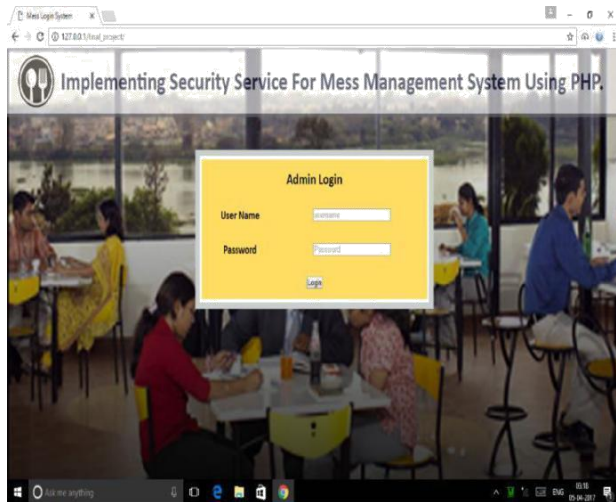


Fig 5.1 Admin Login screen

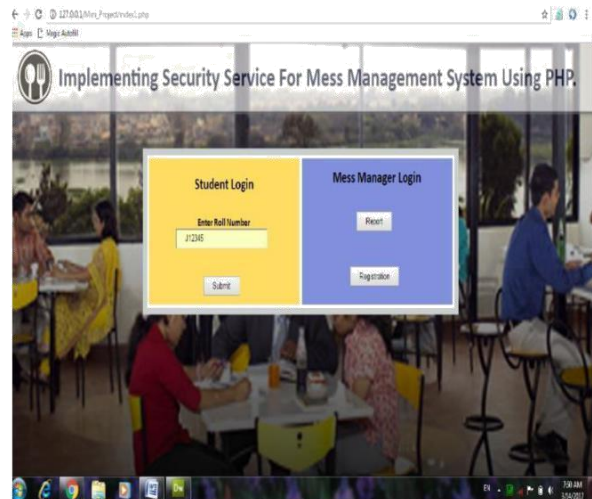


Fig 5.2 Student and Mess Manager Login

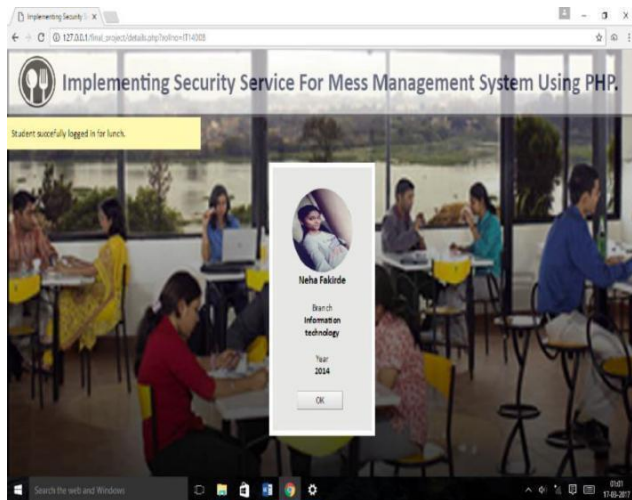


Fig 5.3 Student Profile

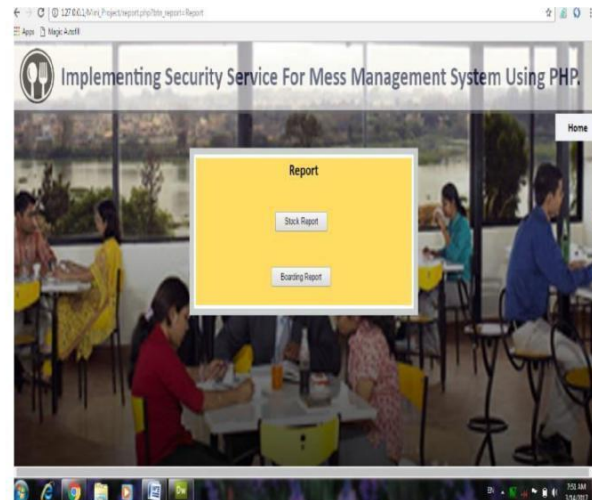


Fig 5.4 Report Page

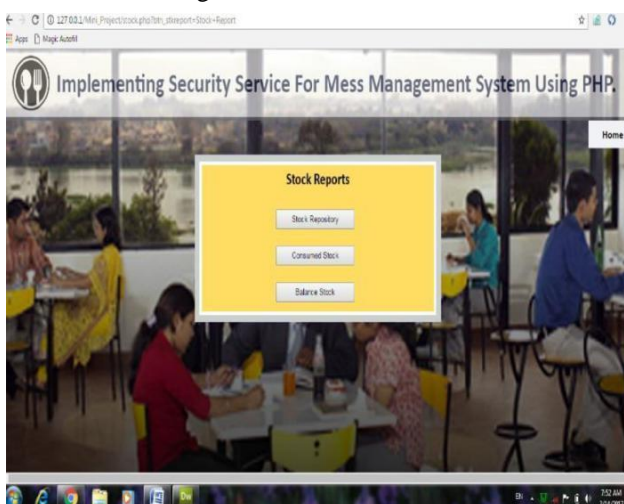


Fig 5.5 Stock Report



Fig 5.6 Stock Repository

In Student Login Report fig 5.10 mess manager can see the report of student that how many student done their meal at particular date. The date will select by date picker. Mess manager can select a particular duration. Fig 5.11 shows a report of boarders at particular duration selected by the mess manager with date breakfast, lunch, dinner details. Fig 5.12 is the student registration entered by mess manager that will be saved in the database. When register button is clicked that time the details of the student will saved in the database. After that student can login into the mess.

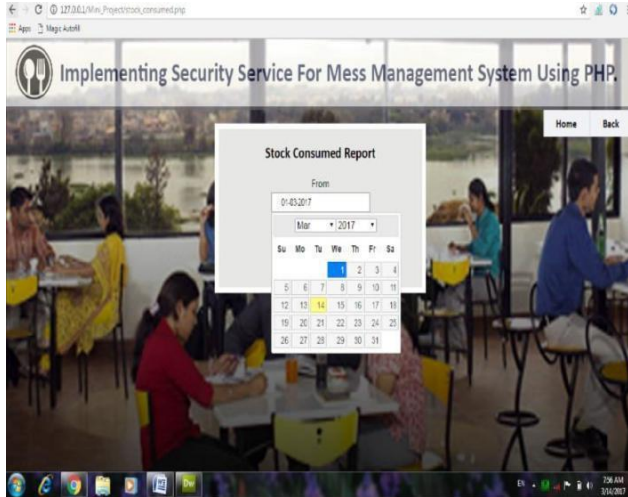


Fig 5.7 Stock Consumed

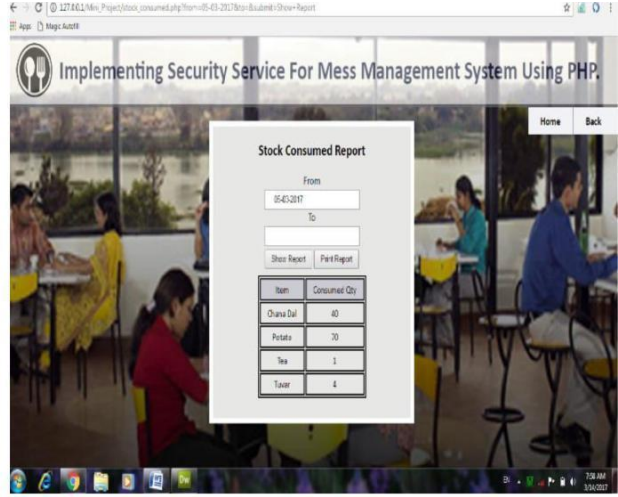


Fig 5.8 Output of Consumed Report

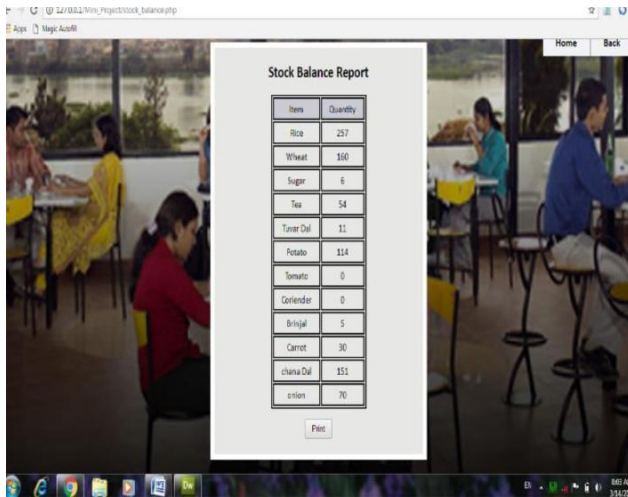


Fig 5.9 Stock Balance Report

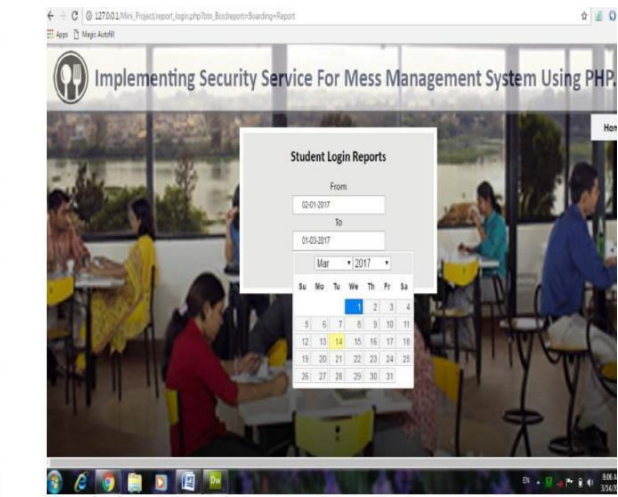


Fig 5.10 Student Login Report

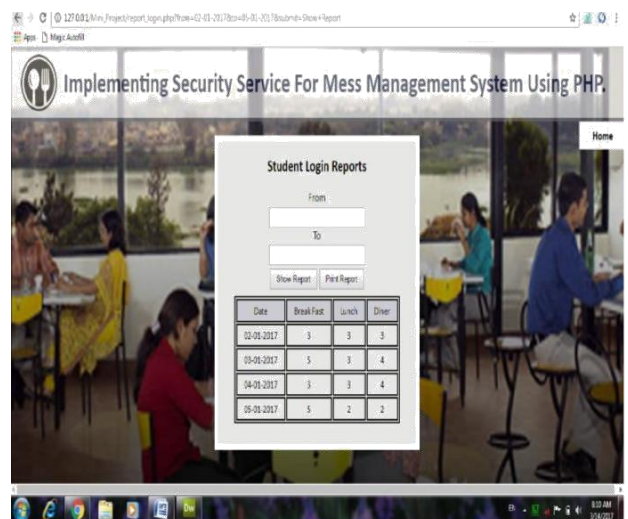


Fig 5.11 Output of Student Login Report

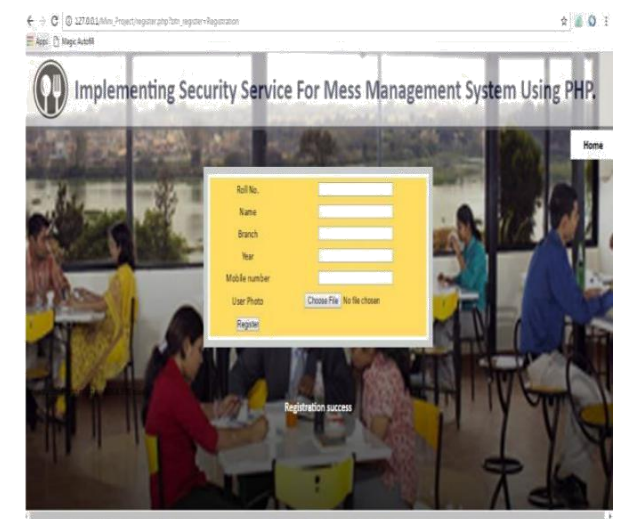


Fig 5.12 New Registration

6. CONCLUSION

The paper guarantees a secured environment for attendance record of student availing mess service. In this the student, enters the roll no after submitting the roll no a new screen pops out with student details along with photograph. After successful authentication a text message will be sent to the submitted student's contact number for validation. It very useful for top level management to take dynamic decision. This can be enhanced by deploying on the web where different mess facilities are integrated to work and also by using Bluetooth this application may be on the hands of boarders. The billing process may be effectively managed by considering the constraints of availing mess facility.

7. REFERENCE

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