IT-632-Software Engineering

Cafeteria Management System (Cashless Canteen)

System Requirement Specification Report 1.0

Team-2

Instructor – Professor Asim Banerjee

Date: 13th September, 2013

15 September, 2013

DA-IICT, Gandhinagar

Overview

The purpose of this document is to present a detailed description of the requirements of our stakeholder. These requirements where found out by taking surveys, interviews, personal meetings with the client and internal discussions among the development team. This document is intended for both the stakeholders and the developers of the system and will be proposed to the Admin staff of DA-IICT.

Target Audience

Mentors
Developers

Document Revision History

Version	Primary Author(s)	Description	Reviewer(s)	Date
1.0	Team #2	System Requirement Specification Report	Aakash Thakkar	15 September, 2013

Contents

1. Introduction

1.1 Purpose

The purpose of this document is to define the requirements gathering process used to elicit requirements from the product stakeholders. It will serve as a guide for the developers on one hand and a software validation document for the prospective client on the other. It discusses the functional, non-functional, performance and development requirements and deliverables. It is an organized document with an aim to assist in designing, coding and testing of the software and reduce unnecessary development effort by clearly enlisting all the system requirements specification. It'll also help the development team visualize the scope of the project clearly.

1.2 Scope

The overall aim of the project is to simplify the cafeteria transactions by making them automated (computerized), cashless and quick. The average time of the transactions is to be reduced comprehensively. A web portal is to be developed with the help of which the cafeteria transactions would be carried out without any cash involved in it. The website would be accessible to the whole DA-IICT community as it would be hosted in the DA-IICT intranet server itself. One of the goal of the project is to eliminate the coupon system that is prevailing in the current scenario.

1.3 Stakeholders

The stakeholders would include:

- Students at DA-IICT
- Faculty at DA-IICT
- Admin Staff at DA-IICT
- Canteen Owners at DA-IICT

1.4 Deliverables

The deliverables will include:

- Project Proposal
- Feasibility Report
- Project Plan
- Software Life Cycle Development Model
- Software Requirement Specifications
- User Manual
- Requirements Traceability Matrix
- System Design Documents
- System Test Plan
- Test Cases

- Test Reports
- User Interface Design Document
- Quality Assurance Plan
- Tools and Libraries
- Risk Monitoring, Management & Mitigation Plan
- Software Configuration Management Plan
- Coding Conventions
- Documentation Standards
- Cost Estimation Plan
- Deployment Plan
- Termination Analysis
- Product – Website

2. Overall Description

2.1. Product Perspective

Our Project aims to develop a new Software System for Cafe of DAIICT satisfies various requirements of our cafe owners and end users - student community i.e., the Software System solve the problems faced by Student Community and provides new hassle free features. The product aims at improving and developing features related to Radio Frequency Identification Tag, Responsive Information Architecture, Interactive User Interface and many more.

2.2 Product Functions

The product will automate all the existing manual functions to the users (cafe operator, Students, Admin or CMC members) of cafe and some of the additional requirements set out by the Student Community. It being the cashless system of DA-IICT's cafe would have to deliver as a robust technical platform which provides all the necessary services and functions for the cafe to pursue its goal of cashless cafe to work and operate smoothly; which includes removing operational as well as functional glitches and shortcomings of currency change, ensuring that students do not have to engage in managing coupons of different cafes anymore and focus only on managing virtual currency in their respective account.

2.3 User Classes and characteristics

Users can be broadly categorized on the basis of:

a) Location of access:

1. Intranet - Students accessing the portal within the DA-IICT campus. CMC members and Admin can also access this portal.

2. Cafe counter - Cafe owner can access this system in order to place the order on request which would be recognized using RFID cards.

b) Privileges:

1. Administrator - Somebody who has access to all the administration features and have the authority to issue RFID cards and recharge accounts.
2. CMC Members - Somebody who can address complaints related to cafe and monitors the system for maintenance purpose.
3. Student - Somebody who can access the student portal and view their balance, transfer their balance to other members and figure out their expense details.
4. Cafe - Somebody who can place order on request and deduct the amount from requested account but not alter their balance.

2.4 Operating Environment

We will work on the Java web application platform. We will use HTML, JavaScript and CSS for the generic user interface development and front coding. The back end coding of the server side information management system will be done in Struts framework. The main database creation will be done on MySQL and querying will be executed through Struts framework.

2.5. Assumptions and Dependencies

The same as the ones which hold for the current operational functionality, like know-how of payment cycle between vendor and cafe owner, computer, basic knowledge of English language, and intranet connectivity which is easily satisfied by Admin, CMC, Cafe staff and Student Community.

2.6. Design and Implementation Constraints

Since it deals with monetary transactions so our client who's Admin department had demanded high security from users of both perspective of student as well as cafe owner. We have investigated various scenarios of fraud detection and prevention and concluded to implement RFID card for security purpose instead of swipe card system. We will face some constraints wherein we won't be able to easily tweak the basic bare bone structure which struts framework provides.

3. Specific Requirements

3.1. External Interface Requirements

3.1.1 User Interface

Description: Overall look and feel the website would be improved. An interactive UI would be made. The specifications are-

- Customer can view history of their daily eating(s).
- Customer can check his/her weekly, monthly expenses.
- Customer can check his due balance.
- Customer can transfer balance to his/her friends.
- Customer can view menu (thali) a day before.
- Customer can activate or block his/her account.
- Cafeteria owners provides dynamic menu which can change on daily basis.
- Cafeteria owner would entry the order.
- Cafeteria owners can check their weekly, monthly sales.
- Cafeteria owners can add and remove an item.
- System Admin can add or remove user profile.
- System Admin would deposit or withdraw to or from user account.
- Customer can create his/her profile (for the first time)
- Cafeteria Owners can roll back the entered order.
- System Admin can view sales of each cafeteria owners.

3.1.2 Hardware Interface

RF-ID Reader with any computing machine – PC, tablet, smart-phone, etc. with internet access is the only hardware requirement from the user side to access the website. The website will be hosted on DA-IICT's servers.

3.1.3 Software Interface

Software	For
Netbeans	To code, implement and deploy the website
Google Drive and Dropbox	Document sharing
Github	Code sharing and Version Control
Adobe Photoshop, Dreamweaver	UI Design

3.1.4 Communication Interface

Internet browsers of any computing device.

3.2. System Features

The interfaces would be different for different categories of users. Overview of those features is as follows –

System Requirements Specification Report

3.3.1   For Website Admin:

- **Registration:** Admin can register cafeteria owners.
- **Login**: Admin can login using his/her username and password.
- **View/Update Profiles**: Admin can view and update his/her profile. And can view others profiles as well.
- **Debit/Credit Balance**: Admin can debit and credit balance from students and cafeteria owner's account.

3.3.2   For Students, Faculty Members:

- **Registration**: Registration using DA-IICT webmail id.

- **Login**: Student/Faculty can login using her/his username and password.

- **Transfer Amount**: Student/Faculty can transfer balance from his/her account to friends account.

- **View Profiles and Daily transaction**: Students/Faculty can view his/her profile and daily transaction done by him/her.

- **Feedback/Complain**: Student/Faculty can give his/her feedback/complain regarding food or cafeteria owners

- **Block Account:** User can block their account in case of some unwanted situations. E.g. lost or stolen card.

3.3.3   For Cafeteria Owners

- **Login**: Cafeteria owners can login using her/his username and password.
- **Entry Order**: Cafeteria owners can entry the order by deducting amount from customers account.
- **View Profiles and Daily transaction**: Students/Faculty can view his/her profile and daily transaction done by him/her.
- **View/Update Menu**: Cafeteria owners can view and update their menu on daily basis.

4. Non Functional Requirements

4.1 Performance Requirements

- As our website is replacing the traditional payment method of payment with cash, it is expected that the system takes less time than the previous method of payment.
- If a single machine stops working, the cards of almost 1000 people won't work on that canteen, which is serious. We have to make sure that this doesn't happen because of our software.
- It may be possible that all the canteens have rush during the lunch/dinner time, hence the system should not freeze or the Card reader's shouldn't be unresponsive due to overload of users coming together.

- There can be almost 100-200 transactions coming within 2-5 minutes, so the system should be responsive at all time.
- The system should have a fast working connection with the server, working with a slow connection is not possible if we intend to have a fast and responsive system.
- The application shall be able to do all the transactions with proper verification and authentication. There has to be no chance that any other user can do any unauthenticated transaction with the system.
- The application should be able to recover after crashes and undesired hardware failures.

4.2 Safety and Security Requirements

- The student's should have their username same as their student ID. For the other users it has to be made sure that the username's be "unique".
- The software has to be highly secured, an SSL connection is necessary. Also the user cannot go back and restore his session. Instead he has to login again once he logged out.
- It has to be made sure, that no unauthorized access happens. Because, in that case money can be transferred from one account to another.
- The canteen systems should be secured from any type of viruses or other malicious threats, it is desirable to bar the system from any type of external activity.
- Database should be secured with appropriate passwords and data backup options.
- Any transaction happening in the system should be reflected in the system including the identity of the system from which the transaction is happening.
- MAC filter should be kept, so that the canteen systems shouldn't be able to access the student accounts, and the students cannot access canteen accounts.

4.3 Software Quality Requirements

1. **Maintainability**
   - The user must be able to browse through the application without any difficulty.
   - All the requirements and system features are well documented in both, soft (in-built help) and hard versions user manuals which we intend to ship along with the product itself. Along with it, the user interface developed will be simple. Both these factors will attribute to efficient utilization of resources by user.

2. **Portability**
   - The website can be accessed from any platform like a browser, mobile phone - android and iOS etc.
   - There are no prerequisites for accessing the website on the host machine but having an internet connection with certain minimum speed for smooth access.
   - Having latest updated browser is preferred for having a better experience.

3. **Usability**
   - The website shall provide a self-explicable user friendly interface such that it is usable with minimum extent of struggle.
   - All steps of the website development will be well documented to ensure maintenance of the product through lifetime.

4. **Reliability**
   - We intend to provide facility of backup of entire system along with information for the admin and user to deal with problems like power failure, disk failure, etc.

4.4 Organizational Requirements

1. **Delivery**: The website must be ready and be delivered within an estipulate time as mentioned by the client.
2. **Standard**: The website should be deployed with a well framed user manual such that even a person with minimum technical knowledge can understand it.

5. User Specifications

5.1 System Environment
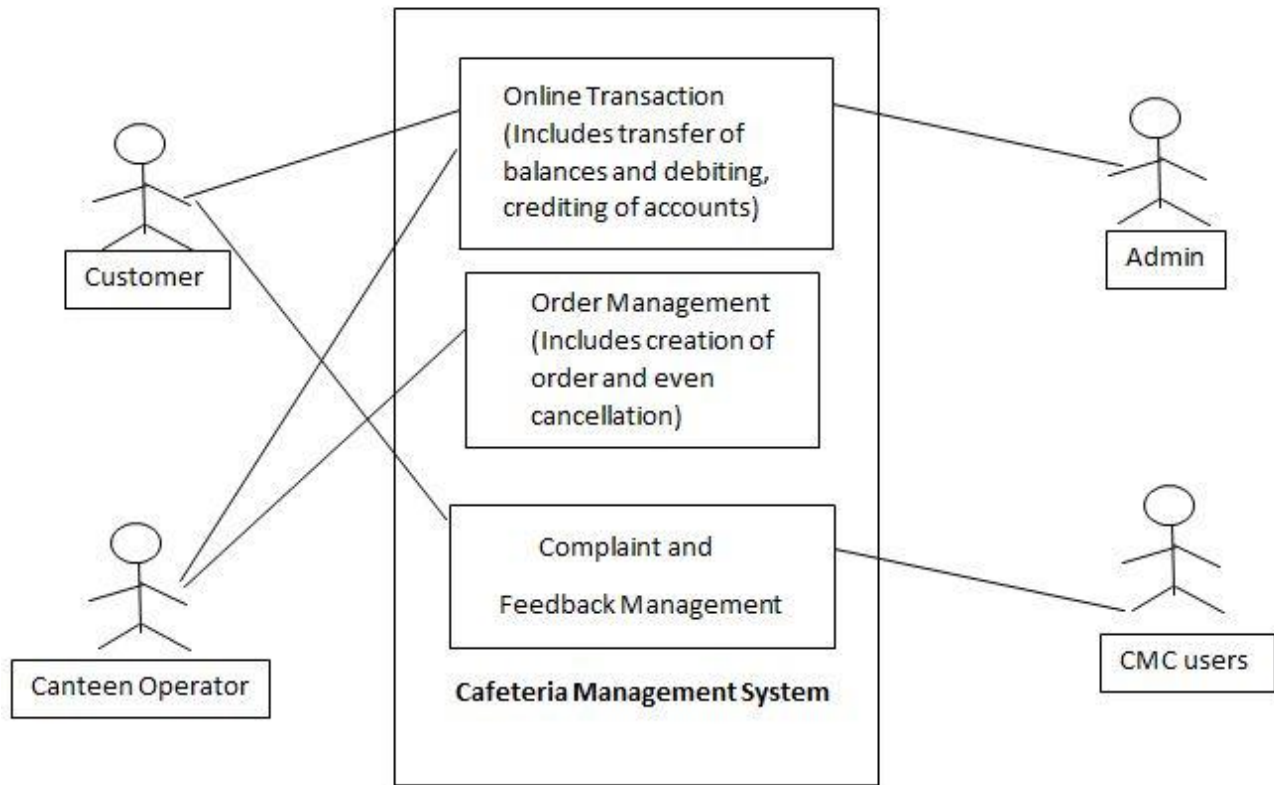
5.2 User Description:

5.2.1 User Use Case

U.1 Login:

ACTOR	CUSTOMER, ADMIN, CANTEEN OPERATORS
DESCRIPTION	CUSTOMER AND ADMIN CAN LOGIN TO THEIR ACCOUNT TO EITHER ORDER A COMMODITY OR TO CHECK THE TRANSACTION REPORT.
PREREQUISITE	SHOULD BE A REGISTERED USER.
INPUT	LOGIN ID AND PASSWORD
PROCESS	ACTOR ENTERS THE LOGIN ID AND PASSWORD
OUTPUT	LOGIN SUCCESSFUL
ERROR HANDLING	IF THE LOGIN ID OR PASSWORD IS INCORRECT, ERROR MESSAGE WILL BE DISPLAYED.

U.2 Buying commodity from canteen:

ACTOR	CUSTOMER
DESCRIPTION	CUSTOMER CAN PLACE THE ORDER USING THE ID CARD.
PREREQUISITE	MUST HAVE AN ID CARD.
INPUT	ID CARD, ID NUMBER.
PROCESS	CANTEEN OPERATOR SWIPES THE ID CARD USING RFID.
OUTPUT	THE ORDER IS PLACED AND TRANSACTION IS SUCCESSFUL.
ERROR HANDLING	CARD WILL NOT WORK IF IT IS DISABLED BY THE USER. (IN CASE OF THEFT)

U.3 Transfer balance to other accounts:

ACTOR	CUSTOMER
DESCRIPTION	CUSTOMER CAN TRANFER HIS AVAILABLE BALANCE TO OTHERS ACCOUNT.
PREREQUISITE	MUST HAVE A BALANCE.
INPUT	
PROCESS	ACTOR ENTERS THE LOGIN ID AND PASSWORD
OUTPUT	BALANCE ADDED TO THE OTHER CUSTOMER'S ACCOUNT AND DEDUCTED FROM TRANSFERER'S ACCOUNT.

U.4 Viewing transaction log:

ACTOR	CUSTOMER
DESCRIPTION	CUSTOMER CAN VIEW ALL HIS RECENT TRANSACTIONS FORM HIS ACCOUNT.
PREREQUISITE	
INPUT	
PROCESS	
OUTPUT	TRANSCATION LOG IS DISPLAYED WITH ALL THE RECENT TRANSACTIONS.

U.5 Check balance:

ACTOR	CUSTOMER
DESCRIPTION	CUSTOMER CAN POST FEEDBACKS AND COMPLAINS ABOUT THE SERVICE AND THE FOOD OFFERED.
PREREQUISITE	CUSTOMER HAS LOGGED IN.
INPUT	POST
OUTPUT	POST SUCCESSFUL.

U.6 Posting feedbacks and complaints:

ACTOR	CUSTOMER
DESCRIPTION	CUSTOMER CAN CHECK HIS AVAILABLE BALANCE.
PREREQUISITE	CUSTOMER HAS LOGGED IN.
OUTPUT	THE AVAILABLE BALANCE IS DISPLAYED.

U.7 Disabling the card:

ACTOR	CUSTOMER
DESCRIPTION	IF THE CARD IS LOST, CUSTOMER CAN DISABLE HIS/HER CARD SO THAT IT IS NOT MISUSED.
PREREQUISITE	CUSTOMER HAS LOGGED IN.
OUTPUT	DISABLE SUCCESSFUL.

U.8. Sign up:

ACTOR	CUSTOMER, ADMIN
DESCRIPTION	CUSTOMER CAN REGISTER HIMSELF BY PROVIDING DETAILS THAT ARE ASKED.
PREREQUISITE	CUSTOMER HAS AN ID CARD.
INPUT	DETAILS LIKE ID, PASSWORD, MOBILE NUMBER.
PROCESS	CUSTOMER ENTERS HIS/HER DETAILS.
OUTPUT	REGISTRATION SUCCESSFUL.

U.9 Viewing canteen menus:

ACTOR	CUSTOMER
DESCRIPTION	CUSTOMER CAN VIEW THE MENU ITEMS OF EVERY FOOD COURT.
PREREQUISITE	CUSTOMER HAS LOGGED IN.
INPUT	
PROCESS	
OUTPUT	LIST OF MENUS DISPLAYED.

5.2.2 Admin Use Case:

U. 1. Recharge an account using id card or RFID:

ACTOR	ADMIN
DESCRIPTION	ADMIN CAN RECHARGE THE CUSTOMER'S ACCOUNT ON CUSTOMER REQUEST.
PREREQUISITE	CUSTOMER HAS AN ID CARD.
INPUT	LOGIN ID
PROCESS	
OUTPUT	RECHARGE SUCCESSFUL.

U. 2. Pay to the canteen operators:

ACTOR	ADMIN
DESCRIPTION	ADMIN WILL PAY CASH TO THE CANTEEN OPERATORS
OUTPUT	TOTAL DEPOSIT BALANCE DEBITED

U. 3. Verify customer's id card and photograph:

ACTOR	ADMIN
DESCRIPTION	ADMIN CAN VERIFY THE CUSTOMER'S ID AND PHOTOGRAPH
PREREQUISITE	
INPUT	LOGIN ID
PROCESS	
OUTPUT	VERIFIED.

U. 4. View the sales of every canteen:

ACTOR	ADMIN
DESCRIPTION	ADMIN CAN VIEW SALES OF EVERY CANTEEN TO ESTIMATE THE PROFIT.

U. 5. Check the total deposit balance:

ACTOR	ADMIN
DESCRIPTION	ADMIN CAN CHECK THE TOTAL BALANCE TO MANAGE THE PAYMENT.
INPUT	LOGIN ID

U. 6. Edit user data if not eligible for verification:

ACTOR	ADMIN
DESCRIPTION	ADMIN CAN EDIT USER DATA IF ANY DETAIL ADDED, IS NOT ACCEPTABLE.
PREREQUISITE	ADMIN IS REGISTERED AND HAS LOGGED IN.
INPUT	LOGIN ID, USER ID
PROCESS	
OUTPUT	DATA EDITED.

7. View the details of any customer:

ACTOR	ADMIN
DESCRIPTION	ADMIN CAN VIEW DETAILS OF TRANSACTIONS MADE BY CUSTOMERS, IF REQUIRED.
PREREQUISITE	ADMIN IS REGISTERED AND HAS LOGGED IN.
INPUT	LOGIN ID, USER ID

5.2.3 Canteen Owners Use Case:

U. 1. Place the order:

ACTOR	CANTEEN OPERATORS
DESCRIPTION	CANTEEN OPERATORS CAN PLACE THE ORDER REQUESTED BY THE CUSTOMER.
PREREQUISITE	CUSTOMER HAS AN ID CARD.
INPUT	ID CARD
OUTPUT	ORDER PLACED.

U. 2. Edit menu items:

ACTOR	CANTEEN OPERATORS
DESCRIPTION	CANTEEN OPERATORS CAN EDIT THEIR MENU ITEMS DAILY.
OUTPUT	ORDER PLACED.

U. 3. View transaction log and balance:

ACTOR	CANTEEN OPERATORS
DESCRIPTION	CANTEEN OPERATORS CAN VIEW TRANSACTION LOG AND BALANCE TO ESTIMATE THEIR SALES.
PREREQUISITE	CANTEEN OPERATOR HAS LOGGED IN.
INPUT	LOGIN ID, PASSWORD.
PROCESS	
OUTPUT	TRANSACTION LOG DISPLAYED.

U. 4. Cancel previous order:

ACTOR	CANTEEN OPERATORS
DESCRIPTION	CANTEEN OPERATORS CAN CANCEL PREVIOUS ORDER IF THE CUSTOMER WANTS TO DO SO.
PREREQUISITE	CANTEEN OPERATOR HAS LOGGED IN.
INPUT	
PROCESS	
OUTPUT	ORDER CLEARED.

Appendix A – Requirement Gathering

This section includes all the interaction sessions of the team members with the clients i.e CMC member, Canteen Owners, Faculties and Admin Staff.

A.1 Meeting with the Canteen Owner:

Date: 6 September, 2013

Venue: Canteen #4

- When we initially pitched our system in front of him, he was very delighted to hear about the proposal.
- He went on and stated that he has implemented that same sort of system at a cafeteria of another college.
- He also answered our questions as to would it be feasible for them to implement this new system both financially and operationally.
- He raised a concern about the money management and the payment cycles, as they have to pay for the vegetables and other petty expenses on a daily basis.
- He even said that it would be a tough task to train the canteen workers about the new system, but also added that they would become used to as time passes.
- He insisted on having notifications delivered to both the canteen owners and the customers about each and every transaction.
- He also agreed to our proposal of fixing the menu a day before and the same information to be delivered to the user a day before.

A.2 Meeting with the Deputy Convener of Cafeteria Management Committee:

Date: 6 September, 2013

Venue: Cafeteria

- As we introduced our system to him, he seemed very interested as he too is a computer science student.
- He understood the system quickly, and asked several questions regarding the system which we were able to answer to.
- He even agreed that the CMC members would handle the maintenance of the system once deployed.
- He guaranteed us any support or help that we would require during the designing of the project.

- We also acquired knowledge on the types of difficulties the customers are facing in the current system and the complaints the CMC receives from the customers.

A.3 Meeting with the Admin Staff (Mr. Sudhir Dave) and the Registrar:
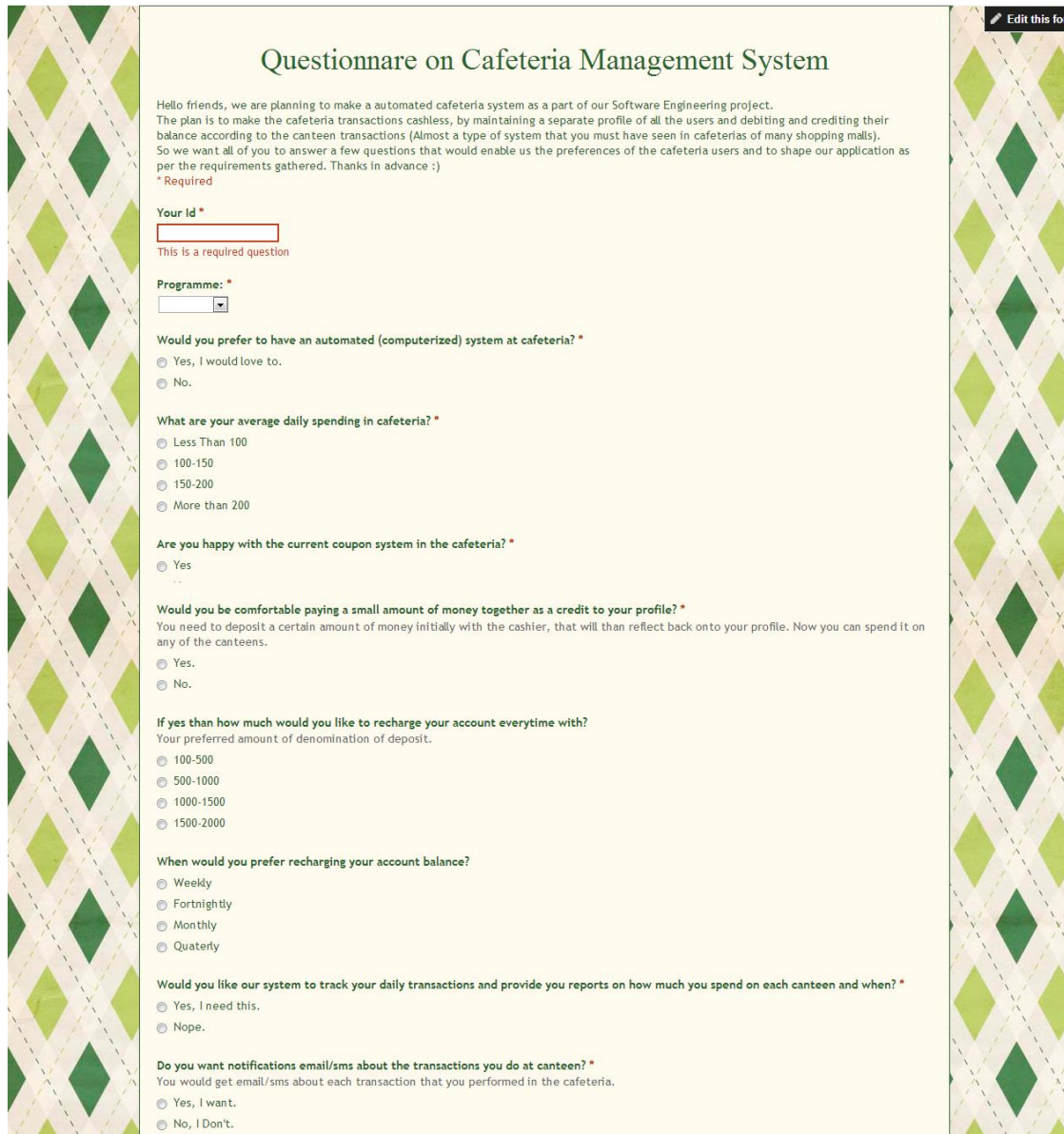
Date: 6 September, 2013
Venue: Cafeteria

- We learned that there was a similar kind of system implemented in DA-IICT some 8 years back, but it failed due to some reasons. So the main motive of the meeting was to learn about the system that was implemented. The things we learned are:

    1) The system was outsourced to a third party.
    2) The student had smart card as ID card.
    3) The accountant officer used to sit for 2 hours daily near ATM for Recharge purpose.
    4) Student had to maintain minimum of 100 Rs as their balance.
    5) The vendor had POS device as an interface.
    6) The Vendor use to swipe the card to make a payment.
    7) The money payback lifecycle was of around one month.

- Concerns that the old system faced:
    1) The smart card identification failed many times and as a result the swiping had to be done more.
    2) The lack of training about the system lead to faulty transactions.
    3) Problem with recharging the user account i.e. even after recharging account, he/she could not order an item (as balance would not have been transferred to his/her account).

A.4 Online Survey

The survey form is pasted below:

Do you want Daddu's store to be a part of the automated system? *
- Yes.
- No.

Would you be comfortable if the cafeteria complaints and feedbacks are managed through this portal? *
- Yes, good idea.
- No.

Any more suggestion ?
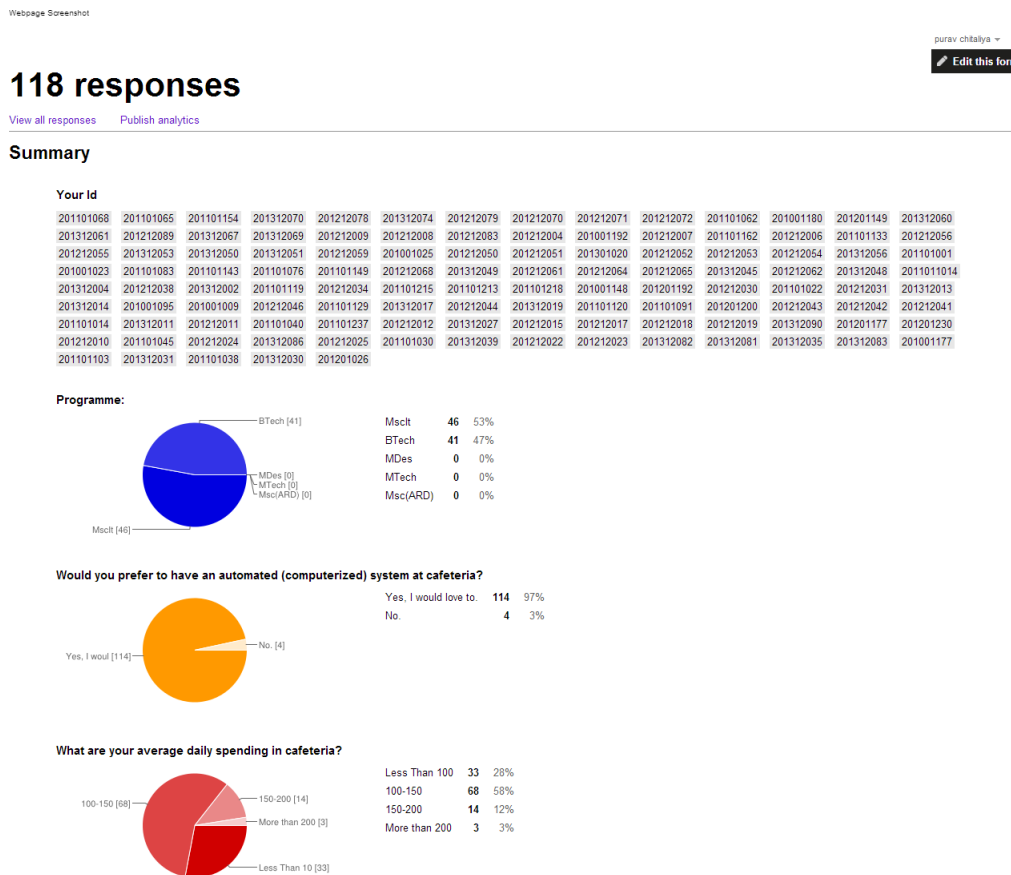Believe us, this would be a great help.

[Submit]

Never submit passwords through Google Forms.

Powered by
Google Drive

This content is neither created nor endorsed by Google.
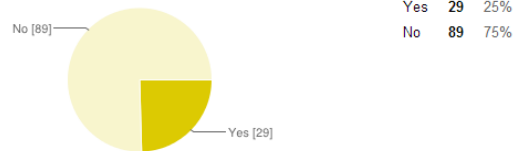Report Abuse - Terms of Service - Additional Terms

https://docs.google.com/forms/d/1Erxsdc8vJ5UCceAsPsle8Y9FIPv7A_cQk92HML7HOy4/viewform Mon Sep 16 2013 19:34:25 GMT+0530 (India Standard Time)

The results of the survey are as follows:

Webpage Screenshot

purav chitaliya ▾

✎ Edit this form

118 responses

View all responses   Publish analytics

Summary

Your Id

201101068	201101065	201101154	201312070	201212078	201312074	201212079	201212070	201212071	201212072	201101062	201001180	201201149	201312060
201312061	201212089	201312067	201312069	201212009	201212008	201212083	201212004	201001192	201212007	201101162	201212006	201101133	201212056
201212055	201312053	201312050	201312051	201212059	201001025	201212050	201212051	201301020	201212052	201212053	201212054	201312056	201101001
201001023	201101083	201101143	201101076	201101149	201212068	201312049	201212061	201212064	201212065	201312045	201212062	201312048	2011011014
201312004	201212038	201312002	201101119	201212034	201101215	201101213	201101218	201001148	201201192	201212030	201101022	201212031	201312013
201312014	201001095	201001009	201212046	201101129	201312017	201212044	201312019	201101120	201101091	201201200	201212043	201212042	201212041
201101014	201312011	201212011	201101040	201101237	201212012	201312027	201212015	201212017	201212018	201212019	201312090	201201177	201201230
201212010	201101045	201212024	201312086	201212025	201101030	201312039	201212022	201212023	201312082	201312081	201312035	201312083	201001177
201101103	201312031	201101038	201312030	201201026									

Programme:

MscIt	46	53%
BTech	41	47%
MDes	0	0%
MTech	0	0%
Msc(ARD)	0	0%

BTech [41]
MDes [0]
MTech [0]
Msc(ARD) [0]
MscIt [46]

Would you prefer to have an automated (computerized) system at cafeteria?

Yes, I would love to.	114	97%
No.	4	3%

Yes, I woul [114]
No. [4]

What are your average daily spending in cafeteria?

Less Than 100	33	28%
100-150	68	58%
150-200	14	12%
More than 200	3	3%

100-150 [68]
150-200 [14]
More than 200 [3]
Less Than 10 [33]

Are you happy with the current coupon system in the cafeteria?

Yes	29	25%
No	89	75%

Would you be comfortable paying a small amount of money together as a credit to your profile?

Yes.	110	93%
No.	8	7%
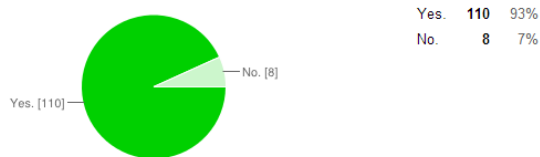
If yes than how much would you like to recharge your account everytime with?

100-500	44	38%
500-1000	50	43%
1000-1500	14	12%
1500-2000	8	7%
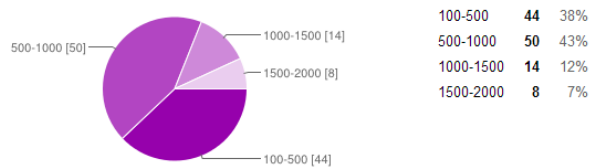
When would you prefer recharging your account balance?

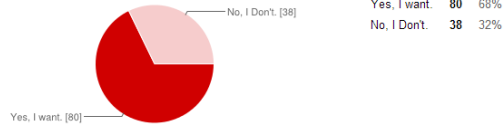|		
Weekly	80	69%
Fortnightly	15	13%
Monthly	17	15%
Quaterly	4	3%
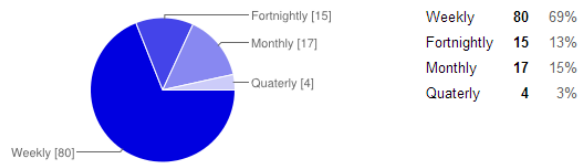
Would you like our system to track your daily transactions and provide you reports on how much you spend on each canteen and when?

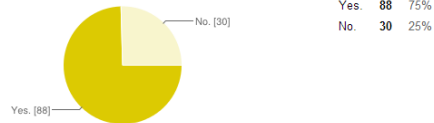|		
Yes, I need this.	104	88%
Nope.	14	12%
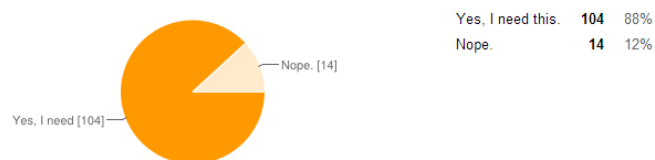
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Do you want notifications email/sms about the transactions you do at canteen?

Yes, I want.	80	68%
No, I Don't.	38	32%

No, I Don't. [38]

Yes, I want. [80]

Do you want Daddu's store to be a part of the automated system?

Yes.	88	75%
No.	30	25%

No. [30]

Yes. [88]

Would you be comfortable if the cafeteria complaints and feedbacks are managed through this portal?

Yes, good idea.	114	97%
No.	4	3%

Nope. [14]

Yes, I need [104]

Do you want notifications email/sms about the transactions you do at canteen?

Yes, I want. **80** 68%

No, I Don't. [38]
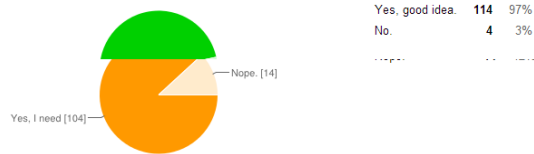
management of moneyy   Provide the cashier with lots of change. sometimes even 1 or 2 rupees being not given affects the customer satisfaction with the system. Also not your concern but a suggestion to put insect killer that flourosent light at every counter   good idea   No Suggestion   No!!   Its a great Idea what you are planning for cafeteria. No More suggestions. your plan includes all the things for what i think.   NO SUGGESTION   A regular check to ensure that people take away their plates and/or throw wastes into the dustbin would be quite good. As I've seen a man collecting dishes from the tables every hour or so, which is quite inappropriate for us to let that happen!   -   ---   Good Idea.   No.   Idea is really good. Waiting for it..   Excellent idea, I will be happy if this system really implemented.   it is better if you use smart card for payment and balance.   thanks:)   You Can Add A Card System To That (As we have point cards in malls) for students. so that they can crash it and have it. but it may consume more time while ordering.   After every transaction the owner should get an option to choose whether he wants an sms/email or not.   That's much better idea because rather than giving coupons of rupees, card system will be much better.   If you will be able to implement this system with so many features, then I don't have any suggestions. I hope that you complete this project successfully...   No   Nothing more to say :) :)   Your list of courses doesnt include Ph.D students. Also, is this feasible? Since letting the counter owners use it will be troublesome. If you can bypass manual use and automate the process somehow then it's pretty awesome. I look forward to it :D But you will require a separate device or computer on EVERY counter unless I am grossly mistaken. Is that practical in peak hours?   Keep security in mind, programmable RFID can breach your system, and as you know B.Tech people can do it easily. So my suggestion would be with the card, have a finger print scanner, to tighten the security.   u are already doing a great work! keep it up   Try ur best to implement this. Good luck   You can keep only one cashier alltogether for all the canteens and give coupons of certain amount so that we can use it in any canteen.   regular Check For food quality and check for hygiene   improving the quality of food , if needed prices can also be increased   System must be secure. So, Students can trust on it.   You can also provide menu on each counter in the morning or a day before.   No thank you chitaliya saheb :P   1. One should be able to see the menu of each canteen online. 2. Till date, people have to order for Jain food beforehand which becomes really hectic amidst our tight schedule. So there should be a system where these people can order for Jain food online. 3. If somebody is seriously ill and is unable to come to the cafeteria, then he/she can order for meal online from specific counter and the respective counter will deliver it to the boys/girls hostel.   no,   It would be nice if it is just like the system in malls.   This is IT.   Along with an automated system, the current coupon exchange system should be continued (coupon can be exchanged without keeping in mind the Counter name)..   Above included feedback and questions include what I wanted to suggest   You have covered all the required aspects....I think if all the above features are implemented it would form a great system....Good Luck guys :)

Number of daily responses

45
36
27
18
9
0
9/11/13   9/15/13

System Requirements Specification Report

Appendix B – Glossary

- **Functional**: - Relating to or based on function especially as opposed to structure.
- **System**: - A set of things working together as a mechanism or interconnecting network.
- **End-User**: - student, teacher and cafeteria' person using services.
- **Client**: - organizations which have more number of canteen.
- **Server**: - A computer that provides client stations with access to website and RFID as shared resources to a computer network.
- **Login/Logout**: - Enter into and going of the system.
- **MySQL**: - It is used to manage the system.
- **Cashless CMS**: - Cashless canteen management system is a website that managing changing problems, daily report and also get the feedback from the user.
- **Front-End**: - End user facing view of the system
- **Dashboards**: - Dashboard is the front view of the users data. There are three types of dashboard provided in the Cashless canteen management system for student, canteen member and admin.

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