# comp90082-2024-sg-koala

**Welcome to your software project space!**

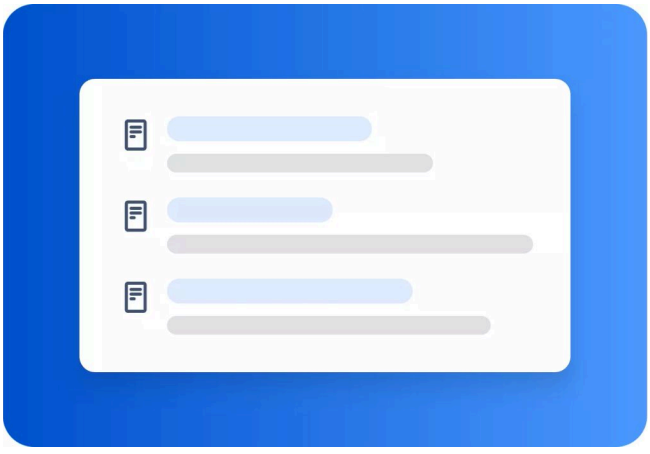
- We've added some suggestions and placeholders. Everything is customizable.
- Get started with page templates:
  - ✍️ Template - Product requirements
  - 🗒️ Template - Meeting notes
  - ✅ Template - Decision documentation
- Check out https://comp90082-2024-sg-koala.atlassian.net/wiki/spaces/comp900822/pages/327856 Can't find link for more tips.

### Status

*Write an update*

### Jira issues

### Recently updated



Display a list of recently changed pages

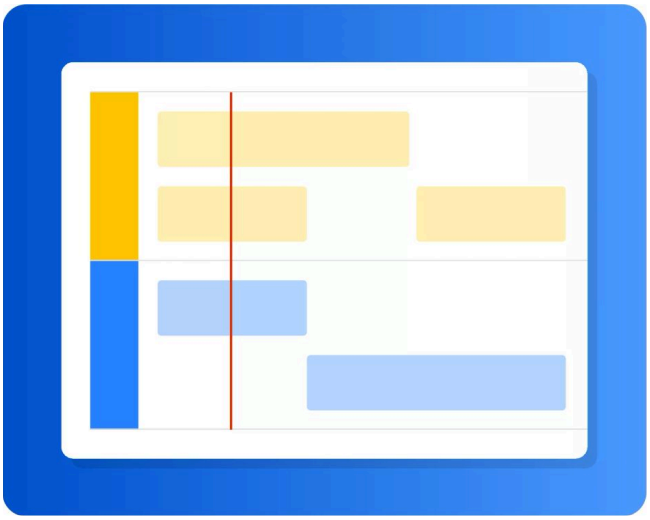
**To add the Recently updated element:**

1. When editing type /
2. Find Recently updated in the dropdown
3. Select **Insert**

**To edit the Recently updated element:**

1. Select the placeholder. The floating toolbar appears.
2. Select **Edit**. The right panel opens.
3. Modify the parameters. Your changes are saved as you go.
4. Resume editing the page, and the panel closes.

## Roadmap



Adding a roadmap planner

Create simple, visual timelines that are useful for planning projects, software releases and much more.

Roadmaps are made up of:

- **bars** to indicate phases of work.
- **lanes** to differentiate between teams, products or streams.
- **markers** to highlight important dates and milestones.
- a **timeline** showing months or weeks.

You can provide more information about items on your roadmap by linking a bar to a page.

**To add the Roadmap planner:**

1. When editing type /
2. Find Roadmap planner in the dropdown
3. Select **Insert**

**To edit the Roadmap planner:**

1. Select the placeholder. The floating toolbar appears.
2. Select **Edit**. The right panel opens.
3. Modify the parameters. Your changes are saved as you go.
4. Resume editing the page, and the panel closes.

# 🎓 BACKGROUND

# Product Overview

### Introduction:

Science Gallery Melbourne introduces multiple unique tours and workshops for secondary school group visits. With a high volume of booking requests throughout the year, the current use of multiple systems including Microsoft Office tools and Priava for space and time management has become cumbersome.

The primary challenge is the complexity and inefficiency of using multiple systems to manage bookings. This multi-step process requires constant updates across several platforms when any changes to bookings are made, involving a significant administrative effort and coordination among team members.

We seek to develop a Unified Booking Management System that simplifies and automates the booking process. This solution will integrate booking, calendar scheduling, and space and equipment management into a single, user-friendly platform. It will help the staff of the Learning Team add and update bookings quickly, check for any scheduling conflicts and store all the tours to the database automatically.

### Key Features:

1. Unified Booking System**:** A centralised platform that integrates booking requests, calendar management, and resource allocation, ensuring a seamless process from initial inquiry to final confirmation.
2. Dynamic Scheduling & Resource Management:  Checks for space, staff availability, and equipment requirements to prevent double bookings and ensure that all necessary resources are allocated to each event.
3. Bulk Editing & Updating: Offers the capability to modify and update multiple bookings simultaneously, facilitating easy adjustments to recurring events or changes in program schedules.
4. Comprehensive Database Integration: Confirmed and completed bookings are systematically recorded in a database, enabling efficient tracking, reporting, and analysis of past events for continuous improvement and planning.
5. Interactive Weekly Dashboard: Provides a real-time overview of upcoming programs, including detailed information on the schedule, assigned staff, and preparation requirements, aiding in efficient staff rostering and program delivery.

### Benefits:

**Efficiency:** Automates and simplifies the booking and event management process, saving time and reducing manual errors.

**Flexibility:** Easily accommodates various program types, booking requirements, and resource constraints.

**Reduce Human Error:** Minimises the likelihood of mistakes in booking arrangements and resource allocations, ensuring accuracy and reliability in every event organised.

# Stakeholders

| Stakeholders | Description | Level of Interest | Level of Influence | potential Impact | Communication Plan |
|---|---|---|---|---|---|
| Science Gallery Learning Team | Main end user of the product, responsible for organising and managing educational programs and workshops at the Science Gallery Melbourne. | High, as the product directly affects their work processes and efficiency. | High, given their direct involvement in defining requirements and using the system. | High, as improvements in the system can greatly enhance their operational efficiency and program quality. | In person meeting after each sprint. |
| Partner/Non-partner school teachers | Teachers from schools that collaborate with the gallery for educational tours and workshops. | Low | Low | Low, their booking process will not change. | N/A |
| Project team | The group of individuals tasked with developing and implementing the project. | High, as their role is to deliver a successful product. | Very high, as they make the crucial decisions on the system's features and functionality. | High, as the project's success directly correlates with their performance. | Meet once or twice a week in person or through zoom. |
| University of Melbourne | The university associated with the Science Gallery Melbourne, potentially providing resources or support. | Moderate | High, the booking process need to use specific tool. | Moderate | N/A |
| Learning team temporary employee | Short-term staff hired to assist with the increased workload or specific tasks within the Learning Team. | Moderate | Low | Moderate, in terms of testing and providing feedback on the system's usability and efficiency. | N/A |
| Bus company BusCharter | The service provider responsible for transporting students to and from the gallery. | Low | Low | Low | N/A |
| Interpreters | The service provider responsible for translating for students | Low | Low | Low | N/A |

| | | | | | |
|---|---|---|---|---|---|
| Unimelb business service | The business services division within the University of Melbourne that responsible for paying additional fees (bus and interpreters). | Moderate, as they need accurate information sent from the system | Moderate | Moderate | N/A |
| Secondary school students | Students that participate in tours and workshops. | Low | Low | Low | N/A |
| IT department | The team responsible for maintaining the technological infrastructure. | High, as they need to ensure the system's reliability and security. | High, due to their role in troubleshooting, maintenance, and potentially implementing technical improvements. | High, as the system's functionality and user experience heavily depend on their efficiency and effectiveness in addressing technical issues. | Communicate using email. |

## Client Expectation

1. **Unified Booking System:** A centralised platform that integrates booking requests, calendar management, and resource allocation, ensuring a seamless process from initial inquiry to final confirmation.
2. **Dynamic Scheduling & Resource Management:** Automatically checks for staff availability, and equipment requirements to prevent double bookings and ensure that all necessary resources are allocated to each event.
3. **Bulk Editing & Updating:** Offers the capability to modify and update multiple bookings simultaneously, facilitating easy adjustments to recurring events or changes in program schedules.
4. **Comprehensive Database Integration:** Confirmed and completed bookings are systematically recorded in a database, enabling efficient tracking, reporting, and analysis of past events for continuous improvement and planning.
5. I**nteractive Weekly Dashboard:** Provides a real-time overview of upcoming programs, including detailed information on the schedule, assigned staff, and preparation requirements, aiding in efficient staff rostering and program delivery.
6. **User-Friendly Interface**: The system should be intuitive and easy to navigate for all users.

## Industry Need

The project, while focused on enhancing the booking and event management processes for the Science Gallery Melbourne, taps into a broader industry need within large educational and cultural institutions like the University of Melbourne. The specific challenges related to efficiency in such expansive organisations underscore a critical industry demand. These challenges are often compounded by the size and complexity of the organisation, leading to inefficiencies in communication, coordination, and resource management.

# Scopes

| | | |
|---|---|---|
| **Inner Scope** | Form for new bookings | Objectives: A form for staff to entering booking details when clients book via phone or email. |
| | | Functionality: The form should contain all the necessary details and specific request. A booking ID will be sent to client email after form is completed. |
| | Tag pending application | Objectives: Tag pending application depends on the programs applied. |
| | | Functionality: Staff will be able to tag pending application to generate checklist using different template. |
| | Checklist | Objectives: A checklist shows following steps that need to be complete. |
| | | Functionality: Staff will use the checklist to ensure all necessary steps are taken, such as availability confirmation, payment processing, final confirmation with clients. |
| | Calendar | Objectives: A calendar shows all the confirmed bookings. |
| | | Functionality:  Confirmed bookings will be visible on calendar, with accompanying staff and number of students. |
| | Database | Objectives: A database will store all details of the bookings. |
| | | Functionality: Staff will be able to add or edit new data. Generates analytic reports for future reporting. |
| **Outer scope** | Secondary school application form | Partner/Non-partner school teacher apply tour/workshop by filling online form. |

| | | |
|---|---|---|
| | Priava venue | Staffs check and book venue on Priava. |
| | Microsoft Calendar events | Add or update events on Microsoft Calendar, accompanying teacher will be assign to events. |
| | Payments | Pay necessary fees such as bus or interpreter fees. |

## Terminology

| Term | Definition |
| --- | --- |
| Booking System | A digital platform used to manage reservations, appointments, or event participations, allowing users to schedule visits or services in advance. |
| Resource Allocation | The process of assigning available resources in an efficient, effective, and orderly manner. In the context of this project, resources can include staff, rooms/spaces, equipment, and workshop materials. |
| Dashboard | A visual interface that displays key information and metrics at a glance, allowing users to monitor and manage activities, resources, or performance indicators effectively. |
| Database | A structured set of data held in a computer, especially one that is accessible in various ways. |

# Choice of Technology

| Choice of Technology | |
|---|---|
| Database | MongoDB |
| Front-End | React Framework |
| Back-End | Django Python |

**Client Requirement** : Any technology is feasible, as long as it does not affect priava's calendar.

- **Database**: MongoDB
  - what: MongoDB is an open-source NoSQL database that stores data in the form of documents (usually in JSON or BSON format). Compared to traditional relational databases (such as MySQL or PostgreSQL), it offers higher flexibility and scalability.
  - why: For this project, given the limited budget, using the free version of MongoDB is a relatively good choice, as it can largely meet our requirements.
- **Front-End**: React Framework
  - what: React is an open source plug-in JavaScript library for building user interfaces. Since It has become one of the most popular and widely used tools in plugin development. The main goal of React is to improve development efficiency, enable fast UI rendering, and help developers build large, dynamic web applications.
  - why: Our team members are essentially experienced with React, which makes it very easy for us to get started. We can begin developing our website earlier, saving some time for learning and adaptation.
- **Back-End**: Django Python
  - what: Django is an advanced Python web framework designed to make developing complex, database-driven websites easier and faster.
  - why: Django's comprehensiveness can cover all our needs, and some of our team members also have rich experience using it, so we choose to use Django.

## Constraints

- This product is required to use the Priava booking system for venue booking
- This product is required to use Outlook Calendar to invite facilitators and manage booking calendar
- Zero budget on deployment, database

# High-Level Plan

### Sprint 1 - planning

- design prototype
- determine the choice of technologies
- generate product backlog
- estimate story points and priorities
- allocate user stories for sprint 2
- allocate development roles
- generate risk management strategy

### Sprint 2 - development

- client review on sprint 1
- update requirements based on client review
- Initialise development architecture, front end and back end
- design database structure
- enable authorisation to external API
- complete user stories allocated
- monitor risk
- update risk management strategy if detect new risk
- update development speed

### sprint 3 - development

- client review on sprint 2
- update requirements based on client review
- continue development on allocated user stories
- update risk management strategy if detect new risk
- test and document completed features
- complete user stories allocated
- update development speed

### sprint 4 - deployment

- test and document all features
- client review on sprint 3
- final adjustment based on client review
- deploy and deliver

## 1 SPRINT-1

## Sprint-1 Plan

- design prototype
- determine the choice of technologies
- generate product backlog
- estimate story points and priorities
- allocate user stories for sprint 2
- allocate development roles
- generate risk management strategy

## Sprint-1 Goal

- collect client information for user stories
- generate product backlog
- generate sprint 2 goals and burn down chart
- generate goal model
- confirm the choice of technologies
- confirm communication frequency
- initialised risk management strategy
- complete design prototype

# Sprint-1 Burn Down Chart

Since Sprint 1 is the inception and design phase, there is no need for a burn-down chart of user stories.

## Sprint-1 Review

We planned to meet with our client next week, 25th March - 28th March

## 2 SPRINT-2

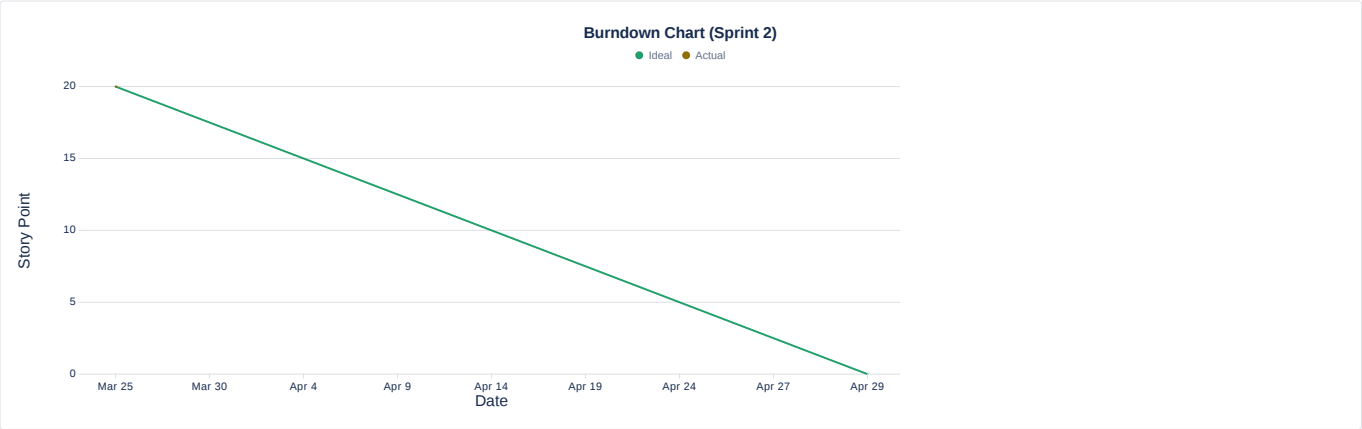
## Sprint-2 Plan

- client review on sprint 1
- update requirements based on client review
- Initialise development architecture, front end and back end
- design database structure
- enable authorisation to external API
- complete user stories allocated
- monitor risk
- update risk management strategy if detect new risk
- update development speed

## Sprint-2 Goal

| Sprint goal | List of feature user stories |
|---|---|
| Implement school teacher booking process | As Tony Lee, I want to book a workshop through any method listed on the current website so that I can visit the place with students.<br><br>As James Parker, I want to input phone/ email bookings for clients so that I can process the booking. |
| Implement learning team booking management | As James Parker, I want to manage all pending bookings so that I can check with the booking checklist. |
| Implement connection with Priava venue booking system | As James Parker, I want to check a booking time with Priava venue booking so that I can manage the availability of the venue. |
| Initialise database connection and storage | As James Parker, I want to see all booking information so that I can update details. |

## Sprint-2 Burn Down Chart




| Task | Story Point |
|---|---|
| US 0.1 | 1 |
| US 1.1 | 2 |
| US 1.2 | 2 |
| US 1.4 | 2 |
| US 1.5 | 3 |
| US 2.1 | 4 |
| US 2.2 | 3 |
| US 4.1 | 3 |
| Total Story Point | 20 |

| Task | Date | Ideal | Actual |
|---|---|---|---|
| Start | Mar 25 | 20 | 20 |
| | Mar 30 | 17.5 | |
| | Apr 4 | 15 | |
| | Apr 9 | 12.5 | |
| | Apr 14 | 10 | |
| | Apr 19 | 7.5 | |
| | Apr 24 | 5 | |
| | Apr 27 | 2.5 | |
| End | Apr 29 | 0 | |

## Sprint-2 Review

# 3 SPRINT-3

## Sprint-3 Plan

- client review on sprint 2
- update requirements based on client review
- continue development on allocated user stories
- update risk management strategy if detect new risk
- test and document completed features
- complete user stories allocated
- update development speed

## Sprint-3 Goal

| Sprint goal | List of feature user stories |
|---|---|
| Finish Epic feature 0 | As Tony Lee, I want to book a workshop and get a booking ID so that I can update/cancel any booking later through email or call using this booking ID. |
| Implement Microsoft Calendar management system | As James Parker, I want to update booking information to Microsoft Calendar so that I can invite and roster facilitators. |
| Enable update booking details | As James Parker, I want to update the current booking detail so that I can have the up to date information for reporting. |
| Implement accessbility arrangement including interpreter or transpotation | As James Parker, I want to book additional arrangements so that I can satisfy clients' requirements. |
| Implement update for risk assessment | As James Parker, I want to send and update workshop risk assessment for a school so that they can prepare for this visit and I can keep a record for the risk of this event. |
| Implement update for medical information | As James Parker, I want to gather and manage medical information, allergies, or accessibility needs for the visiting groups so that I can ensure a safe and accommodating visit for all attendees. |

## Sprint-3 Burn Down Chart

| Task | Story Point |
|---|---|
| US 0.2 | 2 |
| US 3.1 | 3 |
| US 3.2 | 2 |
| US 4.3 | 1 |
| US 5.1 | 3 |
| US 5.2 | 3 |
| US 6.1 | 3 |
| US 6.2 | 2 |
| US 7.1 | 3 |
| Total Story Point | 22 |

## Sprint-3 Review

## 4 SPRINT-4

## Sprint-4 Plan

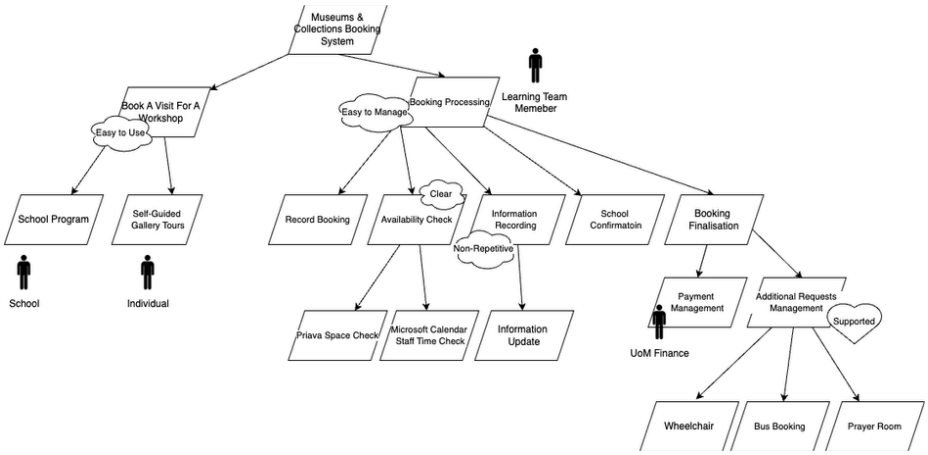
## Sprint-4 Goal

## Sprint-4 Burn Down Chart

## Sprint-4 Review

# REQUIREMENTS

## Goal Model




Goal Model

## Personas


Major Responsibilities
• Managing and overseeing the booking system for various trips within the Science Gallery.
• Ensuring a smooth and efficient booking process for both individual visitors and group tours.
• Coordinating with other departments to update trip schedules, availability, and special events.
• Handling customer inquiries and issues related to bookings.
Goals and Tasks
• To simplify the booking process for all users and make sure that it is user-friendly and accessible for all the user .
• To increase the efficiency of managing bookings, including ease of updating trip schedules and availability.
• To improve customer satisfaction.
Image:generate By AI
Physical, Social, and Technological Environment
• Works in an office within the Science Gallery but often moves around the gallery to coordinate with different departments.
• Interacts with a diverse team, including exhibitions coordinators, teacher, and school representatives.
• Uses a variety of technology solutions, including a booking management system, Priava system.
Quote
"Our main duty is to let the client can book the journey of discovery efficiently and easily. To achieve this goal, my mission is to make the process as seamless as possible, ensuring that every guest are happy with the whole process "
James Parker
Booking manager
Age : 38
Gender : Male
Address : Melbourne
SKILLS
Managing
Problem Solving
Teamwork
PERSONALITY
85%
Personal Thinking
75%
Open Minded

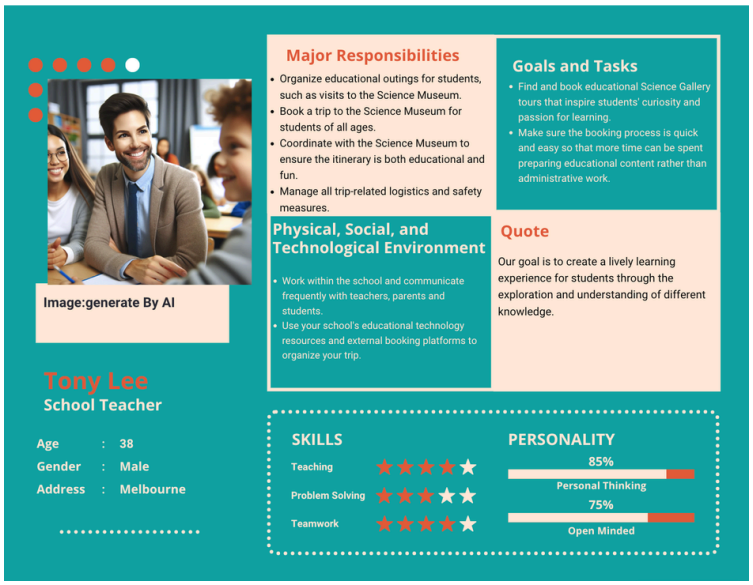

Major Responsibilities
• Organize educational outings for students, such as visits to the Science Museum.
• Book a trip to the Science Museum for students of all ages.
• Coordinate with the Science Museum to ensure the itinerary is both educational and fun.
• Manage all trip-related logistics and safety measures.
Goals and Tasks
• Find and book educational Science Gallery tours that inspire students' curiosity and passion for learning.
• Make sure the booking process is quick and easy so that more time can be spent preparing educational content rather than administrative work.
Image:generate By AI
Physical, Social, and Technological Environment
• Work within the school and communicate frequently with teachers, parents and students.
• Use your school's educational technology resources and external booking platforms to organize your trip.
Quote
Our goal is to create a lively learning experience for students through the exploration and understanding of different knowledge.
Tony Lee
School Teacher
Age : 38
Gender : Male
Address : Melbourne
SKILLS
Teaching
Problem Solving
Teamwork
PERSONALITY
85%
Personal Thinking
75%
Open Minded

Image:generate By AI

## Emily Zhang

**Booking Specialist**

| | | |
|---|---|---|
| Age | : | 28 |
| Gender | : | Female |
| Address | : | Melbourne |

### Major Responsibilities

- Answering phone calls from schools and educators interested in booking educational programs.
- Processing booking requests, including entering data into the booking system, scheduling, and confirming bookings.
- Coordinating with other departments to ensure availability and readiness of programs.

### Goals and Tasks

- To efficiently process all booking requests, ensuring schools receive prompt responses and high satisfaction with the booking experience.
- To manage the booking calendar effectively, maximizing the utilization of available programs and resources.

### Physical, Social, and Technological Environment

- Works in a busy office environment, part of the larger educational outreach department.
- Regularly interacts with educators, school administrators, and internal staff from various departments.
- Uses a specialized booking system, email, and phone as primary tools for communication and booking management.

### Quote

"Every call is an opportunity to make a positive impact on students' learning experiences. My goal is to ensure every school finds the perfect program for their needs."

### SKILLS

- Time management ★★★★★
- Problem Solving ★★★☆☆
- Teamwork ★★★★★

### PERSONALITY

85%
Personal Thinking

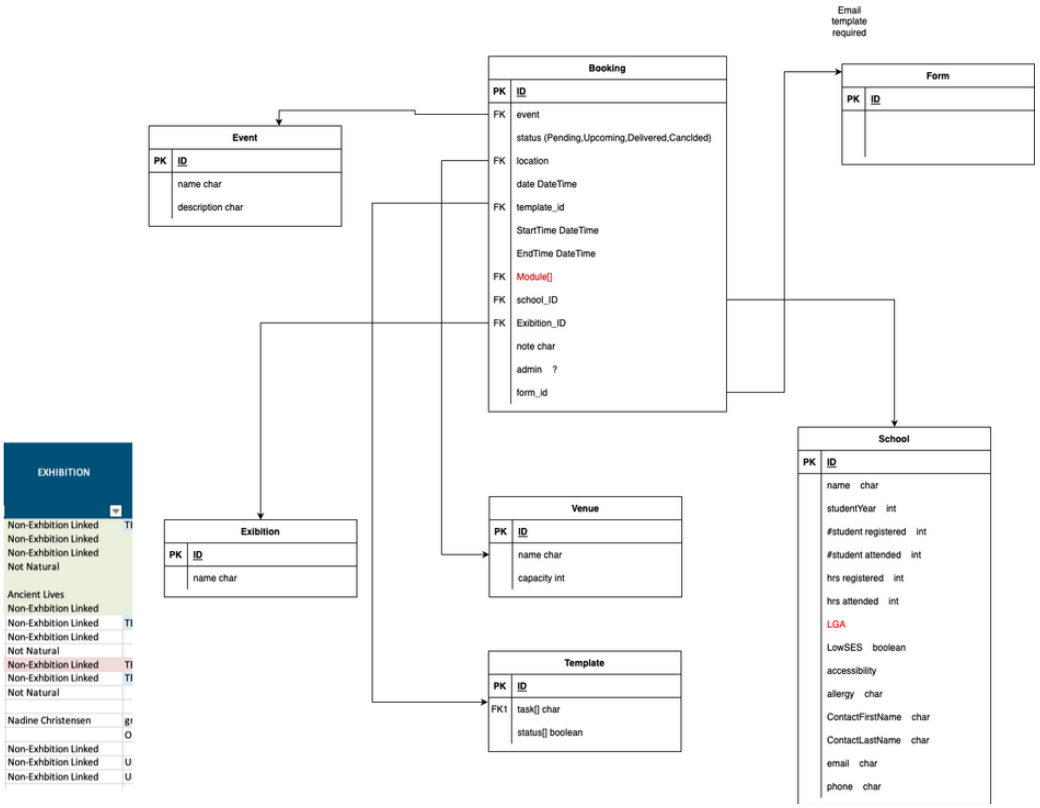
75%
Humor

# Prototypes

## Figma

View our design via Booking Management System

## Database ER Diagram Prototype




Database ER Diagram Prototype

# User Stories - Product Backlog

- **Size Estimation/Story Points** estimate between 1 - 5 days
- **Priority** - must have, should have, could have, will not have
- **As** - reflect to Personas

| **Epic Feature 0: School teacher booking** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimation (1-5)** | **Dependency** | **Justification** |
| 0.1 | Tony Lee | fill in a booking form | I can book a visit for a workshop | • Display booking form<br>• Display required field of input<br>• Let user see booking completion notification | Must have | 1 | N/A | **Size estimation:** The current team relies on Microsft booking form. We can adjust it to fit it in our user stories.<br>**Priority estimation:** We need a booking form before processing the booking information by learning team member. |
| 0.2 | Tony Lee | be able to see a booking ID in my email inbox | I can update/cancel any booking later through email or call using this booking ID | • Send email to client inbox<br>• Display booking ID | Should have | 2 | 0.1 | **Size estimation:** We will need to extract client email and generate unique booking ID.<br>**Priority estimation:** Is good to have a booking ID for client. This allows the learning team staff to track booking easily by referencing the booking ID when update/cancel booking. |
| **Epic Feature 1: Learning team member booking checklist** | | | | | | | | |

| ID | As | I want to | So that | Acceptance Criteria | Priority | Size Estimation (1-5) | Dependency | Justification |
|---|---|---|---|---|---|---|---|---|
| 1.1 | Emily Zhang | manually enter booking information if client booked by telephone/email | I can keep track of the client details and process booking. | • Display form input field<br>• Allow user to tag the booking (based on checklist template type)<br>• Allow user to see completion notification | Must have | 2 | N/A | **Size estimation:** A simple form for input and creating a record in the database<br>**Priority estimation:** It is important that we have this method so the staff can process these booking made by phone call or email. |
| 1.2 | James Parker | tag all pending booking by checklist template type | I can keep track of all bookings process based on the template checklist | • Display a list of pending bookings<br>• Allow user to distinguish between different tags | Must have | 2 | N/A | **Size estimation:** Only require to use distinguishable tags such as different colour and reflect on the different template<br>**Priority estimation:** Need this for going through checklist for different types of workshop booking |
| 1.3 | James Parker | update checklist template | I can have a more up to date checklist template for tracking booking progress | • Allow user to see current template by type<br>• Allow user to only update the required field | Could have | 3 | N/A | **Size estimation:** Update all booking checklist with the same tagged template, need to search and update all relevant bookings in database.<br>**Priority estimation:** not the most important, but it will be flexible to have it. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1.4 | James Parker | see all bookings and see each booking checklist progress | I can track progress of all bookings and individual one's | • Allow user to see all booking details<br>• Allow user to search for target booking | Should have | 2 | 1.1 | **Size estimation:** Need searching for one individual booking for convenience.<br>**Priority estimation:** Learning team member should be seeing this if they want to track the progress using the checklist |
| 1.5 | James Parker | update booking details | I can track the more up to date booking information. | • Allow user to see all booking details<br>• Allow user to search for target booking<br>• Allow user to only update the required field | Should have | 3 | 1.1, 1.4 | **Size estimation:** Need searching for target booking for convenience. Need update target booking details in all other platform<br>**Priority estimation:** This is a necessary functionality, but automation can be develop later in the development. |

| **Epic Feature 2: Connection and negotiation with Priava venue booking system** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimation (1-5)** | **Dependency** | **Justification** |
| 2.1 | James Parker | check Priava venue availability | I know if there is space available for a booking | • Allow user to login to Priava<br>• Allow user to see Priava information inside the booking system | Must have | 4 | N/A | **Size estimation:** Need to use Priava API to embed in our booking system, setup Authentication to use this API<br>**Priority estimation:** Priava is essential in this booking system |
| 2.2 | James Parker | have booking details copyed | I can have the venue booked | • Allow user to submit | Must have | 3 | 1.1, 1.2, 2.1 | **Size estimation:** Need to linked to |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | into Priava if there is availbility | | booking details to priava | | | | Priava API for automation<br>**Priority estimation:** This is required for venue booking and booking information need to be shown in Priava as well. |

| **Epic Feature 3: Microsoft Calendar managment** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimation (1-5)** | **Dependency** | **Justification** |
| 3.1 | James Parker | add Priava booking information to the shared Microsoft Calendar | we can provide facilitators with immediate access to venue availability | • Display correct time slot<br>• Information should be same as one given from Priava | Must have | 3 | 2.1,2.2 | **Size estimation:** Need to linked to Microsoft API for automation<br>**Priority estimation:** This is required for venue booking and booking information need to be shown in Microsoft Calendar |
| 3.2 | James Parker | invite facilitators to assist with scheduling | we can ensure the schedules are processed and audited efficiently | • if casual facilitator required, roster via When I Work | Must have | 2 | 3.1 | **Size estimation:** Need to associate with When I work<br>**Priority estimation:** facilitator is essential process and audit the tasks |

| **Epic Feature 4: Store booking details in Database** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimation (1-5)** | **Dependency** | **Justification** |
| 4.1 | James Parker | see a list of booking details in the booking system | I can select a booking and update the booking information | • Display grouped data<br>• Allow user to update booking details | Must have | 3 | 1.1, 1.2 | **Size estimation:** Link database to the booking system. Data should be stored once booking details was entered by client or learning team members. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | • Allow user to search a booking by booking id | | | | **Priority estimation:** Reqiored for learning team member to track historical bookings. |
| 4.2 | James Parker | see analysis of the booking details | I can report to the team | • Display visual analysis<br>• Display data trend | Could have | 3 | 1.1, 1.2, 4.1 | **Size estimation:** Need to process booking data and need to use packages for analysis.<br>**Priority estimation:** Not necessarily needed in the booking system, but good to have for analytic task. |
| 4.3 | James Parker | update a booking information | I can have the up to date information for reporting | • Display most recent booking details<br>• Allow user to see update success notification | Shoul d have | 1 | 4.1 | **Size estimation:** Need to update data in the database and show pop out video for update success notification.<br>**Priority estimation:** Should have this function to allow user to change information from database directly. |

| **Epic Feature 5: Accessibility Arrangements for booking** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimation (1-5)** | **Dependency** | **Justification** |
| 5.1 | James Parker | easily book interpreters through Auslan Services | deaf or hard of hearing students can fully engage with the visit. | • Interface to select the need for an Auslan interpreter | Must have | 3 | 3.1 | **Size estimation:** System should able to connect to Auslan Services including the process for |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | during booking | | | | requesting and confirming interpretation services.<br><br>**Priority estimation:** Ensuring accessibility is very important for inclusive educational experiences. |
| 5.2 | James Parker | offer and book transportation for schools requiring a bus to our venue through BusCharter.com.au | logistical challenges do not prevent schools from attending. | • Option to request bus transport during the booking process.<br>• Interface to book buses directly or send requests to Bus Hire - Low Cost Bus Charter & Coach Hire in Australia<br>• Confirmation of bus booking sent to the school representative. | Should have | 3 | 3.1 | **Size estimation:** Need to use api to connect to BusCharter.com.au and handle the transport request and confirmation result.<br><br>**Priority estimation:** Promote school participation and make the whole process easer. |

| **Epic Feature 6: Risk** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimation (1-5)** | **Dependency** | **Justification** |
| 6.1 | James Parker | send prewritten risk assessments to schools for all our programs | teachers can prepare and address any concerns prior to the visit. | • Automated distribution of risk assessments upon booking confirmation. | Must have | 3 | 1.1, 1.2 | **Size estimation:** Enable automatic sending of risk assessments<br><br>**Priority estimation:** It is very important for schools to understand possible |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | risks before visiting and to promote a safe environment for students. |
| 6.2 | James Parker | confirm booking details with teachers two weeks before their scheduled visit | any necessary adjustments can be made in a timely manner. | • Automated reminder to send confirmation emails two weeks before the booking. | Must have | 2 | 3.1 | **Size estimation:** Enable automatic reminder and confirmation email sending<br>**Priority estimation:** Reduces the potential for misunderstandings is very important. |

| **Epic Feature 7: Health and Safety Information** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimation (1-5)** | **Dependency** | **Justification** |
| 7.1 | James Parker | gather and manage medical information, allergies, or accessibility needs for the visiting groups | we can ensure a safe and accommodating visit for all attendees. | • Secure form for collecting sensitive medical and accessibility information during the booking process. | Must have | 3 | 3.1 | **Size estimation:** Collecting sensitive medical and accessibility information requires keeping the data secure and private and the data can be easily accessible and manageable by internal personnel.<br>**Priority estimation:** It is vital to prepare and provide a safe, inclusive visiting environment that meets the needs of all participants. |

| **Epic Feature 8: Post-visit Reporting** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimatio** | **Dependency** | **Justification** |

| | | | | | | n (1-5) | | |
|---|---|---|---|---|---|---|---|---|
| 8.1 | James Parker | accurately record and report the number of students who attended each program in our database | we can evaluate our outreach and report on our educational impact. | • Interface for entering attendance numbers into the LER database. | Must have | 2 | N/A | **Size estimation:** Implement an interface to enter and update attendance numbers in the database<br>**Priority estimation:** Providing valuable data to assess program effectiveness and plan future delivery is a must. |

| **Epic Feature 9: Financial Processing** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ID** | **As** | **I want to** | **So that** | **Acceptance Criteria** | **Priority** | **Size Estimation (1-5)** | **Dependency** | **Justification** |
| 9.1 | James Parker | process payments for interpreters and buses through the university's financial system | external providers are paid promptly and the service is secured for the schools. | • Integration with the university's financial system for direct payment processing.<br>• Automated payment confirmation to both the service providers and school representatives. | Must have | 3 | 3.1 | **Size estimation:** Requires integration with the University's financial systems and automation of payment processing.<br>**Priority estimation:** Prompt payment to school is key to maintaining a good relationship. |

# Provided Information - user stories support details

| Topic | | |
|---|---|---|
| Planner | The staff member copies the booking details into Microsoft Planner/Tasks into the checklist template so they can track the steps of the booking process. | |
| Priava | The staff member checks Priava (venue booking system) that the workshop space or gallery space is available to be used, then copies the booking information into a Priava booking. If there is not sufficient space, they will negotiate with the school around an alternative date and time | |
| *MSC + Invites* | Once the Priava booking is confirmed, the staff member will add the booking to a shared Microsoft Outlook calendar, once again copying over the booking information. Outlook is used as the main tool by our team as it allows us to invite facilitators to the programs to assist with their own scheduling. If casual facilitators are required, they will also be rostered on here using When I Work. | |
| *LER + update status* | This is the stage where the staff member will enter the data into our excel spreadsheet database of all the programs we have run, manually entering all the data that we capture from the booking process. We also use this data for our reporting. For example, this would be (how many students from X school attended in term 1, and how many total hours did they spent here). | |
| Additional resources - booking is also recorded in database link to the target workshop booking | *Book interpreters* | Some of our schools have deaf/hard of hearing students that require interpreters. These are booked through Auslan Services. |
| | *Book bus if needed* | If a partner school would like to have a bus to our venues, we will book a bus through Bus Hire - Low Cost Bus Charter & Coach Hire in Australia . |
| | *Paid for intepreter/bus* | Our staff member will process the payments for buses and interpreters through the university system. This is currently done through Themis but the university is changing this system some time in the year. |
| Update information in database | *Risk assessments* | We have prewritten risk assessments for all our programs that we send out to schools. |

| | | |
|---|---|---|
| | *Confirm with teacher* | the staff member will send out a confirmation email two weeks before the booking to make sure the details are still correct. |
| | *Medical information* | the staff member will obtain any medical information, allergies or accessibility needs for the group and update the Outlook calendar with the information. |
| | *Numbers on the day* | We need to enter how many students attended into our database spreadsheet (the LER). This is for reporting purposes. |


RISK

## Risk Registry

| Risk ID | Description | Category | Probability | Impact | Risk Level | Mitigation Plan | Owner | |
|---|---|---|---|---|---|---|---|---|
| 0 | API failure leading to interruption in service delivery | Technical | Medium | High | High | Implement alternative APIs; Regular API health checks; Develop a rapid response plan for API failure | | |
| 1 | Software updates to the platform or database causing incompatibility issues | Technical | Medium | High | High | Test any software updates in a controlled environment before rolling them out | | |
| 2 | Data leakage in database due to unsecured data | Security | Low | High | Medium | Preprocess data before saving to ensure no sensitive information is stored | | [Date] |
| 3 | Inaccurate project time estimation leading to delays | Management | High (70%) | Medium | High | Implement more rigorous time estimation techniques | Project Manager | |

## Review Meetings

# COLLABORATION

# About Us

## Team Info

| NAME | ROLE | CONTACT |
| --- | --- | --- |
| @Yujun Yan | Mentor | ? |
| @Guixian Li ***Leona*** | Product Owner | **guixianl@student.unimelb.edu.au** |
| @Daniel Su ***Daniel*** | Developer | **dss1@student.unimelb.edu.au** |
| @Yuanbo Xu ***Chris*** | Scrum Master | **yuanbo@student.unimelb.edu.au** |
| @Pangfeng ZHENG ***Jack*** | Developer | **pangfengz@student.unimelb.edu.au** |
| @Yongli Qin ***Matt*** | Developer | **yongliq@student.unimelb.edu.au** |
| @Yun-Chi Hsiao ***Jim*** | Recorder | **yunchi@student.unimelb.edu.au** |

## External

- **GitHub** https://github.com/COMP90082-2024-SM1/SG-Koala Connect your Github account
- **Trello** COMP90082_2024_SM1_SG_KOALA
- **Slack Channel**
  - *#comp90082-2024-sg-koala*
  - *#client-meeting*
  - *#general*
  - *#meeting*

## Team Calendar

| Meeting Type | Meeting time | People Involved |
|---|---|---|
| Sprint Plan Meeting | Before each Sprint start | All Team Member |
| Product Backlog Refinement Meeting | Before each Sprint start | All Team Member |
| Weekly Stand-up Meeting | Twice a week (Monday, Wednesday) | All Team Member |
| Supervisor Meeting | Weekly (Wednesday) | All Team Member, Supervisor |
| Review Meeting | After a Sprint finished | All Team Member, Client |
| Retrospective Meeting | After a Sprint finished | All Team Member |

## Agile Processes

# Team Charter

## Team Purpose and Mission

- Aim to significantly reduce workload and enhance user experience.
- Develop a user-friendly, efficient software application to improve the Science Gallery's booking system.

## Scope of Work

- Design, develop, and test the application.
- Interface with the Science Gallery's existing systems and databases.
- Ensure accessibility and ease of use for various user groups.

## Roles and Responsibilities

- Project Manager: Manages project schedules and liaises with the Science Gallery.
- Scrum Master: Guides and assists the Scrum team, ensuring Scrum practices are followed, resolving obstacles, and promoting a productive team environment.
- Recorder: Documents the development process comprehensively, including creating user guides.
- Developers: Responsible for coding and building the software application, including writing, testing, and debugging code, and collaborating on design and implementation decisions.

## Procedures and Processes

- Weekly team meetings to discuss current work.
- Weekly meetings with Supervisor for progress reviews.
- Sprint sessions include planning, retrospectives, and client reviews.
  - Planning: Organising and defining tasks and objectives for the sprint.
  - Retrospective: Reflecting on the past sprint to identify improvements.
  - Review with Clients: Discussing progress and feedback with clients.
- Use of collaboration tools.
  - Trello for task management.
  - Slack for communication.

## Resources

- Team members will independently research and document resources, compiling them in a shared documented 🤓 Links & Resources for easy access and reference.
- Additionally, the team will coordinate with the client to obtain a testing account and necessary data for effective system testing and validation.

## Performance Metrics

- Completion of development milestones on schedule.
- Reduction in booking system workload as reported by the Science Gallery.
- User satisfaction and feedback post-implementation.

## Conflict Resolution Strategies

- Encourage open and respectful communication to address issues as they arise.
- Implement regular check-ins to identify and resolve emerging conflicts early.
- Facilitate mediation sessions with a neutral party for unresolved conflicts.

## Duration and Timeframes

The team will operate over the duration of the semester, with the project structured into four distinct sprints:

- Sprint 1: 3 weeks.
- Sprint 2: 4 weeks.
- Sprint 3: 4 weeks.
- Sprint 4: 2 weeks.

The project is set to conclude by the end of the semester, aligning with these sprint durations for effective planning and execution.

# Definition of Ready

The "Definition of Ready" in software development and Agile methodologies refers to a set of criteria that a user story or task must meet before it can be considered ready to be worked on in a sprint or development cycle. This concept ensures that work items are adequately prepared and understood before the team starts working on them, promoting efficiency and reducing the risk of misunderstandings or rework. Key aspects of the Definition of Ready typically include:

- **Clear Acceptance Criteria**: Specific conditions that must be met for the work to be considered complete.
- **Dependencies Resolved**: All dependencies on other tasks or external factors are identified and resolved.
- **Estimated**: The task has been sized or estimated by the team.
- **Feasible**: The team agrees that the task is possible to complete within the sprint or cycle.
- **Prioritised**: The task fits within the team's priorities and product roadmap.
- **Understood by the Team**: Everyone involved has a clear understanding of what needs to be done and why.

The Definition of Ready is a crucial component of Agile project management, ensuring that tasks are well-prepared before development begins, thus improving the team's efficiency and effectiveness.

## Definition of Done

The "Definition of Done" in Agile and software development is a critical agreement that determines when a task or user story is considered complete. It serves as a checklist that ensures quality and completeness. Key aspects typically include:

- **Quality Standards Met**: The work meets predefined quality criteria, such as code quality, design standards, and performance benchmarks.
- **Acceptance Criteria Fulfilled**: The task satisfies all the conditions specified in the user story or requirement.
- **Code Review and Testing**: The code has been reviewed, and all necessary testing (unit tests, integration tests, etc.) has been successfully completed.
- **Documentation Updated**: Relevant documentation (technical, user manuals, etc.) has been updated to reflect the changes.
- **Approved by Stakeholders**: The work is reviewed and approved by the relevant stakeholders, such as product owners, clients, or team leads.
- **Potentially Shippable**: The increment is in a state where it could be released to users, even if it won't be shipped immediately.

The Definition of Done ensures transparency and a shared understanding of what it means for work to be complete, helping to avoid ambiguities and ensuring that each product increment is of high quality.

# Meetings

# The 1st Client Meeting

## 🗓️ Date & Time

**10:30 Mar. 6th, 2024**

## 🗣️ Participants

- @Yuanbo Xu
- @Pangfeng ZHENG
- @Yongli Qin
- @Daniel Su
- @Yun-Chi Hsiao
- @Guixian Li
- @Yujun Yan
- **The client**
- **The other team**

## 📖 Goals

- Self-introduction.
- Project Introduction.
- Questions for the client.

## 🗣️ Discussion Topics

| Time | Item | Presenter | Notes |
|---|---|---|---|
| 30 mins | Project Introduction | The client | Get to know each others with positive communication. |
| 30 mins | Q&A session | All | Need to prepare for the client meeting question. |

## ✅ Action Items

- [x] Everyone participates the meeting.
- [x] Understand the client's needs.
- [x] Develop a strategy for effective communication with the client.
- [x] Receive feedback or responses from the client.

| QUESTIONS | REPLY |
|---|---|
| Does the booking system need to be built based on the current website? | The website is static and currently utilizes Microsoft Form to facilitate client requests, which will be managed by the staff thereafter. |
| Do the Microsoft applications such as Forms and Calendar must be used? | We need to adhere to Priava due to school regulations and consensus. Other aspects can be replaced and modified as needed. |

| | |
|---|---|
| Is the invoice printed or pdf? | Both…? The school manages this aspect. However, it's essential to verify if the recipient has been previously registered. |
| Are we responsible for invoice detail? | Nope! |
| If there is a question about requirements can we contact you directly? | Talk to Chris…and we need his email. |
| Tech stack requirements? | N/A |
| Do we get access to different staff members' rosters? Are they in digital format? | Microsoft SharePoint has the capability to handle permissions, as well as manage tasks for casual workers during my shifts. |
| Do we handle bus arrangements (bus charter)? | Manual. |

## Decisions

- Develop user stories and create a prototype to initially assess and understand client requirements.
- Conduct research on the usage of APIs for Microsoft and Priava.
- @Guixian Li is the **project owner** who is responsible for liaising with the client.

## Notes

1. Booking on the official website.
2. Client's Clients (lol) can contact directly to the staff.
3. Request would be sent via MS Form and email list.
4. Sticking with Priava for the venue!!!
5. Summary of current tools…
    a. **MS Form** → Client's request
    b. **MS Calendar** → Assign staff for activities
    c. **Priava** → Venue booking system
    d. **School Planner** → Todo list for staff
    e. **SharePoint** → Database

## Team Meetings

# Team Meeting - 0

## Date & Time

**11:00 Mar. 20th, 2024**

## 👥 Participants

- @Yuanbo Xu
- @Pangfeng ZHENG
- @Yongli Qin
- @Daniel Su
- @Yun-Chi Hsiao
- @Guixian Li

## 📖 Goals

- Evaluate the work completed by each team member.
- Discuss the prototype for the product.

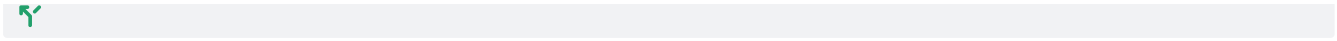
## 🗣️ Discussion Topics

| Time | Item | Presenter | Notes |
|---|---|---|---|
| 10 mins | Project's requirements | @Guixian Li<br>@Yongli Qin<br>@Yuanbo Xu | Add a Persona Case.<br>Choice of Technology needs client expectation. |
| 10 mins | Product background | @Daniel Su | Done. |
| 10 mins | Collaboration | @Yun-Chi Hsiao | Done. |
| 10 mins | Sprint-1 planning | @Pangfeng ZHENG | Done. Add Sprint-2 planning. |
| 10 mins | Prototype | @Guixian Li | Updated. Ready for Present. |

## ✅ Action Items

- [x] Review 📑 REQUIREMENTS.
- [x] Review 🎓 BACKGROUND.
- [x] Review 💡 COLLABORATION.
- [x] Review 🗺️ ROADMAP.
- [x] Design prototype.

## ⤴️ Decisions



## Supervisor Meetings

# Supervisor Meeting - 0

## 🗓️ Date & Time

**10:00 Mar. 5th, 2024**

## 👥 Participants

- @Yuanbo Xu
- @Pangfeng ZHENG
- @Yongli Qin
- @Daniel Su
- @Yun-Chi Hsiao
- @Guixian Li
- @Yujun Yan

## 🥅 Goals

- Self-introduction.
- Setup Slack team channel.
- Discuss the upcoming client meeting.

## 🗣️ Discussion Topics

| Time | Item | Presenter | Notes |
|---|---|---|---|
| 15 mins | Introduction | @Yujun Yan | Get to know each others with positive communication. |
| 15 mins | Project Brief | @Yujun Yan | Need to prepare for the client meeting question. |

## ✅ Action Items

- [x] Everyone introduce themselves.
- [x] Everyone has joined the Slack channel.
- [x] Prepare for the The 1st Client Meeting questions.

## Decisions

@Guixian Li will be the representative for asking questions.

# Supervisor Meeting - 1

## 🗓️ Date & Time

**12:00 Mar. 13th, 2024**

## 👥 Participants

- @Yuanbo Xu
- @Pangfeng ZHENG
- @Yongli Qin
- @Daniel Su
- @Yun-Chi Hsiao
- @Guixian Li
- @Yujun Yan

## 🥅 Goals

- Progress checking.
- Setup Confluence.
- Clarify the requirements of Sprint-1.
- Discuss the content of 1️⃣ SPRINT-1.

## 🗣️ Discussion Topics

| Time | Item | Presenter | Notes |
| --- | --- | --- | --- |
| 20 mins | Sprint-1 Introduction | @Yujun Yan | Introduce the tasks which need to be done in Sprint-1. |
| 15 mins | Confluence Module | @Yujun Yan | Use the provided templates and structure to setup the Confluence. |

## ✅ Action Items

- [x] Understand the Sprint-1 task.
- [x] Setup the Confluence following the templates.

## ⤴️ Decisions

# Supervisor Meeting - 2

## 🗓️ Date & Time

**13:00 Mar. 20th, 2024**

## 👥 Participants

- @Yuanbo Xu
- @Pangfeng ZHENG
- @Yongli Qin
- @Daniel Su
- @Yun-Chi Hsiao
- @Guixian Li
- @Yujun Yan

## 🥅 Goals

- Progress checking.
- Showcase the Confluence and Figma design.
- Refine the documentation.

## 🗣️ Discussion Topics

| Time | Item | Presenter | Notes |
|---|---|---|---|
| 20 mins | Review Session | @Yujun Yan | 1. Need one more case in persona.<br>2. Discuss Burn Down Chart in Sprint-1.<br>3. Discuss Constraint section content.<br>4. GitHub readme add release tag. |
| 5 mins | Q&A | @Guixian Li | 1. Discuss the missing of Burn Down Chart in Sprint-1. |

## ✅ Action Items

- [x] Progress checking.
- [x] Review Sprint-1.

## ⤴️ Decisions

## Agile Ceremonies

# Sprint Planning - 1

## Date & Time

**13:00 Mar. 13th, 2024**

## 👥 Participants

- @Yuanbo Xu
- @Pangfeng ZHENG
- @Yongli Qin
- @Daniel Su
- @Yun-Chi Hsiao
- @Guixian Li

## 📖 Goals

- Determine the specific roles for each team member.
- Allocate specific tasks to each team member.

## 🗣️ Discussion Topics

| Time | Item | Presenter | Notes |
|---|---|---|---|
| 10 mins | Roles | @Guixian Li | Discuss each team member's personality and capabilities to assign roles effectively. |
| 30 mins | Tasks | @Guixian Li | Compile the tasks for Sprint 1 using the checklist provided on the LMS. |

## ✅ Action Items

- [x] Determine the specific roles for each team member.
- [x] Allocate specific tasks to each team member.

## Decisions

- @Guixian Li will be the **project owner**.
- @Yuanbo Xu is the **scrum master**.
- @Yun-Chi Hsiao is the **recorder**.
- @Guixian Li @Yuanbo Xu @Yongli Qin are responsible for REQUIREMENTS section.
- @Pangfeng ZHENG takes responsibility for overseeing **Trello** and planning SPRINT-1.
- @Yun-Chi Hsiao manages **Confluence**, **GitHub**, and COLLABORATION content.

@Daniel Su is responsible for the 🎓 BACKGROUND section.

## Retrospectives

## Review Meeting

## 🤓 Links & Resources

- **Trello** COMP90082_2024_SM1_SG_KOALA
- **GitHub** https://github.com/COMP90082-2024-SM1/SG-Koala Connect your Github account
- **Figma** Booking Management System
- **Priava API**
  - API & Integrations – Priava
- **Microsoft**

# TEMPLATE

✅ Template - Decision documentation

✍️ Template - Product requirements

🗒️ Template - Meeting notes

# ✅ Template - Decision documentation

| | |
|---|---|
| **Status** | NOT STARTED / IN PROGRESS / COMPLETE |
| **Impact** | HIGH / MEDIUM / LOW |
| **Driver** | |
| **Approver** | |
| **Contributors** | |
| **Informed** | |
| **Due date** | |
| **Resources** | |

## 📚 Relevant data

## 📘 Background

## 🌈 Options considered

| | Option 1 | Option 2 |
|---|---|---|
| **Description** | | |
| **Pros and cons** | ➕<br>➖ | ➕<br>➖ |
| **Estimated cost** | LARGE | MEDIUM |

## ✅ Action items

- [ ]

## 🌟 Outcome

# ✍️ Template - Product requirements

| | |
|---|---|
| **Target release** | Type // to add a target release date |
| **Epic** | Type /Jira to add Jira epics and issues |
| **Document status** | DRAFT |
| **Document owner** | @ mention owner |
| **Designer** | @ designer |
| **Tech lead** | @ lead |
| **Technical writers** | @ writers |
| **QA** | |

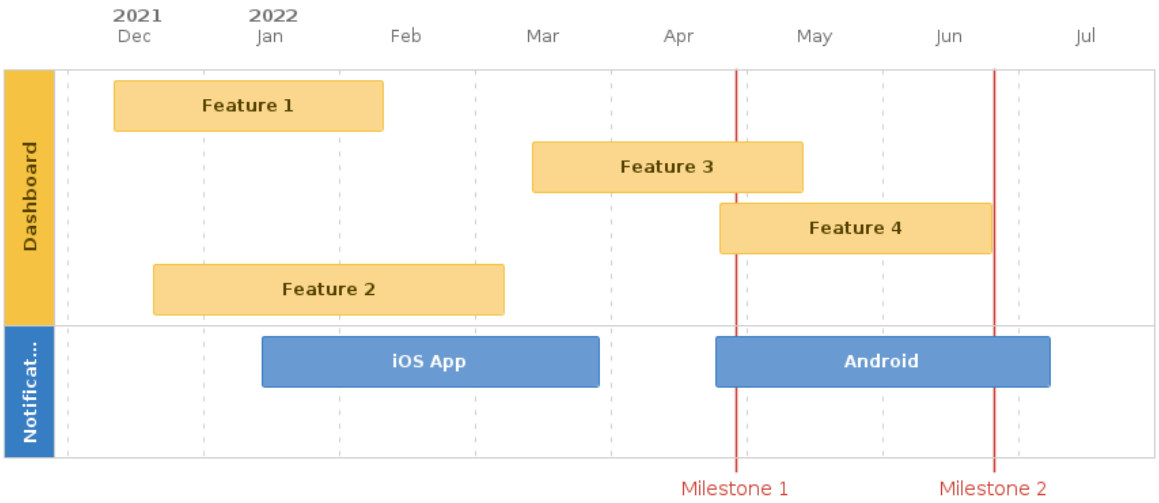
## 🎯 Objective

## 📊 Success metrics

| Goal | Metric |
|---|---|
| | |
| | |

## 🤔 Assumptions

## 🌟 Milestones



## 🗒️ Requirements

| Requirement | User Story | Importance | Jira Issue | Notes |
|---|---|---|---|---|
| | | HIGH | | |
| | | | | |

## 🎨 User interaction and design

## ❓ Open Questions

| Question | Answer | Date Answered |
|---|---|---|
| | | |

## ⚠️ Out of Scope

-

# 🗒️ Template - Meeting notes

## 🗓️ Date

## 👥 Participants

- 
- 

## 🥅 Goals

- 

## 🗣️ Discussion topics

| Time | Item | Presenter | Notes |
| --- | --- | --- | --- |
| | | | • |
| | | | |

## ✅ Action items

- [ ] 

## ⤴️ Decisions

↙️