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Mess food wastage saver

Sadhana Dukre, Pranali Khangate, Ankita Kamble, *Prof. Jayashree Kulkarni*

Department of Information Technology, MIT Academy of Engineering, Alandi, Pune, India

ABSTRACT: 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. Also if student is not available and food is ready it will cause the food waste. The method of maintaining paper-based records is not feasible. The idea of the paper is providing an automated way for recording student attendance at accurate solution which saves time too. This paper presents detailed information on the Mess Management System. The main aim of the mess is to provide clean and fresh food to the students/employees of the organization like mess management. Also not to waste food by taking care of attendance of students. It will be easy to handle that app make in android application. Thus, there arises a need to create software that will make the entire Mess Management an automated system. This software will be useful to any school/college hostel or in general to any institute maintaining a mess. This system uses Levenshtein distance algorithm to match admin entered query with available students name in database.

KEYWORDS-FOOD WASTE MANAGEMENT, ONLINE ATTENDANCE.

I. INTRODUCTION

I. BACKGROUND:

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. It includes option such as adding, deleting information about the students and menu items. The delete option is applicable to a single record or multiple. It also has facility to add schedule of timing for mess opening and closing. Proposed system manage the mess system. Admin can send request to orphanage to collect the food. Admin can view student location on map. Admin and student analyze review of system that given from user which are positive or negative.

I.II. MOTIVATION

Need to develop the android application that will saves admin as well as student time to manage present also to write on board today's menu. If student is not available today that food will waste, so there is need to make centralize system that connect platform to admin and student.

II. REVIEW OF LITERATURE

1. 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.
2. 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

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drawback. Sometime 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.

3. B Muniraja, J Rajanikanth, demons trated the procedure of payment process in the canteens through RIFD cards. This eliminates the cash carry. The paper explained the drawbacks f existing system and proposed features and RTC (Real Time Clock) architecture components. It has the information about the PIR (Passive Infrared) sensor working.
4. 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.
5. Shows that, with good management and marketing practices, a canteen can provide healthy foods and also be financially viable. The school canteen is a small business. Like any business, it requires good management practices to be efficient and successful.
6. Design a self-service ordering node including its software and hardware. The touch screen displays food items for customers to input their orders directly by touching. The user can also request the order even through speech commands using speech recognition module. The system automatically completes data receiving, storage, display, and analysis.
7. By this system can change the entire canteen system. System can recharge card and used in after finishing of our college. Is there amount in that card the amount is refundable? This project is very easy to operate and fast response. The user credential result should be shows every week or a month. For this project to give effective solution and also In-Time only bill should be produced. For that the students are particular time only stay at canteen.
8. An effort is underway in Ghana to build a series of small community food process plants based on improved cold storage on fishing boats and on-shore facilities for preserving fish, which in an important source of protein. The aim of PHP's effort in Ghana is to engage local communities to feed people and create opportunities, and improve health through good nutrition.

III. SYSTEM ARCHITECTURE

PROPOSED SYSTEM ARCHITECTURE

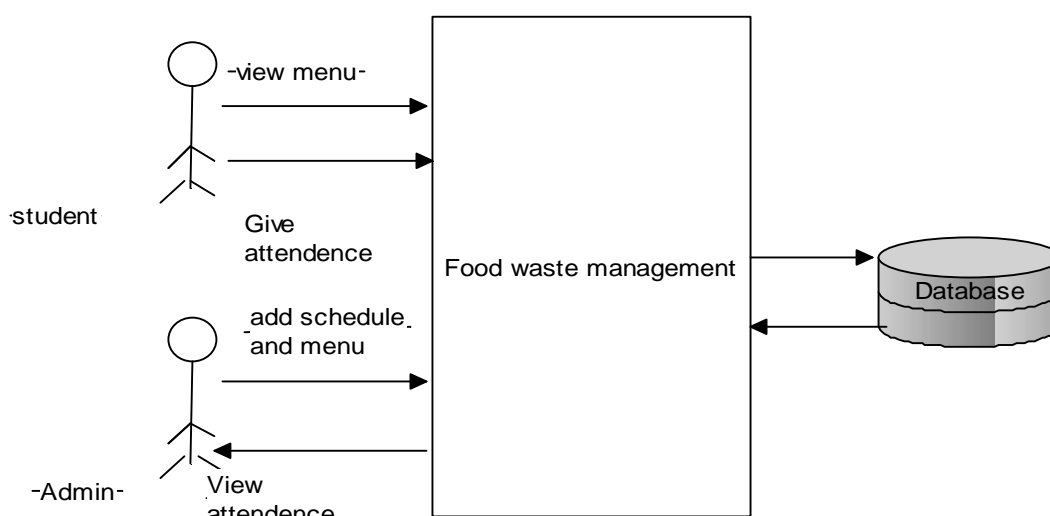


Fig.1: System architecture

SYSTEM OVERVIEW-

The system will work for food waste management and store system data securely by managing everyone separate record. The proposed system admin will login to system. Admin add schedule of the day for lunch or dinner. He can

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view student list and attendance of student. Admin add today's menu on site for student. Student registers to mess and login to system. Student can view today's menu. Student can give attendance to system that he will present for today. That will saves food waste of mess. This system uses Levenshtein distance algorithm to match admin entered query with available students name in database. Proposed system manage the mess system. Admin can send request to orphanage to collect the food. Admin can view student location on map. Admin and student analyze review of system that given from user which are positive or negative with naïve bayes algorithm.

ADVANTAGES-

1. Save food wastage in hostel.
2. Within less time attendance can perform.

IV. MATHEMATICAL MODEL

Set Theory:

Let us consider S as a system for automatically find best resources.

$S = \{ \dots \}$

INPUT:

- Identify the inputs

$F = \{f_1, f_2, f_3, \dots, f_n\}$ 'F' as set of functions to execute commands. }

$I = \{i_1, i_2, i_3, \dots\}$ 'I' sets of inputs to the function set }

$O = \{o_1, o_2, o_3, \dots\}$ 'O' Set of outputs from the function sets, }

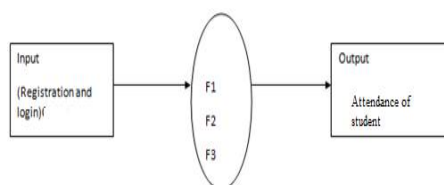
$S = \{I, F, O\}$

$I = \{ \text{Query submitted by the user, i.e. Give attendance} \}$

$O = \{ \text{Output of desired query, i.e. View all stud. attendance} \}$

$F = \{ \text{Functions implemented to get the output, i.e. Food saves} \}$

Mapping diagram



Mapping diagram for attendance of student

ALGORITHM:

Algorithm:Levenshtein distance algorithm

For calculating difference between searching query that is student name .It will work for any spelling mistake in student name .It match entered student name with available all students.

Input.

1. Text string x = Student name
2. Text string y=available all student name
3. Distance to match string x with y

Processing: It will find valid distance between two strings

Output: Give result distance is matched with specified distance in algorithm. Give result match or not matched.

Algorithm:Naïve Bayes algorithm

This algorithm is used classify review is positive or negative that will used aspect review is positive or negative

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Input: Post

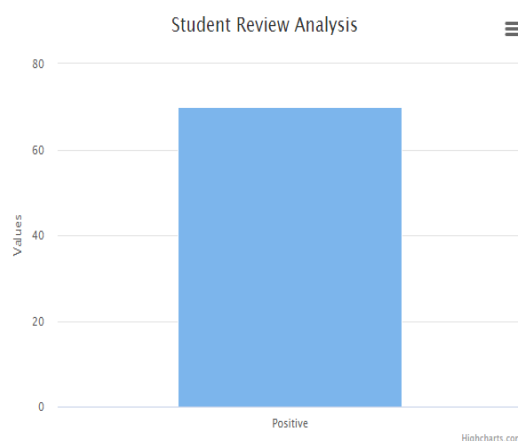
Output: Predicated class of review. Working: Step 1: Take review Step 2: Preprocess thereview

Step 3: Pass to naive bayes class.

Step 4: Get positive and negative score according to specify its dictionary. Step 5: Get max score and declare as positive or negative.

Step 6: Predicated class of all aspects.

RESULT:



Graph: Student review analysis

Explanation: Graph analyze the system review with applying naïve bayes algorithm. That will give result all review are most positive or negative.

IV. CONCLUSION

This software will be useful to any school/college hostel or in general to any institute maintaining a mess or canteen. Also, this software will reduce manpower, thus reducing the capital being invested. Thus, a application with added benefits than the existing ones is created. However, other aspects will be worked upon for better performance and efficiency. It will save food from wasting. It will work for mess management. System analyze all review. Admin view location of user on map.

REFERENCES

- [1] Ankita Chawla, Priyanka Joshi, Sanjana Panjwani, Surbhi Sontakke, "Mess Management System", International journal of science and engineering march-2015, vol:1 issue:2. Pg.: 82-85, e-ISSN: 2394-8299 p-ISSN: 2394-8280.
- [2] B Muniraja, J Rajanikanth, "In-Time Billing Process for Canteen Management System "International Journal of Emerging Trends in Engineering Research (IJETER), Vol. 3 No.6, Pages : 200-203 (2015), ISSN: 2347 –3983.
- [3] B Muniraja, J Rajanikanth, "In-Time Billing Process for Canteen Management System"International Journal of Pure and Applied Research in Engineering and Technology (IJETER), Vol: 3 (12), Pages: 223-231 (2015),ISSN: 2319 –507X.
- [4] Salman Beg, "Hotel Management System".
- [5] Swapna, M. Firdouse Ali Khan, "Design and Implementation of Ordering System for Restaurants", in International Journal of Engineering Research & Technology (IJERT), Vol. 1, Issue 10, December-2012.
- [6] S. B. Patil, Srikantha Rao, P. S. Patil 2001 „Canteen Management Design Principles“ Proceedings of the International Conference & Workshop on Trades in Technology, pp. 765-766, viewed 7 October 2001.
- [7] Tan-Hsu Tan, Ching-Su Chang, Yung-Fu Chen, Yung-Fa Huang, Tsung-Yu Liu, "Developing an Intelligent e-Restaurant with a Menu Recommender for Customer-Centric Service", Systems, Man, and Cybernetics, Part C: Applications and Reviews, IEEE Transactions.
- [8] Canteen Management Design Principles.
- [9] Craig Rominger, nano ICE, Inc. Member, Clinton Global Initiative (CGI) Bothell, Washington USA "Development of a Sustainable Food Supply Chain by Post Harvest Program" 2012 IEEE Global Humanitarian Technology Conference.
- [10] J. Parfitt, M. Barthel, and S. Macnaughton, "Food waste within food supply chains: quantification and potential for change to 2050," Philosophical Transactions of the Royal Society, v. 365 (1554), 27 September 2010.