SRS Document

Mess Management System (MMS)

Group Number :- G20

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Category : Web Application and Desktop Application

Purpose : A full stack web application which replaces the physical use of card system in mess used by other institute (iit etc.) which benefits the students so that the students only pay for food when they eat and replacing it with a more eco-friendly non paper digital only platform which is also very convenient

Existing Systems :

Lots of Paperwork : Present Systems in use, requires a lot of paperworks or those which are automated are semi automated, still requiring paperworks.

Less user friendly system : Present systems are less userfiendly and somehow requires you to have some prior technical or database knowledge.

Laggy or Restricted systems : Systems in use are slow and lags when processing lots of student data. And most systems do not store students data for their course tenure and thus creating a sort of restricted environment, when dealing with student's data.

Students get billed for each meal : The manual system in use right now, forces students to pay for meals they do not want to consume or have not consumed, as they do not take track of particular meals taken by them.

Not a single Integrated platform : Most Systems present nowadays in the market, do not provide an integrated

system which can handle students as well as management and their needs.

Wastage of food : Systems present nowadays in market do not keep track of meals they are going to consume next day and hence management can over make or under make meals for next day or slot, which can result in extra food being made or wasted, and hence not contributing to green environment movement, which is much needed.

Less secure or less reliable : Manual Systems rightnow provide less security or less reliability.

Proposed System :

Different Interface : Both Student and Mess management will be provided different Web app interfaces for their ease and the security reasons for their day to day use as well as data updation.

Mess Meal booking : Students can book or unbook their mess meals (Breakfast, Lunch, Dinner) for the next day, according to the ongoing mess menu, between provided time slots.

Mess Meals' Order : Mess Management can see or get particular meal’s orders ordered by students for next day, after the booking time slots get over, and then take action or can prepare food accordingly.

Cross verification : During mess timings or for before meals, Mess Management can cross verify whether any student has paid for his/her meal, during that slot.

Mess management can access those reviews and feedback and then act accordingly.

Mess Menu : Mess Management can update the mess menu at any time, for the whole week or for a particular day, according to the need.

Announcement : Mess Management can put or update announcements at Webapp for students to read and to notify them about upcoming and ongoing events.

Data Updation : Institute Management will be provided an easy to use GUI interface to update student's/batch's/mess management's data easily, without need of prior technical knowledge.

Billing : Institute Management can keep track of their student's/batch's meals taken and bill him/her/them accordingly. Institute Management can also change meal's price making them effective immediately through the provided easy to use GUI interface.

Authentication : Student, Mess Management and Institute Management Authentication would be provided which would help in data privacy and security.

Advantages for Students :

Book meals : Students can book or unbook meals (Breakfast, Lunch, Dinner), through the interface from anywhere with any device with internet connection, at their comfort.

Charged for meal Students take : Students are going to get charged for meals they take, rather than getting charged for every meal they take or dont take, by booking and cross verification, provided by the system.

See Mess Menu : Students can see the mess menu from anywhere from any device with internet connection, and can decide and book accordingly.

Get notified : Students can get notified for any event and news at their fingertips rather than going to some notice board.

Get bills and dues : Students can get their current month's mess bills and mess dues, and can keep track of their meals taken, for cross verification if needed.

Advantages for Management :

Paperless process : System would turn most of the mess operations like billing, attendance and other things paperless, making operations cost effective, efficient and environmentally friendly.

Cross Check : Management can assure only students who paid or booked meals will be able to get meals during mess timings, through the cross checking feature of the system.

GUI : An easy to use GUI for all operations and works, which require no prior technical or database knowledge.

Billing made easy : System would make the tedious task of billing or calculating dues of several students a work of a single click, through provided GUI interface and system's reliability.

Notify Students : Management can notify students about any change in mess menu or prices or any upcoming event without need to notify in person or through notice boards.

Functional Requirements :

- Users must have a valid user Id and password to login thus creating individual profiles.
- Administration can register a new student and mess manager.
- Students can have the data of the mess for the current month.
- Administration can use the data to prepare the mess bill of the students for the current month.

Non Functional Requirements :

- Secure access of confidential data (user's details).
- Maximum time availability.
- Better component design to get efficiency at peak time.
- Students and mess manager's registration facility is accessible by administration only.
- Scalable design.

Software Tools :

DataBase server : MongoDB

Client : Any web browser and Desktop

Development Tools : Microsoft Visual Studio Code

Programming Tools : HTML, CSS, NodeJS, Java, JavaFx

Deployment :

Operating System Server **:** Window 7/8/10/11, Linux, UNIX

Hardware Specification :

Processor : Intel Core i3

RAM : 4GB

Hard Disk : 500 GB