

IT - 314

Software Engineering

Lab-1

201901065 - Devangi Naliyadhara

201901066 - Kenil Bhingradiya

Task -1

Time Management Software (TMS)

Theme -1 Software Requirements:-

Epic 1: Register users' daily appointment schedules.

- Users should be able to edit and update their appointments.
- Software should be able to set starting time, Duration of meeting, the total number of members to be invited, Agenda of the meeting.
- Availability of common slots and if the slot is not available, then help find the slots and the user in consultation with the concerned executives for making room for a common slot.
- Executives might plan out the important jobs they need to do on any day at different hours and post it in their daily list of engagements.

Epic 2: Make groups for different topics and schedule meetings

- The executive manager should be able to make groups in particular agendas and also appoint members to each group to execute tasks.
- The executive manager should be able to see if a particular task is completed or not.
- If the task is not completed before the deadline, the manager is also able to notify the entire team.

Epic 3: User Requirements

- When a meeting is scheduled then it automatically finds common slots in the calendar to set a meeting.
- Relevant entries in calendars/diaries of those executives who are in meetings.
- Software should be able to mark the period when the user is planning to be on leave.
- Software should be able to pre-schedule important appointments as per the executive managers.

Epic 4: Notify members of scheduled meetings

- Software should be able to notify members of a meeting when it is created.
- Software should alert members before it starts (like 10 minute before the meeting).
- software should mail to all respective members about their meeting details and agendas and the topic of the meeting.
- Also, when a meeting is created, it also schedules/adds in all members digital calendars.

Theme 2: Data Analysis

Epic 1: Software should provide various kind of statistics

- Time spent on a particular agenda's meeting.
- Number of meetings organized for particular agenda. For each meeting the time given. Basically, it should group data according to the agenda and show the required information.
- The software should be made realistic so that it updates all info related to the time spent/ meeting attended etc continuously.
- The manager should be given the right to access the statistics of his/her employees. So, there should be a hierarchy of rights given to certain users.

Epic 2: internal calculations

- Find average time spent for meeting on a particular topic
- Number of meeting organized in one topic or one agenda
- Average time to complete one project.
- A total number of man-hours spent to complete the task.
- Display the number of meetings completed, ongoing, and scheduled.

Task-2

Restaurant Automation System (RAS)

Theme 1: Software requirements

Epic 1: Processing order of customers

- Manager should be able to take orders from customers(like dish name, quantity) and place it in the kitchen to prepare.
- Whenever an item is sold, the sales clerk should be able to enter the item/dish code and the quantity sold.
- The manager should also be able to check if that dish is there on the menu card but not possible to prepare at that time.
- Managers should also be able to customize products, if available, as customers require.

Epic 2: Calculate bill for customers automatically

- After placing an order it should automatically calculate the amount to be paid at the end.
- Also, it stores modes of payment through which process bills are paid(like cash, debit card, etc.) .
- If payment is online then make sure that it is secure.

Epic 3: Restaurant accounting

- Software should be able to check whether a particular ingredient is in excess quantity or insufficient quantity.
- Purchase orders are generated on a daily basis, whenever the stock for any ingredient falls below a threshold value and alerts the manager about this.
- Software should be able to check whether stocks for all ingredients is sufficient enough for 2 days in comparison with a threshold value for respective ingredients.
- Software should maintain the prices of all the items and also support changing the prices by the manager.
- Whenever ingredients are issued for the preparation of food items, the data is to be entered into the computer and the database should be updated.
- Whenever the ordered ingredients arrive, the invoice data regarding the quantity and price will be entered.

- If sufficient cash balance is available, the computer should print a check immediately against an invoice.

Epic 4: Manager Access

- Manager should be able to print a menu card containing the menu items and their price when it gets updated or added or deleted.
- Manager should be able to analyze data or update it whenever required.

Theme 2: Data Analysis

Epic 1: Software should provide various kind of statistics

- Monthly sales receipt and expenses data should be generated whenever the manager would request to see them.
- Software should automatically calculate the threshold value after the end of the day.
- Software should be also able to calculate the threshold value for each item based on the average consumption of this ingredient for the past three days.

Epic 2: Internal calculation

- Calculate threshold values.
- calculate the monthly expenses and income.
- Real-time ingredient database update