

PROJECT PLANNING REPORT

1. GROUP MEMBERS

List the members and describe the skills of each member.

- Nay Xie

All the technical programming knowledge and skills acquired from the courses so far, including Python, MySQL, Html, and a little bit of JavaScript and CSS, along with some ad hoc learning from Googling and ChatGPT.

A keen learner with the skill set necessary to proceed in this programme, which I believe encompasses concentration, problem-solving, creativity, time and project management, and communication.

- Shulin Zhao

I am proficient in Python, MySQL, and programming languages. Skilled in procedural and object-oriented programming. Experienced in database design and software engineering methodologies. Strong in problem-solving and ethical considerations. Capable of business analysis modeling and stakeholder engagement. Quick learner with acute attention to detail. A dedicated team player committed to project success.

- Simon Eccleston

Proficient in programming and database skill learned in MAC. Project management and report writing skills. Dedicated and a reliable team player.

- Fangxin Tang

Proficient in Python, OOP, MySQL, Flask, HTML, CSS, and has knowledge in JavaScript. Reliable team player with strong problem-solving skills.

- Dora Wang

All the technical programming skills from the course as well.

A team player and a monitor who pays extra attention to the due dates and what needs to be done.

2. PROJECT OVERVIEW

The Waikirikiri Swim Centre Management System automates the manual processes of a swim centre with 1000 members and 10 instructors. The system tracks member details, subscription payments (\$70/month), pool usage, aqua aerobics class bookings, and individual swimming lessons (\$44 for 30 mins, \$80 for 60 mins). Aqua aerobics classes are part of the subscription, while lessons have separate fees.

Key Features:

- Member profiles and registration
- Subscription tracking and payments
- Aqua aerobics class management
- Individual swimming lesson booking
- Instructor profiles and scheduling
- Admin tools for managing members, payments, reports, and communication

User Roles:

Admin/Manager:

- Manage member profiles and payments
- Monitor attendance and subscription status
- Generate financial reports
- Schedule aqua aerobics classes and lessons
- Communicate with members

Member:

- Update profile and view details
- Book swimming lessons and aqua aerobics classes
- Renew subscriptions
- Access booking information

Instructors:

- Update profile and view schedule
- Manage aqua aerobics classes and lesson bookings

3. PRODUCT BACKLOG (USER STORIES)

List of all the agreed user stories with priority, story point, and acceptance criteria.

I. Priority: Top

1) As a user, I want to login, so that I can view my dashboard. (4 points)

- Login screen takes me to appropriate dashboard.
- Incorrect logins are rejected with error message.

2) As a user, I want to have a dashboard, so that I can easily navigate to my profile applications. (4 points)

- Correct navigation to correct destination when URL clicked.
- Correct navigation back to dashboard from appropriate areas.
- Log out URL

3) As a member, I want to view and update my own profile, so I can keep my information updated. (4 points)

- Profile information can be viewed.
- Profile information including title, first name, last name, position, phone number and email, health information, can be edited, no- primary key such as id or username.

4) As an Admin/Manager, I want to be able to update own profile, so that I can keep my profile current and accurate. (4 points)

- View own profile, including Name (Title, First Name, Family Name), Position, Phone Number, Email.
- Update own profile, including Name (Title, First Name, Family Name), Position, Phone Number, Email.

5) As an Instructor, I want to view and update my own profile, so I can keep my information accurate and up to date. (4 points)

- View own profile, including Name (Title, First Name, Family Name), Position, Phone Number, and Email.
- Update own profile information including Name (Title, First Name, Family Name), Position, Phone Number, and Email.
- profile photo would be nice

II. Priority: High

6) As a member, I want to view swim instructors, so I know their personal information. (4 points)

- A list of swim instructors can be found.
- Individual instructor's name has a clickable link to view that instructor's information, including picture, first name, last name, position, email.
- A clickable link to see the available time slot for booking

7) As a member, I want to view the available times for individual swimming lessons with instructors, so I know which swimming lesson I want to choose. (4 points)

- Individual swimming lessons timetable can be viewed (and clickable?)
- The available time slot is shown with assorted colours apart from the not available ones.
- The instructors who hold the time slot are shown.

8) As a member, I want to view the weekly schedule of aqua aerobics classes so that I see what is available. (4 points)

- The weekly schedule of aqua aerobics classes can be viewed. (How to do it and what information be shown. The table is a simple way to show the information)
- If a lesson is available, there is a clickable link to book it.

9) As an Admin/Manager, I want to view schedule of instructors individual swimming lessons, so that I can better coordinate the schedules. (4 points)

- View a list of the 10 instructors
- Choose instructors and view their lesson schedule

10) As an Instructor, I want to view the schedule of aqua aerobics classes that I am running, so I can be aware of my teaching commitments. (4 points)

- View a schedule of aqua aerobics classes assigned to me.
- See details of each class, including the class time, location (hydrotherapy pool or training pool), and the number of attendees booked for each class.
- the maximum is 30 attendees

11) As an Instructor, I want to view the individual swim lesson bookings and the swim trainees' profile information, so I can prepare for each lesson accordingly. (4 points)

- Access a list of all upcoming individual swimming lesson bookings assigned to me.
- See the details of each booking, including the lesson time, the member's profile information (Name, Contact Details), and any additional notes provided by the member.
- health records
- locations of the classes

12) As an Instructor, I want to schedule my available times for individual swimming lessons, so that members can book lessons with me. (4 points)

- Access a timetable where I can input my available time slots for individual swimming lessons.
- Set the time, duration (30 or 60 minutes), and location (Olympic size pool, hydrotherapy pool, training pool, or family pool) for each available lesson slot.

13) As an Admin/Manager, I want to be able to manage member details, so that I can keep member details up to date. (4 points)

- View member information
- Update member information

14) As a user, I want to be able to register as a member, instructor, or admin so that I can access the platform with the appropriate privileges and contribute according to my role. (4 points)

- Upon successful login, users should be directed to a dashboard or homepage tailored to their selected role, providing relevant information and options.
- Web form with fields Username, Password and Role.
- Submit button redirects the user to the login page.
- The registration page should offer distinct options for users to choose their desired role: "Member," "Instructor," and "Admin."
- The registration form should validate user input and provide meaningful error messages for missing or incorrectly formatted information.
- Users should be able to select one role during the registration process.

15) As a User, I want to be able to logout, so that I can securely end my session and protect my personal information. (4 points)

- Clear and easily identifiable logout button in prominent location on user interface/dashboard.
- Clicking on the "Logout" button should immediately terminate the user's session, logging them out of the application or website.
- After clicking the "Logout" button, a confirmation prompt should appear to confirm the user's intention to log out, helping prevent accidental logouts.
- After successful logout, the user should be redirected to a designated page (such as a login page) or presented with a clear confirmation message that they have been logged out.
- If the logout attempt fails due to any reason (e.g., network issues), the user should receive clear error feedback explaining the issue and providing guidance on resolving it.

III. Priority: Medium

16) As a member, I want to book an individual swimming lesson, so that I can reserve the instructor's time for personalised instruction. (4 points)

- Select by instructors or individual swimming lesson timetable
- If select by instructors, (connect with user story 2), book the time slots for private swimming class of a specific instructor
- If select by individual swimming lesson timetable (connect with user story 3), select the available time slot and book the lesson with the instructor

17) As a member, I want to pay for the individual swimming lesson, so that I can secure the instructor's time (4 points)

- Display selected lesson details: instructor's name, lesson date, time, and duration before payment.
- Display cost breakdown: present total cost.
- Click "Pay" button to complete the payment

18) As a member, I want to book an aqua aerobics class, so that I can attend the class. (4 points)

- Click select the class from user story 4)
- Display class details, including class date, time, instructor's name, pool location, max capacity, show a confirm button to be clicked.
- Click confirm, book the class

19) As a member, I want to view all my bookings for classes and swimming lessons, so that I know which class or lesson is upcoming. (4 points)

- Show my booking info: Course, instructor, pool, date, and time.

20) As a member, I want to view subscription details, so that I can see when my subscriptions will be due. (4 points)

- Display Subscription Information: including the monthly payment amount of \$70 and the services covered (pool usage and aqua aerobics classes).
- Display Payment Overview: show a summary of upcoming subscription payments, indicating the due date and the total amount.
- Payment option: click this button to process for a payment.

21) As a member, I want to make a payment to my subscription, so that I can keep using the service. (4 points)

- Payment Option: Provide "Make Payment" button within the member's account dashboard.
- Payment Details: display a breakdown of the subscription cost and any other relevant payment information.
- Payment Confirmation: Click pay the bill, feedback confirmation message.

IV. Priority: Low

22) As an Admin/Manager, I want to be able to generate financial reports, so that I can keep track of the financial situation of the centre. (4 points)

- Keep track of three revenue collections, total revenue, subscription, and swimming lesson tuition. Total revenue is the sum of the last two.
- Group collections by months or the financial year.

23) As an Admin/Manager, I want to be able to view report of the most popular aqua aerobics classes, so that I can plan classes better for next year. (4 points)

- Keep track of total attendance, average attendance, and percentage of capacity filled for each aerobics class
- Group records by months or year
- Presented in a chart or graph

24) As an Admin/Manager, I want to be able to send on-screen reminders to members when their subscription is due, so that I can encourage them to continue with their subscription. (4 points)

- View member subscription details – status and expiry date
- Send on-screen reminders to members when their subscription is due
- Messages presented in a message container on the user's page

25) As an Admin/Manager, I want to be able to send on-screen news/updates to members, so that I can effectively communicate with members. (4 points)

- Create and publish news and updates
- Messages presented in a message container on the user's page

26) As an Admin/Manager, I want to track payments from members, so that I can make sure memberships are not in arrears. (4 points)

- Table with list of all payments by members.
- Payments ordered by date. Searched by members name (first and last name).

27) As an Admin/Manager, I want to be able view members attendance with a breakdown of the different types of attendance, so that I can see which areas/activities are most/least popular with members and track their participation. (4 points)

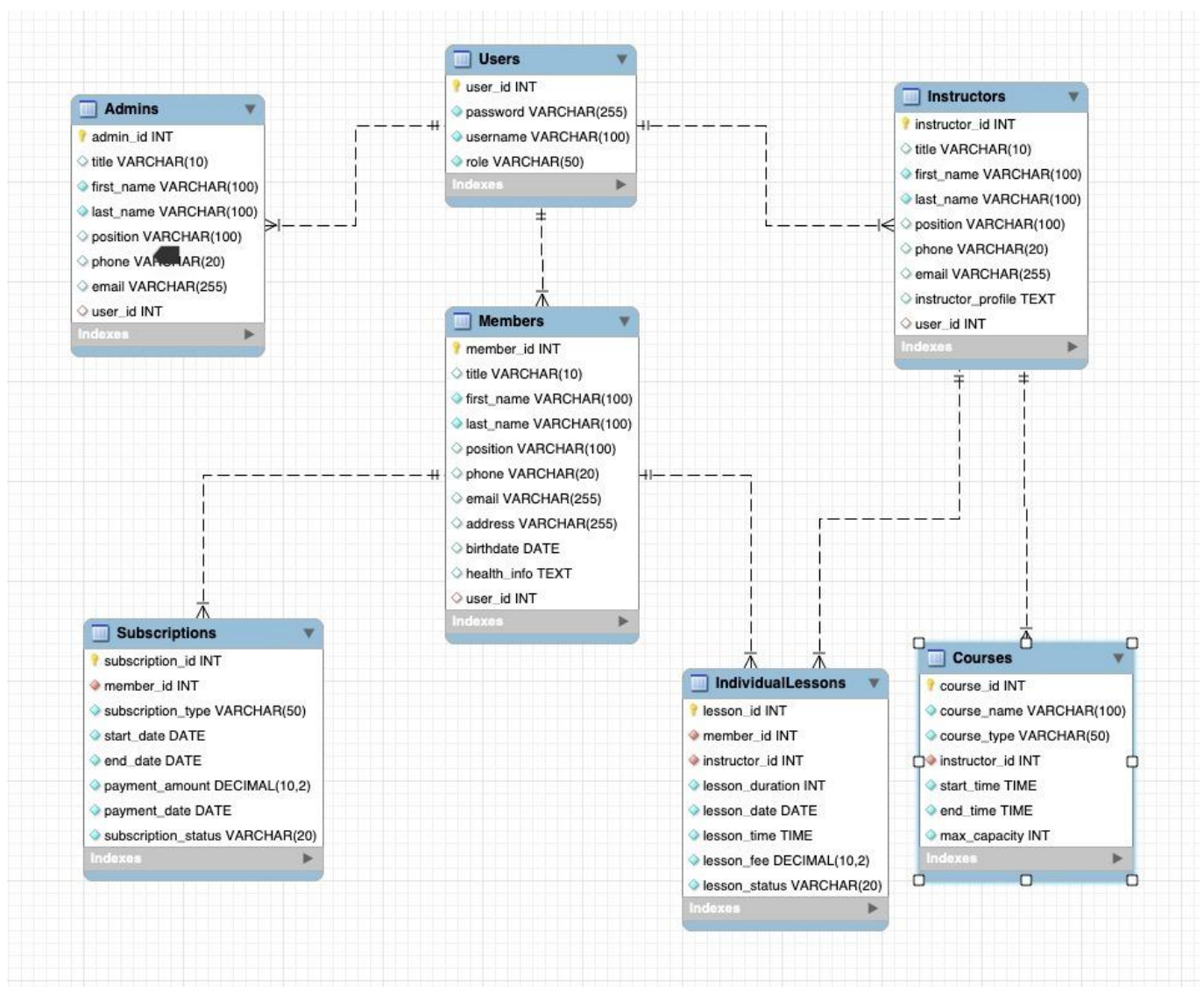
- User generates report showing monthly attendance in what areas and activities. Over a selectable period.
- Individual attendance history based on member selection. Over a time period.

28) As an Admin/Manager, I want to be able to view the subscription status of our members, so that we can actively assist members with their subscriptions. (4 points)

- User generated report showing overall membership subscription types and volumes.
- User generated report showing individual membership subscription details and status.

4. PROPOSED DATABASE DESIGN

Provide a preliminary Entity-Relationship Model for your database schema, Include entity names and fields.



5. PROPOSED TIME ALLOCATION

Work out the number of hours required to complete the project and the estimated hours for each person for each sprint.

We have estimated 300 hours total (20h per person per sprint) for this project.

Backlog items that should have potentially been in sprint 1 can be scheduled in Sprint 2, now that the team has more available resources.

6. SPRINT 1 PLANNING

List of user stories and person-in-charge

User Story	Task	Developer	Estimated Hours
As an Admin/Manager, I want to be able to update own profile, so that I can keep my profile current and accurate.	<ul style="list-style-type: none">– View own profile, including Name (Title, First Name, Family Name), Position, Phone Number, Email.– Update own profile, including Name (Title, First Name, Family Name), Position, Phone Number, Email.	Nay	4
As a user, I want to have a dashboard, so that I can easily navigate to my profile applications.	<ul style="list-style-type: none">– Correct navigation to correct destination when URL clicked.– Correct navigation back to dashboard from appropriate areas.– Log out URL	Simon	4
As a user, I want to login, so that I can view my dashboard.	<ul style="list-style-type: none">– Login screen takes me to appropriate dashboard.– Incorrect logins are rejected with error message.	Simon	4
As an Instructor, I want to view and update my own profile, so I can keep my information accurate and up to date.	<ul style="list-style-type: none">– View own profile, including Name (Title, First Name, Family Name), Position, Phone Number, and Email.– Update own profile information including Name (Title, First Name, Family Name), Position, Phone Number, and Email. Profile photo would be nice	Shulin	4

As a member, I want to view and update my own profile, so I can keep my information updated.	<ul style="list-style-type: none"> – Profile information can be viewed. – Profile information including title, first name, last name, position, phone number and emails can be edited, no- primary key such as id or username. 	Dora	4
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