

Team 10 Iteration 2 Report

March 22, 2024

Andre Arcaina
Joseph Leung
Tristan Cheng
Felipe Quiroga
Jack Heintz

1. Project topic MEM: Recreation Club Membership

The context of this project is a small amateur club (think salsa dancing or something like that) with a couple of dozen members. Club meets once a week for practice, and they are coached by an amateur coach. Members are free to show up (or not) every time. When they show up, they should pay for each practice, say, \$10, but they may also pay up to one month in advance; some discount may be given if so desired. Once a month, the treasurer pays the rent for the hall in which the club meets, and the coach should be paid monthly or biweekly, but only for the practices that she has attended (she has a full-time job which sometimes requires her to be unavailable for the practice). The app should keep track of finances for the club, and for each member, as they sometimes show up for practice but manage to sneak out without paying. It may also send reminders to members about forthcoming practices, both regular and ad hoc ones, and threaten those who are a bit too casual with their payments.

Revised Product Backlog

Requirement					
Story	Initial Priority	Task	Estimate (Story Points)	Actual Time (Story Points)	Status
Track Club Finances					
Treasurer needs to be able to see the club's current profit	MED	Create the income statement and add the revenue portion (members payments, any other income that may come)	1		Not Started
		Add the expense portion to the income statement (coach's payments, hall expenses, any other expenses)	1		Not Started
		Create a list for the year, logging each month's profit to compare changes in revenue/expenses in order to find ways to maximize profit	1		Not Started

Treasurer needs a log of any unpaid debt from previous months (i.e. any months the rent for the hall was not paid, or not fully paid, and unpaid coach expenses)	HIGH	Create a list to log the total amount of unpaid coach expenses and hall expenses for each month, prioritizing the urgency for payment	2		Not Started
Treasurer needs the current month's account payables (e.g. members who have paid in advance)	MED	For efficiency, this can be listed in the income statement under revenues. Since there is no mention of a return policy, this can be counted as a revenue as soon as the transaction is completed.	1		Not Started

Log and sort members					
Keep a log of the members	MED	Create a list of the members who have attended the class, and those who will be attending the class Each member will have their name, phone number, whether they paid or not, and address	3		Not Started
Sort the members by their frequency of attendance in the club. Provide a discount based on the amount of practices attended.	LOW	Using the list of members, organize the members by the amount of times they have attended practice at the club	2		Not Started

		Based on the frequency level, the member will have a loyalty discount. The top 10 people on the list of most practices attended will receive a complimentary discount of %10 off for one class. This will help ensure member retention	2		Not Started
Sort the members by whether they have paid or not. Provide a discount or charge based on amount of unpaid vs. paid classes	HIGH	Using the list of members, organize the members by the amount of times they paid/not paid	1		Not Started
		If the member has not paid more than once, then he will be subject to a penalty fee and possibly exclusion from the group. A reminder will be sent for any member who has skipped at least one payment.	2		Not Started
		If the member does not skip a payment for 3 months, he will receive a complimentary discount for 10% off for one class.	2		Not Started

User interaction with application					
The coach should be able to communicate to the members about future practices	HIGH	Create a user interface where a message can be sent out to all or some members, with details of future practices or changes to any practices. A reminder message can also be sent out for a member who has skipped a payment	5		Not Started

The treasurer should be able to manage the coach list and schedule. The coach should be able to manage the members list (i.e. adding or removing)	MED	Create user interfaces for different characters to modify the list of participants. And the corresponding character will receive notification upon changes.	5		Not Started
Members need to be able to schedule and pay for the practice within the app.	MED	Create a user interface of payment methods or link to a third party payment method. Treasurer and coach should receive notification of the scheduled practice and received payment with user id, class amount and relative coach	5		Not Started
New members should be able to create an account	HIGH	Create an interface that allows new members to register an account to partake in club activities	3		Not Started
Members of the club should be able to log into the application	HIGH	Create an interface that allows the members to log into the application and be directed to a UI that corresponds to their role in the club	3		Not Started

Test Plan

User Authentication Tests

Test: Correct information on authentication page

Initial Conditions: Users must be able to login into the system with correct credentials and be found on the database that has all the user information

Test Inputs: Input member username and password, treasurer username and password, coach username and password

Expected Result: Given the correct input, expect a different screen for each given role

Test: Incorrect information on authentication page

Initial Conditions: The user must be able to login into the system with correct credentials, but since the test is based on if the credentials are wrong, there are no initial conditions for this test

Test Inputs: Input incorrect username and password

Expected Result: Given the incorrect input, expect an error on the same screen that indicates that there is no found user in the database

Finance Tracking Tests

Test: If the finances update properly on the database

Initial Conditions: The user must have access to the financial section

Test Inputs: Data inputted into the financial tracker

Expected Result: Financial data should be saved into the database, user can access the inputted data displayed in proper formatting

Test: If the discount feature works as intended for the members

Initial Conditions: The system has registered users. Users have passed conditions required to receive a discount (membership loyalty, payment streak etc.)

Test Inputs: Must have valid users with more than 1 previous payment

Expected Result: The user's payment is discounted automatically after a certain number of payments

Test: If the charging feature works as intended for the members

Initial Conditions: Have members registered in the system. Users saved credit card details for payment

Test Inputs: User books and pays for classes in advance with their saved credit card

Expected Result: Class is scheduled in the system for the user, payment is received

Test: Functioning of “review outstanding debts” button

Initial Conditions: User hasn’t paid for their classes before system was implemented

Test Inputs: User tries to sign up for another class while they have outstanding debt

Expected Result: The system doesn’t allow user to sign up for class, prompt showing outstanding debt

Membership Logging Tests

Test: Functioning of “sort the members by attendance” button

Initial Conditions: Have existing registered users in database

Test Inputs: Click on sort button by attendance

Expected Result: Display users sorted by attendance

Test: Functioning of “sort the members by unpaid/paid classes” button

Initial Conditions: Have existing registered users in database

Test Inputs: Click on sort button by unpaid or paid classes

Expected Result: Display users sorted by unpaid or paid classes

Message Platform Tests

Test: Check if members can send messages and receive announcements/notifications

Initial Conditions: Member has a an active valid account

Test Inputs: Click on messaging platform and send a message to coach

Expected Result: Message received by coach account, both users can view message history

Test: Check if the treasurer can send messages and receive announcements/notifications

Initial Conditions: Treasurer account can access messaging platform

Test Inputs: Click on messaging platform and send a message

Expected Result: Message sent to all users

Test: Check if the coach can send messages/announcements/notifications

Initial Conditions: Coach has valid account that can access messaging platform

Test Inputs: Click on messaging platform and send a message

Expected Result: Message send to intended member/all users

Test: Check if the coach can see reminder messages (if members haven’t paid yet)

Initial Conditions: Coach has valid account

Test Inputs: Click on individual member to check outstanding balance

Expected Result: Coach can see if member has outstanding debt or if they have paid for the class already

Database Tracking Tests

Test: Check if members are being added to the database (coach management)

Initial Conditions: Existing members signed up and saved in database

Test Inputs: Click on view members

Expected Result: Database shows all registered members

Test: Check if members are being removed from the database (coach management)

Initial Conditions: Coach/admin has a valid account with management privileges

Test Inputs: Coach/admin clicks on remove member

Expected Result: Member is removed from database