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## 💻 COS20031 Group 6 - Maverick Mates 2.0 Homepage

### 👋 Welcome to Maverick Mates 2.0 😊

Our team aims to make the world better by applying the most up-to-date technology. We hope to provide solutions to various industry problems by leveraging the latest developments in IT.

#### 📊 Team metrics

**Sprint 0**  
Updated Oct 1, 2023  
DONE

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**Sprint 1**  
Updated Nov 4, 2023  
DONE

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**Sprint 2**  
Updated Nov 4, 2023  
DONE

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**Sprint 3**  
Updated Nov 25, 2023  
DONE

#### ⭐ About Maverick Mates 2.0

We are 5 aspiring young developers that seek to translate business visions into reality through the application of technology. We bring to the table a wide variety of technical skills and knowledge to enhance business operations. Our current project involves constructing a full-stack web application for a training and job-seeking platform.

#### 📌 Meeting notes

- [2023-11-23 Meeting notes \(COS20031 Group 6 - Maverick Mates 2.0\)](#)  
meeting-notes
- [2023-11-16 Meeting notes \(COS20031 Group 6 - Maverick Mates 2.0\)](#)  
meeting-notes
- [2023-11-09 Meeting notes \(COS20031 Group 6 - Maverick Mates 2.0\)](#)  
meeting-notes
- [2023-11-02 Meeting notes \(COS20031 Group 6 - Maverick Mates 2.0\)](#)  
meeting-notes
- [2023-10-5 Meeting notes \(COS20031 Group 6 - Maverick Mates 2.0\)](#)  
meeting-notes
- [2023-10-26 Meeting notes \(COS20031 Group 6 - Maverick Mates 2.0\)](#)  
meeting-notes
- [2023-10-19 Meeting notes \(COS20031 Group 6 - Maverick Mates 2.0\)](#)  
meeting-notes

#### 📸 Meet the team

**TQ**

**Ta Quang Tung**  
Team leader

See [Ta Quang Tung's profile](#).

**NH**

**Tran Hoang Hai Anh**  
Team member

See [Tran Hoang Hai Anh's profile](#).

**SP**

**Nguyen Quang Huy**  
Team member

See [Nguyen Quang Huy's profile](#).

**NH**

**Nguyen Tran Quang Minh**  
Team member

See [Nguyen Tran Quang Minh's profile](#).

**SP**

**Phan Sy Tuan**  
Team member

See [Phan Sy Tuan's profile](#).

#### 🔎 Resources

Restrict search to this space's space key.

#### 📅 Latest updates

**Recently Updated**

- [Team Health Monitor](#)  
about 7 hours ago • contributed by [Tung Ta Quang](#)
- [COS20031 Group 6 - Maverick Mates 2.0 Homepage](#)  
about 7 hours ago • contributed by [Tung Ta Quang](#)
- [Team reflection](#)  
about 8 hours ago • contributed by [Tung Ta Quang](#)
- [Major-specific contributions](#)  
yesterday at 11:52 PM • contributed by [Tung Ta Quang](#)
- [Screenshot 2023-11-24 235118.jpg](#)  
yesterday at 11:51 PM • attached by [Tung Ta Quang](#)
- [Screenshot 2023-11-24 234515.jpg](#)  
yesterday at 11:45 PM • attached by [Tung Ta Quang](#)
- [Screenshot 2023-11-24 233652.jpg](#)  
yesterday at 11:37 PM • attached by [Tung Ta Quang](#)

#### 🔍 Where to find us

- [N/A](#)
- [tunggnut2004@gmail.com \(Team Leader\)](#)
- [N/A](#)
- [https://github.com/gnut04/GreeLiving](#) Connect your Github account

#### ⭐ Featured resources

- [Project plan](#)
- [Working agreement](#)
- [Team Member Underperformance](#)
- [Roles and responsibilities](#)
- [Risk assessment matrix](#)
- [Database documentation](#)
- [Major-specific contributions](#)
- [Team reflection](#)

#### 📅 Our calendar

**Sprint 0**

**Sprint 2**

2

Weeks 1 to 4 ( Sep 4, 2023 to Oct 1, 2023 )

This stage of the project involves forming the team, understanding the business' requirements, and planning ahead for the rest of the project. More specifically, we will work on the following:

- To form the team and establish a safe and effective working environment, we will work on our [Member profiles](#), [Working agreement](#), and assign [Roles and responsibilities](#).
- To understand the business' requirements, we will read the project brief provided by the client and have a meeting with them for further clarification.
- Then we will plan for the upcoming weeks with the [Project plan](#) and assess potential risks with the [Risk assessment matrix](#).

### Sprint 1

Weeks 5 and 6 ( Oct 2, 2023 to Oct 31, 2023 )

This stage involves implementing the first version of the database and adding features such as authentication, profile management, training courses, and internationalization. We will also spend time on the [Progress report](#).

For more details, see the [Project plan](#).

Weeks 7 and 8 ( Nov 1, 2023 to Nov 15, 2023 )

This stage involves optimizing and testing the database as well as adding features such as course registration, job posting, job search, and job application. We will finalize the database during this stage.

For more details, see the [Project plan](#).

### Sprint 3

Weeks 9 and 10 ( Nov 16, 2023 to Nov 27, 2023 )

This stage involves making quality changes to the website such as responsive layouts and quality of life features. This stage is when we wrap up the entire project. We will work on the project documentation, reports, and demonstration video.

For more details, see the [Project plan](#).

# ▶ Project plan

Driver	@Tung Ta Quang
Approver	Project Manager of GreeLiving (Ms. Hang) Unit Convener (Mr. Dai)
Contributors	@Tung Ta Quang @Hải Anh Trần Hoàng @Nguyen Tran Quang Minh (Swinburne HN) @SY TUAN PHAN @Nguyen Quang Huy (Swinburne HN)
Informed	Project Manager of GreeLiving (Ms. Hang) Unit Convener (Mr. Dai) Unit Tutor (Mr. Tin)
Objectives	Develop a full-stack web application and database for GreeLiving, an online platform aimed at enhancing the effectiveness of job-seeking and enriching the talent acquisition process. Values offered by this project include: <ul style="list-style-type: none"><li>• Providing learners with reputable training courses that can enhance their CV.</li><li>• Helping job-seekers easily find suitable jobs and simplifying their job application process.</li><li>• Giving employers the opportunity to connect with prospective clients and hire the right people.</li></ul>
Due date	Week 12 Nov 26, 2023
Key outcomes	<ul style="list-style-type: none"><li>• Provide a platform for learners to access high-quality training courses and employers to connect with prospective candidates.</li><li>• Offer an easy-to-use, fast, and secure platform for both learners/job-seekers and employers.</li></ul>
Status	DONE

## 🤔 Problem Statement

The current website of GreeLiving, an online platform for training and recruitment, is lacking a **backend system** with **Content Management System (CMS)** for the management of user content and a **database** for the storage of data such as job listings and candidate profiles. These shortcomings prevent GreeLiving from being a useful platform for connecting job-seekers to employers.

## 🎯 Scope

Must have:	<ul style="list-style-type: none"><li>• A fully-functioning, secure, and optimized MySQL database that supports the business requirements as mentioned in the project brief, which are:<ul style="list-style-type: none"><li>◦ Allowing learners/job-seekers to (1) apply to training courses, (2) search and view job postings based on certain criteria, (3) apply to jobs and select interview dates, and (4) view and modify their personal profile. This will enhance the effectiveness of job seekers.</li></ul></li></ul>
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	<ul style="list-style-type: none"> <li>◦ Allowing businesses/employers to (1) create and publish job postings, (2) view and select applied candidates, (3) set interview dates with candidates, and (4) view and modify their company profile. This will enrich the talent acquisition process for employers.</li> <li>• A prototype of the website showing the interactions the user can perform to use the platform's essentials features.</li> <li>• Internationalization/localization for the website to make it accessible to both Vietnamese and Australian users.</li> </ul>
<b>Nice to have:</b>	<ul style="list-style-type: none"> <li>• A fully responsive user interface on the website's frontend.</li> <li>• An industry-ready full-stack website for the platform.</li> <li>• Web analytics to analyze web traffic and user behavior.</li> <li>• A content management system (CMS) that enables GreeLiving to manage the website's content (e.g. creating and administering job aptitude tests, posting vacancies, etc.), thereby delivering significant business value and converts said content into a suitable format for storage in the database.</li> </ul>
<b>Not in scope:</b>	<ul style="list-style-type: none"> <li>• A payment system that enables learners/job-seekers to securely pay for training courses.</li> <li>• A hosting architecture for the website, including concerns such as virtual machines, load balancing, backups, etc.</li> <li>• Search engine optimization (SEO) to improve the website's visibility on search engines.</li> </ul>

## Timeline



Project  
proposal

Sprint 1 end

Progress  
report

Sprint 2 end

## ▶ Milestones and deadlines

See the sections below for detailed sprint information.

Milestone	Owner	Deadline	Status
Complete Sprint 0 (Warm-up, team bonding, and project proposal).	@Tung Ta Quang	Oct 1, 2023	DONE
Complete Sprint 1 (Authentication, profile management, training courses, internationalization, and progress report).	@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) @SY TUAN PHAN @Hải Anh Trần Hoàng	Nov 1, 2023	DONE
Complete Sprint 2 (Course registration, job posting, job search, job application, and database finalization).	@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) @SY TUAN PHAN @Hải Anh Trần Hoàng	Nov 15, 2023	DONE
Complete Sprint 3 (Responsiveness, minor features, and project wrap-up).	@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) @SY TUAN PHAN @Hải Anh Trần Hoàng	Nov 26, 2023	DONE

## Sprint 0

Time: Sep 18, 2023 to Dec 3, 2023

Status: DONE

Jira issue	Priority
[ ] CMM20EP-10: Complete the Initial ER Diagram <span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">DONE</span>	HIGH
[ ] CMM20EP-3: Complete the Team Homepage <span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">DONE</span>	HIGH
[ ] CMM20EP-6: Complete the Risk Assessment page <span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">DONE</span>	HIGH
[ ] CMM20EP-5: Complete the Roles and Responsibilities page <span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">DONE</span>	HIGH
[ ] CMM20EP-11: Complete Team Member Profiles <span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">DONE</span>	HIGH
[ ] CMM20EP-12: Complete Team Meeting Notes (2 or 3) <span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">DONE</span>	HIGH
[ ] CMM20EP-4: Complete the Project Plan page <span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">DONE</span>	HIGH
[ ] CMM20EP-14: Complete Team Member Underperformance provision <span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">DONE</span>	HIGH

<input checked="" type="checkbox"/> CMM20EP-15: Complete Working Agreement <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-7: Complete the Persona pages <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-8: Complete the Empathy Map pages <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-9: Complete the Product Requirements page <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH

## Sprint 1

Time: Oct 3, 2023 to Nov 1, 2023

Status: DONE

Jira issue	Priority
<input checked="" type="checkbox"/> CMM20EP-59: Generate mock data for the database <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-20: As an employer, I want to be able to view and modify my company's profile page. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-36: As a job-seeker, I want to view and edit my personal user profile so that I can present this information to future employers. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-29: As a learner, I want to see the details of each course listed on the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-28: As a learner, I want to see the list of available training courses offered by the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-27: As a learner and/or job-seeker, I want to create and log into a user account so that I can use the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-18: As an employer, I want to create and log into an account that represents my company in order to use the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-32: As a learner and/or job-seeker from Vietnam, I want to be able to use the platform in Vietnamese. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-24: As an employer coming from Australia, I want to be able to use the website in English. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-40: As a user of the website, I want to view a Home page so I can understand the platform better. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-41: As a user of the website, I want to view an About page so I can understand the platform's creator better. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-52: Write documentation for the database <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-51: Implement the physical database <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-50: Ensure the database follows a consistent naming convention <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-49: Normalize the database <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-58: Complete the Progress Report page <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-54: Amend the Risk Assessment Matrix (based on the feedback for the Project Proposal) <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH

<input checked="" type="checkbox"/> CMM20EP-53: Amend the Project Plan (based on the feedback for the Project Proposal) <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-57: Complete the Team Health Monitor <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-56: Amend the ER Diagram (based on the feedback for the Project Proposal) <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-55: Amend the Project Requirements (based on the feedback for the Project Proposal) <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH

## Sprint 2

Time: Nov 1, 2023 to Nov 16, 2023

Status: DONE

Jira issue	Priority
<input checked="" type="checkbox"/> CMM20EP-30: As a learner, I want to be able to register to courses offered by the platform. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-34: As a job-seeker, I want to be able to make and submit a job application through the platform. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-33: As a job-seeker, I want to be able to search for jobs based on certain criteria so that I can find the jobs best suited for me. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-37: As a job-seeker, I want to be able to see the detailed description of a given job to decide if it is suitable for me. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-60: Document the SQL statements needed to satisfy use cases. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-19: As an employer, I want to write, publish, and edit job postings for my company. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-16: As a job-seeker, I want to schedule interviews with potential employers conveniently through the platform. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-22: As an employer, I want to see a list of all applications to my company in one place. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-21: As an employer, I want to set a list of interview dates for my candidates to choose from (if I interview in person). <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-39: As an employer, I want to set the details of an online interview with my candidates (if I interview online). <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-26: As an employer, I want to be able to mark an application to my company as rejected/selected/etc. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-25: As an employer, I want to be able to see the public profile of my candidates so that I can understand them better. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-35: As a job-seeker, I want to see a list of all the jobs I have applied to, their status, and upcoming interview dates. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-23: As an employer, I want to see a list containing the interview dates my candidates have chosen. <span style="background-color: #c8f7e4; border: 1px solid #2e6b2e; padding: 2px 5px;">DONE</span>	HIGH

<input checked="" type="checkbox"/> CMM20EP-93: Add indexes to the database tables. <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
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## Sprint 3

Time: Nov 16, 2023 to Nov 27, 2023

Status: DONE

Jira issue	Priority
<input checked="" type="checkbox"/> CMM20EP-38: As a job-seeker, I want to be able to save jobs that I am interested in for future consideration. <span style="border: 1px solid green; padding: 2px;">DONE</span>	LOW
<input checked="" type="checkbox"/> CMM20EP-31: As a learner, I want the platform to record the courses I am taking/have completed successfully so that I can show them to future employers. <span style="border: 1px solid green; padding: 2px;">DONE</span>	LOW
<input checked="" type="checkbox"/> CMM20EP-17: As a low-tech user, I would like to have a simple and user-friendly interface. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-72: CSS: Design the About, Course list, Course detail, and Contact pages. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-76: CSS: Design the Applicant profile, Employer profile, and View Applicant (Employer perspective) pages. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-80: CSS: Design the Applicant edit, Applicant setup, Employer edit, and Employer edit pages. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-83: CSS: Design the Job search, Job detail, Job Application, and View Application (Applicant perspective) pages. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-87: CSS: Design the Post job, Edit job, and View Application (Employer perspective) pages. <span style="border: 1px solid green; padding: 2px;">DONE</span>	MODERATE
<input checked="" type="checkbox"/> CMM20EP-61: Process and product presentation slides <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-62: Process and product presentation video <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-64: Final report and deliverable: ER diagram <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-65: Final report and deliverable: Physical database <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-66: Final report and deliverable: Data creation <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-67: Final report and deliverable: Use cases <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-68: Final report and deliverable: Performance (Indexing) <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-69: Final report and deliverable: Major-specific contributions <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-70: Final report and deliverable: Team retrospective <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH
<input checked="" type="checkbox"/> CMM20EP-71: Final report and deliverable: Jira log <span style="border: 1px solid green; padding: 2px;">DONE</span>	HIGH

## 🔗 Reference materials





**COSxGreeliving.pdf**

25 Sep 2023, 02:44 PM

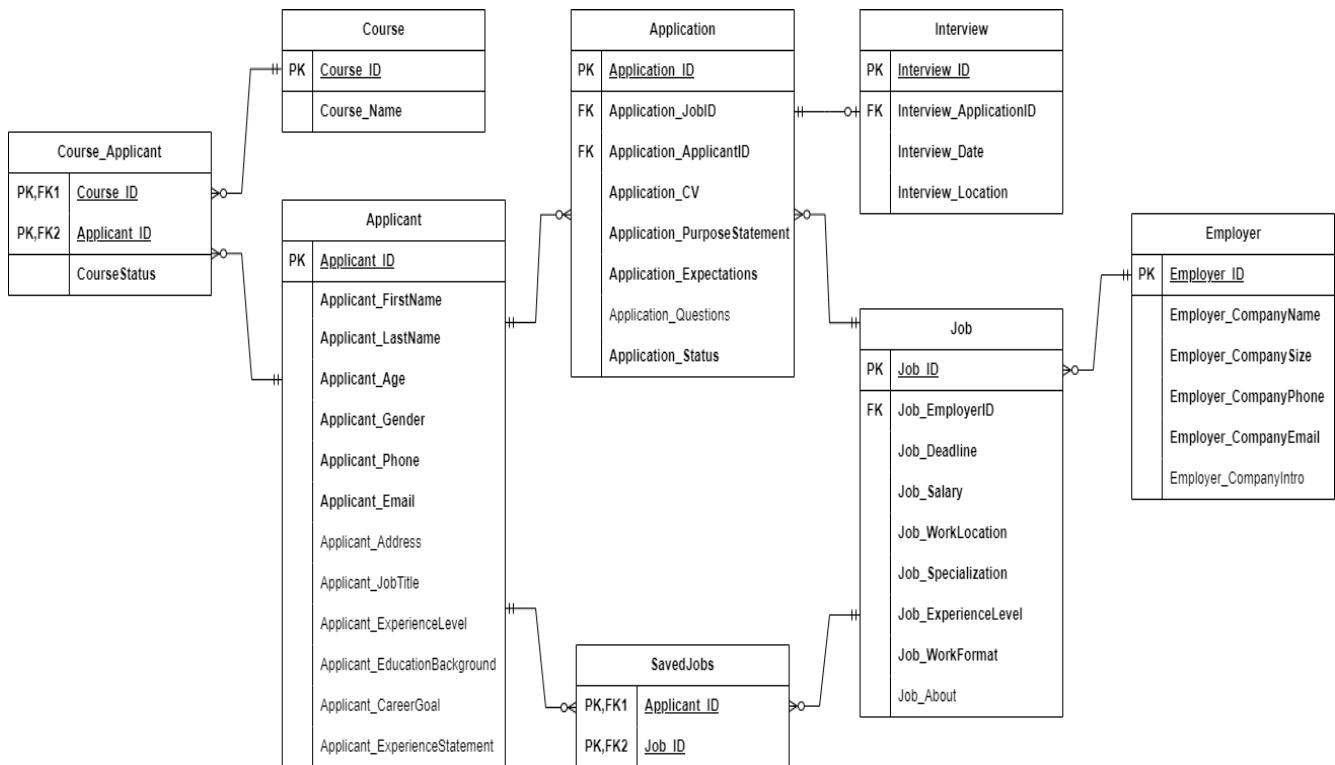
## Database documentation

The subpages of this page contains the various versions of our database design. Throughout the project, we will amend the database design for the sake of normalization, optimization, and feature addition.

- [!\[\]\(35cbf67bffc0c0bbc1bfb4f3ea42174c\_img.jpg\) Revision 3 - Week 7 - Data types and data generation \(COS20031 Group 6 - Maverick Mates 2.0\)  
database](#)
- [!\[\]\(a94ed5ed0aff431122d3d965b1b4bfba\_img.jpg\) Revision 1 - Week 5 - Renaming and normalization \(COS20031 Group 6 - Maverick Mates 2.0\)  
database](#)
- [!\[\]\(ad849fca94bf94343f5c9b154cd2a582\_img.jpg\) Revision 2 - Week 6 - Feature addition and physical implementation \(COS20031 Group 6 - Maverick Mates 2.0\)  
database](#)
- [!\[\]\(bcfed9ccf9b450d49231998b7ea275cb\_img.jpg\) Initial design - Week 4 \(COS20031 Group 6 - Maverick Mates 2.0\)  
database](#)
- [!\[\]\(faf8a02d91c02ab3882d817a711a153e\_img.jpg\) Final database \(COS20031 Group 6 - Maverick Mates 2.0\)  
database](#)
- [!\[\]\(b65f4784d4da1069b168c01845cdf89c\_img.jpg\) Revision 5 - Week 9 - Indexing \(COS20031 Group 6 - Maverick Mates 2.0\)  
database](#)
- [!\[\]\(49d7c0dc47c7ba58d4029e4aa69cab42\_img.jpg\) Revision 4 - Week 8 - Use cases and transactions \(COS20031 Group 6 - Maverick Mates 2.0\)  
database](#)

## Initial design - Week 4

This is the first draft of our database. Adjustments will be added in the future for feature addition, clean-up, and optimization.



# Revision 1 - Week 5 - Renaming and normalization

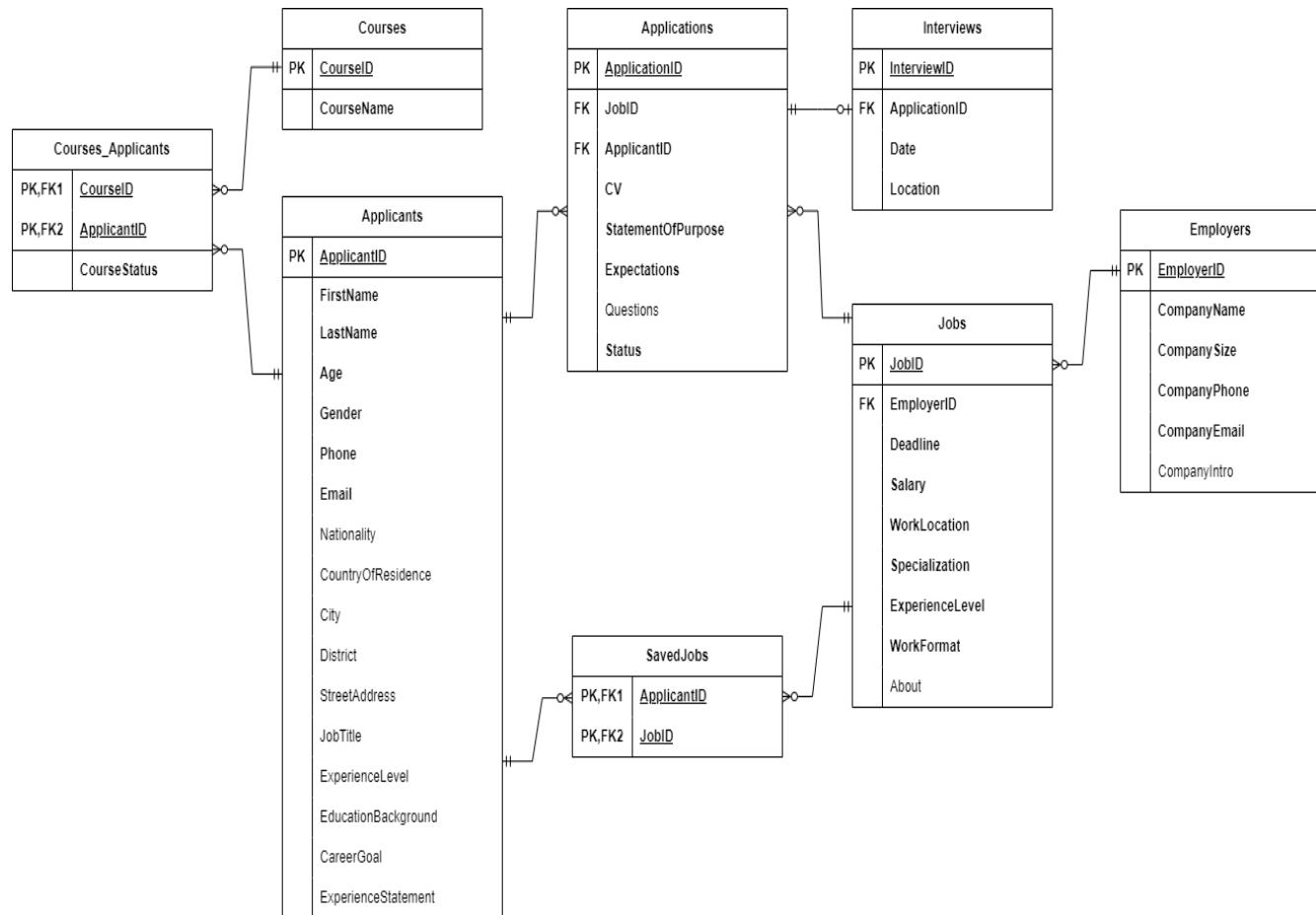
This version establishes a naming convention and features changes to normalize the database.

## Database naming conventions [OUTDATED]

- Table names can only contain alphabetical characters and underscores (A-Z, a-z, \_). Column names can only contain alphabetical characters (A-Z, a-z) and **NO** underscores.
- The name of a normal table must be a capitalized plural noun. If the name comprises two or more words, it must be in CamelCase. **Examples:** Applications, Applicants or AppliedCandidates. **NOT:** application, Applicant, or appliedCandidates.
- The name of a junction table, which establishes a many-to-many relationship between two other tables, can either be a CamelCased name or be the names of the parent tables joined together with an underscore. **Examples:** RegisteredCourses, Courses\_Applicants or Applicants\_Courses. **NOT:** CoursesApplicants or ApplicantsCourses.
- The name of a column must be in CamelCase. **Examples:** CourseID, CourseName. **NOT:** course\_id, Course\_ID, or courseName.

## Changes for normalization

- The original address column of the Applicants table has been split into its component columns to avoid multi-value cells: nationality, country of residence, city, district, and street address.



## Revision 2 - Week 6 - Feature addition and physical implementation

This version adds additional tables to support the features required by the business, namely **WorkExperiences**, **ExtracurricularExperiences**, **Specializations**, and **Skills**. It also resolves some naming inconsistencies, renames the Employees table to Companies, and integrates the previous **SavedJobs** table to the **Applications** table.

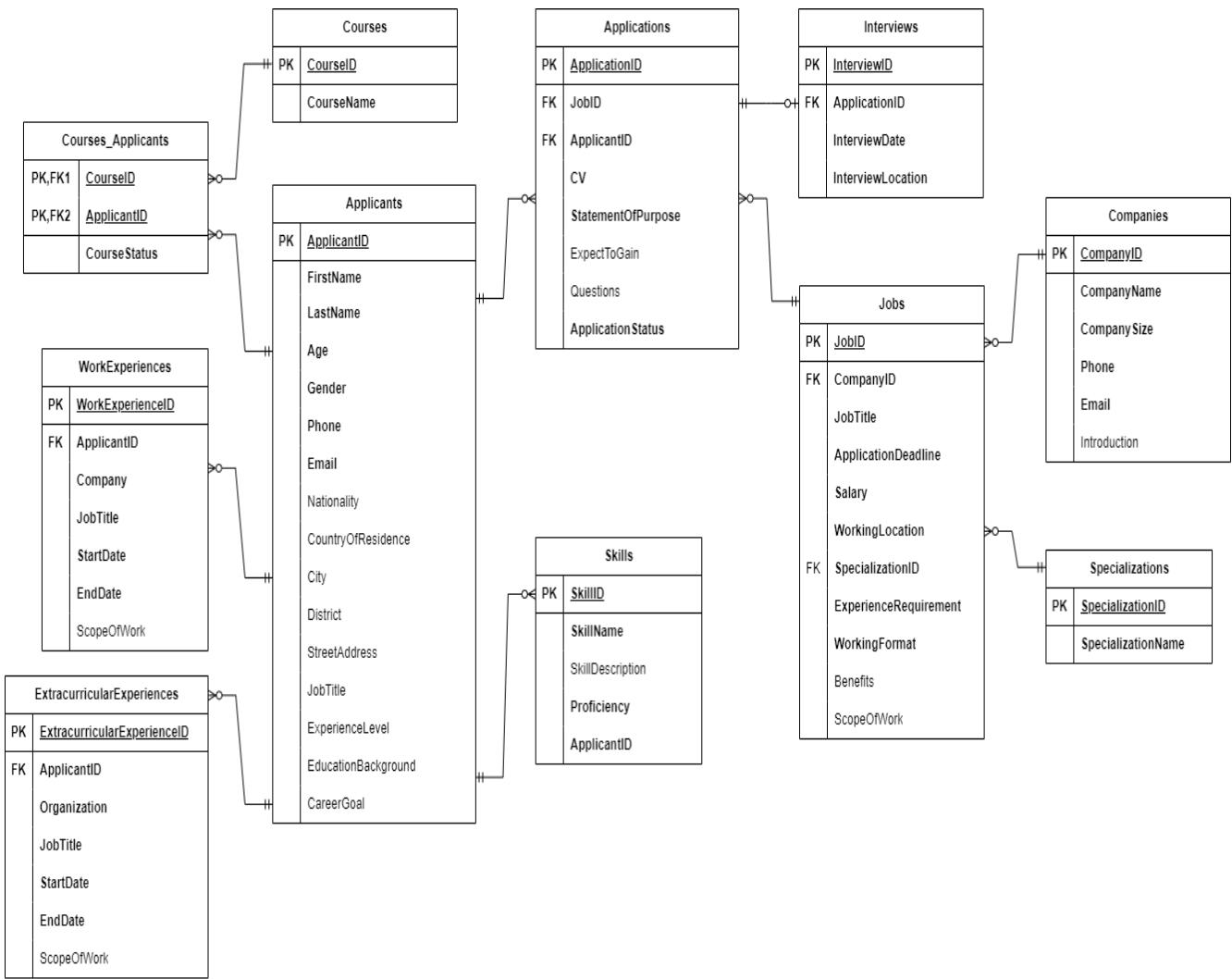
### Physical implementation (SQL)



### Business rules

- Learners can enroll in as many courses as they wish. These will be recorded in their profiles.
- Job-seekers can describe as many work experiences, extracurricular experiences, and skills in their profiles.
- Each job posted by a company is associated with only one specialization.
- An application can only be associated with an interview if it has passed the application round. Each application must have only one interview date.

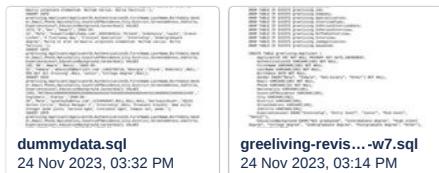
### Updated diagram



# Revision 3 - Week 7 - Data types and data generation

This revision finalizes the data types of the columns and documents the dummy dataset generated for each table for development purposes. In addition, it finalizes the table structures and renames tables and columns to conform to the naming convention set out by the unit (we missed this document previously!)

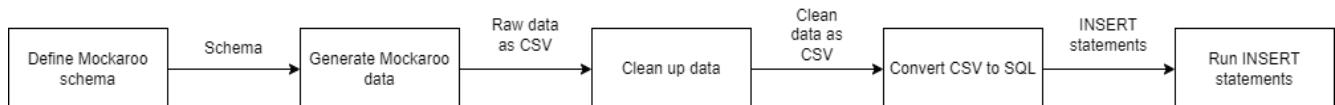
## Physical implementation (SQL)



## Dummy dataset generation procedure

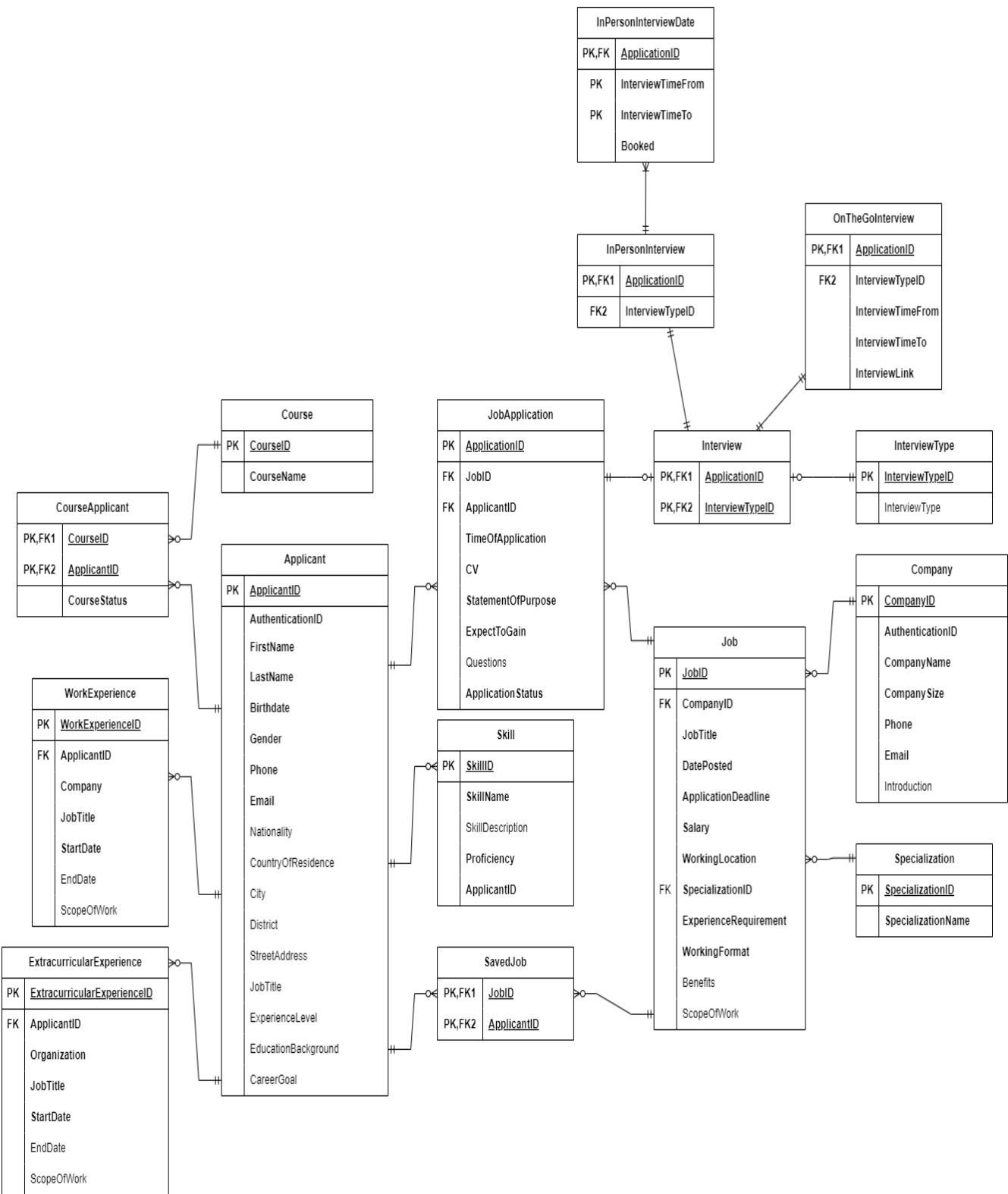
The process by which we produce our dummy datasets is as follows:

- First, we define the schema for each table on [Mockaroo](#), specifying the included columns and their data types. For many columns, we approximate the data type with one of Mockaroo's built-in types.
- Second, we generate the fake dataset for each table based on the specified schema. Due to Mockaroo's restrictions on free accounts, we can only generate 1000 records at a time.
- Third, because the values generated by Mockaroo are not guaranteed to be unique, we have to remove records with duplicate primary keys before adding them to the database. This is done using a [custom C# program](#) that takes a CSV input file containing the raw data and outputs a clean CSV file with no duplicates.
- Fourth, we convert the CSV records into SQL INSERT statements using the [CSV To SQL](#) online tool. This tool generates a .sql file containing INSERT statements corresponding to rows in the CSV file. All INSERT statements are then put into a SQL TRANSACTION to speed up the process of writing data.
- Finally, the .sql file is run on MySQL Workbench/PHPMyAdmin.



## Updated diagram

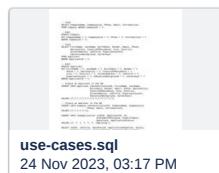
Note: Bold indicates that the column cannot be NULL.



# Revision 4 - Week 8 - Use cases and transactions

This revision identifies the SQL statements required by each use case and whether or not transactions should be used.

## Queries



## Use cases and SQL

Note: The question marks in the SQL statements represent the value to be filled in.

Jira issue (use case)	SQL	Notes
CMM20EP-20: As an employer, I want to be able to view and modify my company's profile page. e. <b>DONE</b>	<pre>1 -- View 2 <b>SELECT</b> CompanyName, CompanySize, Phone, Email, Introduction 3 <b>FROM</b> Company <b>WHERE</b> CompanyID = ?; 4 5 -- Edit 6 <b>UPDATE</b> Company 7 <b>SET</b> CompanyName = ?, CompanySize = ?, Phone = ?, Introduction = ? 8 <b>WHERE</b> CompanyID = ?;</pre>	Email should not be updated after signing up to the platform.
CMM20EP-36: As a job-seeker, I want to view and edit my personal user profile so that I can present this information to future employers. <b>DONE</b>	<pre>1 -- View 2 <b>SELECT</b> FirstName, LastName, Birthdate, Gender, Email, Phone, 3 Nationality, CountryOfResidence, City, District, 4 StreetAddress, JobTitle, ExperienceLevel, 5 EducationBackground, CareerGoal 6 <b>FROM</b> Applicant 7 <b>WHERE</b> ApplicantID = ?; 8 9 -- Edit 10 <b>UPDATE</b> Applicant 11 <b>SET</b> FirstName = ?, LastName = ?, Birthdate = ?, Gender = ?, 12 Phone = ?, Nationality = ?, CountryOfResidence = ?, 13 City = ?, District = ?, StreetAddress = ?, JobTitle = ?, 14 ExperienceLevel = ?, EducationBackground = ?, CareerGoal = ? 15 <b>WHERE</b> ApplicantID = ?;</pre>	Email should not be updated after signing up to the platform.
CMM20EP-27: As a learner and/or job-seeker, I want to create and log into a user account so that I can use the platform. <b>DONE</b>	<pre>1 -- Create an applicant in the DB 2 <b>INSERT INTO</b> Applicant (AuthenticationID, FirstName, LastName, 3 Birthdate, Gender, Email, Phone, Nationality, 4 CountryOfResidence, City, District, 5 StreetAddress, JobTitle, ExperienceLevel, 6 EducationBackground, CareerGoal) 7 <b>VALUES</b> (?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?);</pre>	AuthenticationID is obtained from the authentication service (Auth0).
CMM20EP-18: As an employer, I want to create and log into an account that represents my company.	<pre>1 -- Create an employer in the DB 2 <b>INSERT INTO</b> Company (AuthenticationID, CompanyName, CompanySize, 3 Phone, Email, Introduction) 4 <b>VALUES</b> (?, ?, ?, ?, ?, ?);</pre>	AuthenticationID is obtained from the authentication service (Auth0).

pany in order to use the platform. **DONE**

CMM20EP-34: As a job-seeker, I want to be able to make and submit a job application through the platform. **DONE**

```
1 INSERT INTO JobApplication (JobID, ApplicantID, CV,
2                               StatementOfPurpose, ExpectToGain,
3                               Questions, ApplicationStatus)
4 VALUES (?, ?, ?, ?, ?, ?, ?, 'Applying');
```

CMM20EP-33: As a job-seeker, I want to be able to search for jobs based on certain criteria so that I can find the jobs best suited for me. **DONE**

```
1 SELECT JobID, JobTitle, DatePosted, ApplicationDeadline, Salary,
2       WorkingLocation, WorkingFormat, ExperienceRequirement,
3       SpecializationName, CompanyName, CompanySize
4 FROM Job
5 JOIN Specialization
6 ON Job.SpecializationID = Specialization.SpecializationID
7 JOIN Company ON Job.CompanyID = Company.CompanyID
8 ORDER BY DatePosted DESC;
9
10 -- Additional WHERE conditions can be added depending on the
11 user's query.
12 WHERE (JobTitle LIKE %?% OR CompanyName LIKE %?%);
13 WHERE Salary >= ?;
14 WHERE ExperienceRequirement = ?;
15 WHERE WorkingFormat = ?;
16 WHERE CompanySize = ?;
17 WHERE Job.SpecializationID = ?;
```

CMM20EP-37: As a job-seeker, I want to be able to see the detailed description of any given job to decide if it is suitable for me. **DONE**

```
1 SELECT JobTitle, ApplicationDeadline, Salary, WorkingLocation,
2       SpecializationName, ExperienceRequirement, WorkingFormat,
3       ScopeOfWork, Benefits, CompanyName, Email, Phone,
4       Introduction
5 FROM Job
6 JOIN Specialization
7 ON Job.SpecializationID = Specialization.SpecializationID
8 JOIN Company ON Job.CompanyID = Company.CompanyID WHERE JobID = ?;
```

CMM20EP-19: As an employer, I want to write, publish, and edit job postings for my company. **DONE**

```
1 INSERT INTO Job (CompanyID, JobTitle, ApplicationDeadline, Salary,
2                   WorkingLocation, SpecializationID,
3                   ExperienceRequirement, WorkingFormat, ScopeOfWork,
4                   Benefits)
5 VALUES (?, ?, ?, ?, ?, ?, ?, ?, ?, ?);
```

CMM20EP-16: As a job-seeker, I want to schedule interviews with potential employers conveniently through the platform. **DONE**

```
1 -- First, unbook every date for this particular application.
2 UPDATE InPersonInterviewDate
3 SET Booked = '0'
4 WHERE ApplicationID = ?;
5
6 -- Then, book the specified date.
7 UPDATE InPersonInterviewDate
8 SET Booked = '1'
9 WHERE ApplicationID = ? AND InterviewTimeFrom = ?
10 AND InterviewTimeTo = ?;
```

CMM20EP-22: As an employer, I want to see a list of all applications t

```
1 SELECT ApplicationID, FirstName, LastName, Job.JobTitle,
2       TimeOfApplication, ApplicationStatus FROM JobApplication
3 JOIN Applicant
4 ON JobApplication.ApplicantID = Applicant.ApplicantID
5 JOIN Job ON JobApplication.JobID = Job.JobID
```

<p>o my company in one place. <b>DONE</b></p>	<pre>6 WHERE CompanyID = ? 7 ORDER BY TimeOfApplication DESC;</pre>	
<p> CMM20EP-21: As an employer, I want to set a list of interview dates for my candidates to choose from (if I interview in person). <b>DONE</b></p>	<pre>1 -- If an online interview has previously been set for this 2 application, remove it. 3 DELETE FROM Interview 4 WHERE ApplicationID = ? AND InterviewTypeID = '2'; 5 6 -- Create an in-person interview. 7 INSERT IGNORE INTO Interview VALUES (?, '1'); 8 INSERT IGNORE INTO InPersonInterview (ApplicationID) VALUES (?); 9 10 -- If an in-person interview has previously been set for this 11 application, get all the dates. 12 SELECT InterviewTimeFrom, InterviewTimeTo 13 FROM InPersonInterviewDate 14 WHERE ApplicationID = ?; 15 16 -- Remove some dates if necessary. 17 DELETE FROM InPersonInterviewDate 18 WHERE ApplicationID = ? AND InterviewTimeFrom = ? 19     AND InterviewTimeTo = ?; 20 21 -- Add the new in-person dates. 22 INSERT IGNORE INTO InPersonInterviewDate 23     (ApplicationID, InterviewTimeFrom, InterviewTimeTo) 24 VALUES (?, ?, ?);</pre>	<p>A TRANSACTION is needed since these operations depend on one another. If an error happens with any of these statements, changes will be cancelled with ROLLBACK.</p>
<p> CMM20EP-39: As an employer, I want to set the details of an online interview with my candidates (if I interview online). <b>DONE</b></p>	<pre>1 -- If an in-person interview has previously been set for 2 this application, remove it. 3 DELETE FROM Interview 4 WHERE ApplicationID = ? AND InterviewTypeID = '1'; 5 6 -- Create an online interview. 7 INSERT IGNORE INTO Interview VALUES (?, '2'); 8 9 INSERT INTO OnTheGoInterview 10    (ApplicationID, InterviewTimeFrom, InterviewTimeTo, InterviewLink) 11 VALUES (?, ?, ?, ?) 12 ON DUPLICATE KEY UPDATE 13 InterviewTimeFrom = ?, InterviewTimeTo = ?, InterviewLink = ?;</pre>	<p>A TRANSACTION is needed since these operations depend on one another. If an error happens with any of these statements, changes will be cancelled with ROLLBACK.</p>
<p> CMM20EP-26: As an employer, I want to be able to mark the an application to my company as rejected/selected/etc. <b>DONE</b></p>	<pre>1 UPDATE JobApplication 2 SET ApplicationStatus = ? 3 WHERE ApplicationID = ?;</pre>	
<p> CMM20EP-25: As an employer, I want to be able to see the public profile of my candidates so that I can understand them better. <b>DONE</b></p>	<pre>1 -- Get basic profile 2 SELECT FirstName, LastName, Birthdate, Gender, Email, Phone, 3       Nationality, CountryOfResidence, City, District, 4       StreetAddress, JobTitle, ExperienceLevel, 5       EducationBackground, CareerGoal 6 FROM Applicant 7 WHERE ApplicantID = ?; 8 9 -- Get courses they have enrolled in</pre>	

```

10 SELECT CourseName, CourseStatus FROM CourseApplicant
11 JOIN Course ON CourseApplicant.CourseID = Course.CourseID
12 WHERE ApplicantID = ?;
```

CMM20EP-35: As a job-seeker, I want to see a list of all the jobs I have applied to, their status, and upcoming interview dates. **DONE**

```

1 -- Get the list of applications
2 SELECT ApplicationID, JobApplication.JobID, TimeOfApplication,
3 ApplicationStatus, CompanyName, JobTitle, WorkingLocation,
4 WorkingFormat
5 FROM JobApplication
6 JOIN Job ON JobApplication.JobID = Job.JobID
7 JOIN Company ON Job.CompanyID = Company.CompanyID
8 WHERE ApplicantID = ?
9 ORDER BY TimeOfApplication DESC;
```

```

10
11 -- For applications marked as "Interviewing",
12 determine the interview format.
13 SELECT InterviewTypeID FROM Interview WHERE ApplicationID = ?;
```

```

14
15 -- If the interview type is in-person (id 1), show possible dates
16 SELECT InterviewTimeFrom, InterviewTimeTo, Booked
17 FROM InPersonInterviewDate
18 WHERE ApplicationID = ?;
```

```

19
20 -- If the interview type is online (id 2), show the date.
21 SELECT InterviewTimeFrom, InterviewTimeTo
22 FROM OnTheGoInterview
23 WHERE ApplicationID = ?;
```

CMM20EP-23: As an employer, I want to see a list containing the interview dates my candidates have chosen. **DONE**

```

1 -- Get all booked in-person interviews.
2 SELECT InPersonInterview.ApplicationID,
3 InPersonInterview.InterviewTypeID, Applicant.FirstName,
4 Applicant.LastName, InterviewTimeFrom, InterviewTimeTo,
5 Job.JobTitle
6 FROM InPersonInterview
7 JOIN InPersonInterviewDate
8 ON InPersonInterview.ApplicationID = InPersonInterviewDate.ApplicationID
9 JOIN JobApplication
10 ON InPersonInterview.ApplicationID = JobApplication.ApplicationID
11 JOIN Job
12 ON JobApplication.JobID = Job.JobID
13 JOIN Applicant
14 ON JobApplication.ApplicantID = Applicant.ApplicantID
15 WHERE Job.CompanyID = ? AND Booked != '0' AND InterviewTimeTo > NOW()
16
17 -- Get all online interviews.
18 SELECT OnTheGoInterview.ApplicationID,
19 OnTheGoInterview.InterviewTypeID, Applicant.FirstName,
20 Applicant.LastName, InterviewTimeFrom, InterviewTimeTo,
21 InterviewLink, Job.JobTitle
22 FROM OnTheGoInterview
23 JOIN JobApplication
24 ON OnTheGoInterview.ApplicationID = JobApplication.ApplicationID
25 JOIN Job ON JobApplication.JobID = Job.JobID
26 JOIN Applicant ON JobApplication.ApplicantID = Applicant.ApplicantID
27 WHERE Job.CompanyID = ? AND InterviewTimeTo > NOW();
```

CMM20EP-38: As a job-seeker, I want to be able to save jobs that I am

```

1 -- Save job
2 INSERT IGNORE INTO SavedJob VALUES (?,?)
```

interested in for future c  
onsideration. **DONE**

```
4 -- Unsave job
5 DELETE FROM SavedJob WHERE JobID = ? AND ApplicantID = ?;
6
7 -- View saved jobs
8 SELECT JobID, JobTitle, CompanyName FROM SavedJob
9 JOIN Job ON SavedJob.JobID = Job.JobID
10 JOIN Company ON Job.CompanyID = Company.CompanyID
11 WHERE SavedJob.ApplicantID = ?;
```

CMM20EP-31: As a learner, I want the platform to record the courses I am taking/have completed successfully so that I can show them to future employers. **DONE**

```
1 INSERT IGNORE INTO CourseApplicant (CourseID, ApplicantID) VALUES (
```

# Revision 5 - Week 9 - Indexing

This revision adds indexes to the database where needed by the use cases determined in week 8.

## Final indexes

The following table lists the final indexes we will add after testing.

Column(s) )	Data type(s)	Table	Use case	Evidence
Salary	Decimal number	Job	<p> CMM20EP-33: As a job-seeker, I want to be able to search for jobs based on certain criteria so that I can find the jobs best suited for me.</p> <p><b>DONE</b></p>	<pre> 11 • EXPLAIN SELECT JobID, District, NumberOfJobs, ApplicationDeadline, Salary,    WorkingHours, WorkShift, ExperienceRequirements,    SpecializationID, CompanyName, CompanyCity 12 FROM Job 13 WHERE Salary &gt; 400 14 15 XIX Specialization 16 ON Job.SpecificationID = Specialization.SpecificationID 17 AND SpecializationID IN Job.CompaniesID 18 WHERE Salary &gt; 400 19 20 21 22 23 24 WHERE Salary &gt; 400 </pre> <p>The picture shows that the index is used only when Salary is large enough so that the result set is around 1/10 of the full table (table has 1004 rows, cardinality of index is 988.)</p>

## Indexing considerations

The following table describes our reasoning as to why certain columns are chosen or not chosen for indexing.

Jira issue (use case)	SQL	Needs indexing?
<p> CMM20EP-20: As an employer, I want to be able to view and modify my company's profile page.</p> <p>e. <b>DONE</b></p>	<pre> 1 -- View 2 <b>SELECT</b> CompanyName, CompanySize, Phone, Email, Introduction 3 <b>FROM</b> Company <b>WHERE</b> CompanyID = ?; 4 5 -- Edit 6 <b>UPDATE</b> Company 7 <b>SET</b> CompanyName = ?, CompanySize = ?, Phone = ?, Introduction = ? 8 <b>WHERE</b> CompanyID = ?; </pre>	None. CompanyID is a primary key, so it is already an index.
<p> CMM20EP-36: As a job-seeker, I want to view and edit my personal user profile so that I can present this information to future employers.</p> <p><b>DONE</b></p>	<pre> 1 -- View 2 <b>SELECT</b> FirstName, LastName, Birthdate, Gender, Email, Phone, 3 Nationality, CountryOfResidence, City, District, 4 StreetAddress, JobTitle, ExperienceLevel, 5 EducationBackground, CareerGoal 6 <b>FROM</b> Applicant 7 <b>WHERE</b> ApplicantID = ?; 8 9 -- Edit 10 <b>UPDATE</b> Applicant 11 <b>SET</b> FirstName = ?, LastName = ?, Birthdate = ?, Gender = ?, 12 Phone = ?, Nationality = ?, CountryOfResidence = ?, 13 City = ?, District = ?, StreetAddress = ?, JobTitle = ?, 14 ExperienceLevel = ?, EducationBackground = ?, CareerGoal = ? 15 <b>WHERE</b> ApplicantID = ?; </pre>	None. ApplicantID is a primary key, so it is already an index.
<p> CMM20EP-27: As a learner and/or job-seeker, I want to create and log in.</p>	<pre> 1 -- Create an applicant in the DB 2 <b>INSERT INTO</b> Applicant (AuthenticationID, FirstName, LastName, 3 Birthdate, Gender, Email, Phone, Nationality) </pre>	None.

<p>to a user account so that I can use the platform.</p> <p><b>m. DONE</b></p>	<pre> 4   CountryOfResidence, City, District, 5   StreetAddress, JobTitle, ExperienceLevel, 6   EducationBackground, CareerGoal) 7 <b>VALUES</b> (?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?, ?);</pre>	
<p><b>CMM20EP-18:</b> As an employer, I want to create and log into an account that represents my company in order to use the platform. <b>DONE</b></p>	<pre> 1 -- Create an employer in the DB 2 <b>INSERT INTO</b> Company (AuthenticationID, CompanyName, CompanySize, 3   Phone, Email, Introduction) 4 <b>VALUES</b> (?, ?, ?, ?, ?, ?);</pre>	None.
<p><b>CMM20EP-34:</b> As a job-seeker, I want to be able to make and submit a job application through the platform. <b>DONE</b></p>	<pre> 1 <b>INSERT INTO</b> JobApplication (JobID, ApplicantID, CV, 2   StatementOfPurpose, ExpectToGain, 3   Questions, ApplicationStatus) 4 <b>VALUES</b> (?, ?, ?, ?, ?, ?, ?, 'Applying');</pre>	None.
<p><b>CMM20EP-33:</b> As a job-seeker, I want to be able to search for jobs based on certain criteria so that I can find the jobs best suited for me. <b>DONE</b></p>	<pre> 1 <b>SELECT</b> JobID, JobTitle, DatePosted, ApplicationDeadline, Salary, 2   WorkingLocation, WorkingFormat, ExperienceRequirement, 3   SpecializationName, CompanyName, CompanySize 4 <b>FROM</b> Job 5 <b>JOIN</b> Specialization 6 <b>ON</b> Job.SpecializationID = Specialization.SpecializationID 7 <b>JOIN</b> Company <b>ON</b> Job.CompanyID = Company.CompanyID 8 <b>ORDER BY</b> DatePosted <b>DESC</b>; 9 10 -- Additional WHERE conditions can be added depending on the 11 user's query. 12 <b>WHERE</b> (JobTitle LIKE %?% OR CompanyName LIKE %?%); 13 <b>WHERE</b> Salary &gt;= ?&gt;; 14 <b>WHERE</b> ExperienceRequirement = ?&gt;; 15 <b>WHERE</b> WorkingFormat = ?&gt;; 16 <b>WHERE</b> CompanySize = ?&gt;; 17 <b>WHERE</b> Job.SpecializationID = ?;</pre>	<p>The columns in <b>JOIN</b> conditions are all primary keys/foreign keys, so they are automatically indexed. An index on <b>DatePosted</b> will most likely not be used by the database engine because the <b>SELECT</b> statement selects more columns than just <b>DatePosted</b>. <b>JobTitle</b> and <b>CompanyName</b> cannot be indexed because the leading wildcard <b>%</b> renders indexes useless. <b>ExperienceRequirement</b>, <b>WorkingFormat</b>, and <b>CompanySize</b> make bad indexes because they can only take a limited number of values (low cardinality). <b>Salary</b> makes the most sense to index in this case. Testing reveals that MySQL does in fact use this index, although only</p>

		when <code>Salary</code> is large enough so that the result set is quite small.
<p> CMM20EP-37: As a job-seeker, I want to be able to see the detailed description of any given job to decide if it is suitable for me. <span style="border: 1px solid green; padding: 2px;">DONE</span></p>	<pre> 1  SELECT JobTitle, ApplicationDeadline, Salary, WorkingLocation, 2      SpecializationName, ExperienceRequirement, WorkingFormat, 3      ScopeOfWork, Benefits, CompanyName, Email, Phone, 4      Introduction 5  FROM Job 6  JOIN Specialization 7  ON Job.SpecializationID = Specialization.SpecializationID 8  JOIN Company ON Job.CompanyID = Company.CompanyID WHERE JobID = ?;</pre>	None. All columns on <code>WHERE</code> clauses and <code>JOIN</code> conditions are already primary keys.
<p> CMM20EP-19: As an employer, I want to write, publish, and edit job postings for my company. <span style="border: 1px solid green; padding: 2px;">DONE</span></p>	<pre> 1  INSERT INTO Job (CompanyID, JobTitle, ApplicationDeadline, Salary, 2                  WorkingLocation, SpecializationID, 3                  ExperienceRequirement, WorkingFormat, ScopeOfWork, 4                  Benefits) 5  VALUES (?,?,?,?,?,?,?,?,?,?);</pre>	None.
<p> CMM20EP-16: As a job-seeker, I want to schedule interviews with potential employers conveniently through the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span></p>	<pre> 1  -- First, unbook every date for this particular application. 2  UPDATE InPersonInterviewDate 3  SET Booked = '0' 4  WHERE ApplicationID = ?; 5 6  -- Then, book the specified date. 7  UPDATE InPersonInterviewDate 8  SET Booked = '1' 9  WHERE ApplicationID = ? AND InterviewTimeFrom = ? 10   AND InterviewTimeTo = ?;</pre>	None. The columns in the <code>WHERE</code> clauses are already primary keys.
<p> CMM20EP-22: As an employer, I want to see a list of all applications to my company in one place. <span style="border: 1px solid green; padding: 2px;">DONE</span></p>	<pre> 1  SELECT ApplicationID, FirstName, LastName, Job.JobTitle, 2      TimeOfApplication, ApplicationStatus FROM JobApplication 3  JOIN Applicant 4  ON JobApplication.ApplicantID = Applicant.ApplicantID 5  JOIN Job ON JobApplication.JobID = Job.JobID 6  WHERE CompanyID = ? 7  ORDER BY TimeOfApplication DESC;</pre>	None. <code>CompanyID</code> is already a primary key, so indexing it is unnecessary. An index on <code>TimeOfApplication</code> will most likely not be used because the statement selects more columns than just <code>TimeOfApplication</code> .
<p> CMM20EP-21: As an employer, I want to set a list of interview dates for my candidates to choose from (if I interview in person). <span style="border: 1px solid green; padding: 2px;">DONE</span></p>	<pre> 1  -- If an online interview has previously been set for this 2  application, remove it. 3  DELETE FROM Interview 4  WHERE ApplicationID = ? AND InterviewTypeID = '2'; 5 6  -- Create an in-person interview. 7  INSERT IGNORE INTO Interview VALUES (?, '1'); 8  INSERT IGNORE INTO InPersonInterview (ApplicationID) VALUES (?); 9 10 -- If an in-person interview has previously been set for this 11 application, get all the dates. 12 SELECT InterviewTimeFrom, InterviewTimeTo</pre>	None. The columns in the <code>WHERE</code> clauses are already primary keys.

	<pre> 13 <b>FROM</b> InPersonInterviewDate 14 <b>WHERE</b> ApplicationID = ?; 15 16 -- Remove some dates if necessary. 17 <b>DELETE FROM</b> InPersonInterviewDate 18 <b>WHERE</b> ApplicationID = ? AND InterviewTimeFrom = ? 19             AND InterviewTimeTo = ?; 20 21 -- Add the new in-person dates. 22 <b>INSERT IGNORE INTO</b> InPersonInterviewDate 23     (ApplicationID, InterviewTimeFrom, InterviewTimeTo) 24 <b>VALUES</b> (?, ?, ?); </pre>	
CMM20EP-39: As an employer, I want to set the details of an online interview with my candidates (if I interview online).  <b>DONE</b>	<pre> 1 -- If an in-person interview has previously been set for 2 this application, remove it. 3 <b>DELETE FROM</b> Interview 4 <b>WHERE</b> ApplicationID = ? AND InterviewTypeID = '1'; 5 6 -- Create an online interview. 7 <b>INSERT IGNORE INTO</b> Interview <b>VALUES</b> (?, '2'); 8 9 <b>INSERT INTO</b> OnTheGoInterview 10    (ApplicationID, InterviewTimeFrom, InterviewTimeTo, InterviewLi 11 <b>VALUES</b> (?,?,?,?) 12 <b>ON DUPLICATE KEY UPDATE</b> 13 InterviewTimeFrom = ?, InterviewTimeTo = ?, InterviewLink = ?; </pre>	None. The columns in the <code>WHERE</code> clause are already primary keys.
CMM20EP-26: As an employer, I want to be able to mark the an application to my company as rejected/selected/etc.  <b>DONE</b>	<pre> 1 <b>UPDATE</b> JobApplication 2 <b>SET</b> ApplicationStatus = ? 3 <b>WHERE</b> ApplicationID = ?; </pre>	None. <code>ApplicationID</code> is already a primary key.
CMM20EP-25: As an employer, I want to be able to see the public profile of my candidates so that I can understand them better.  <b>DONE</b>	<pre> 1 -- Get basic profile 2 <b>SELECT</b> FirstName, LastName, Birthdate, Gender, Email, Phone, 3             Nationality, CountryOfResidence, City, District, 4             StreetAddress, JobTitle, ExperienceLevel, 5             EducationBackground, CareerGoal 6 <b>FROM</b> Applicant 7 <b>WHERE</b> ApplicantID = ?; 8 9 -- Get courses they have enrolled in 10 <b>SELECT</b> CourseName, CourseStatus <b>FROM</b> CourseApplicant 11 <b>JOIN</b> Course <b>ON</b> CourseApplicant.CourseID = Course.CourseID 12 <b>WHERE</b> ApplicantID = ?; </pre>	None. All columns on <code>WHERE</code> clauses and <code>JOIN</code> conditions are already primary keys/foreign keys, which are automatically indexed.
CMM20EP-35: As a job-seeker, I want to see a list of all the jobs I have applied to, their status, and upcoming interview dates.  <b>DONE</b>	<pre> 1 -- Get the list of applications 2 <b>SELECT</b> ApplicationID, JobApplication.JobID, TimeOfApplication, 3             ApplicationStatus, CompanyName, JobTitle, WorkingLocation, 4             WorkingFormat 5 <b>FROM</b> JobApplication 6 <b>JOIN</b> Job <b>ON</b> JobApplication.JobID = Job.JobID 7 <b>JOIN</b> Company <b>ON</b> Job.CompanyID = Company.CompanyID 8 <b>WHERE</b> ApplicantID = ? 9 <b>ORDER BY</b> TimeOfApplication <b>DESC</b>; 10 11 -- For applications marked as "Interviewing", </pre>	None. All columns on <code>WHERE</code> clauses and <code>JOIN</code> conditions are already primary keys/foreign keys, which are automatically indexed. An index on <code>TimeOfApplication</code> will most likely not

	<pre> 12 determine the interview format. 13 <b>SELECT</b> InterviewTypeID <b>FROM</b> Interview <b>WHERE</b> ApplicationID = ?"; 14 15 -- If the interview type is in-person (id 1), show possible dates 16 <b>SELECT</b> InterviewTimeFrom, InterviewTimeTo, Booked 17 <b>FROM</b> InPersonInterviewDate 18 <b>WHERE</b> ApplicationID = ?"; 19 20 -- If the interview type is online (id 2), show the date. 21 <b>SELECT</b> InterviewTimeFrom, InterviewTimeTo 22 <b>FROM</b> OnTheGoInterview 23 <b>WHERE</b> ApplicationID = ?; </pre>	<p>be used because the statement selects more columns than just <code>TimeOfApplication</code>.</p>
<span style="color: green;">▢</span> CMM20EP-23: As an employer, I want to see a list containing the interview dates my candidates have chosen. <span style="border: 1px solid green; padding: 2px;">DONE</span>	<pre> 1 -- Get all booked in-person interviews. 2 <b>SELECT</b> InPersonInterview.ApplicationID, 3     InPersonInterview.InterviewTypeID, Applicant.FirstName, 4     Applicant.LastName, InterviewTimeFrom, InterviewTimeTo, 5     Job.JobTitle 6 <b>FROM</b> InPersonInterview 7 <b>JOIN</b> InPersonInterviewDate 8 <b>ON</b> InPersonInterview.ApplicationID = InPersonInterviewDate.ApplicationID 9 <b>JOIN</b> JobApplication 10 <b>ON</b> InPersonInterview.ApplicationID = JobApplication.ApplicationID 11 <b>JOIN</b> Job 12 <b>ON</b> JobApplication.JobID = Job.JobID 13 <b>JOIN</b> Applicant 14 <b>ON</b> JobApplication.ApplicantID = Applicant.ApplicantID 15 <b>WHERE</b> Job.CompanyID = ? AND Booked != '0' AND InterviewTimeTo &gt; NOW(); 16 17 -- Get all online interviews. 18 <b>SELECT</b> OnTheGoInterview.ApplicationID, 19     OnTheGoInterview.InterviewTypeID, Applicant.FirstName, 20     Applicant.LastName, InterviewTimeFrom, InterviewTimeTo, 21     InterviewLink, Job.JobTitle 22 <b>FROM</b> OnTheGoInterview 23 <b>JOIN</b> JobApplication 24 <b>ON</b> OnTheGoInterview.ApplicationID = JobApplication.ApplicationID 25 <b>JOIN</b> Job <b>ON</b> JobApplication.JobID = Job.JobID 26 <b>JOIN</b> Applicant <b>ON</b> JobApplication.ApplicantID = Applicant.ApplicantID 27 <b>WHERE</b> Job.CompanyID = ? AND InterviewTimeTo &gt; NOW(); </pre>	<p>None. Almost all columns on <code>WHERE</code> clauses and <code>JOIN</code> conditions are already primary keys/foreign keys, which are automatically indexed. <code>Booked</code> is the only column to not be part of any primary or foreign key. However, since it can only be either <code>0</code> or <code>1</code>, indexing it is not necessary.</p>
<span style="color: green;">▢</span> CMM20EP-38: As a job-seeker, I want to be able to save jobs that I am interested in for future consideration. <span style="border: 1px solid green; padding: 2px;">DONE</span>	<pre> 1 -- Save job 2 <b>INSERT IGNORE INTO</b> SavedJob <b>VALUES</b> (?,?); 3 4 -- Unsave job 5 <b>DELETE FROM</b> SavedJob <b>WHERE</b> JobID = ? AND ApplicantID = ?; 6 7 -- View saved jobs 8 <b>SELECT</b> JobID, JobTitle, CompanyName <b>FROM</b> SavedJob 9 <b>JOIN</b> Job <b>ON</b> SavedJob.JobID = Job.JobID 10 <b>JOIN</b> Company <b>ON</b> Job.CompanyID = Company.CompanyID 11 <b>WHERE</b> SavedJob.ApplicantID = ?; </pre>	<p>None. All columns on <code>WHERE</code> clauses and <code>JOIN</code> conditions are already primary keys/foreign keys, which are automatically indexed.</p>
<span style="color: green;">▢</span> CMM20EP-31: As a learner, I want the platform to record the courses I am taking/have completed successfully so that I	<pre> 1 <b>INSERT IGNORE INTO</b> CourseApplicant (CourseID, ApplicantID) <b>VALUES</b> </pre>	None.

can show them to future  
employers. DONE

# Final database

This document presents every detail of the final database.

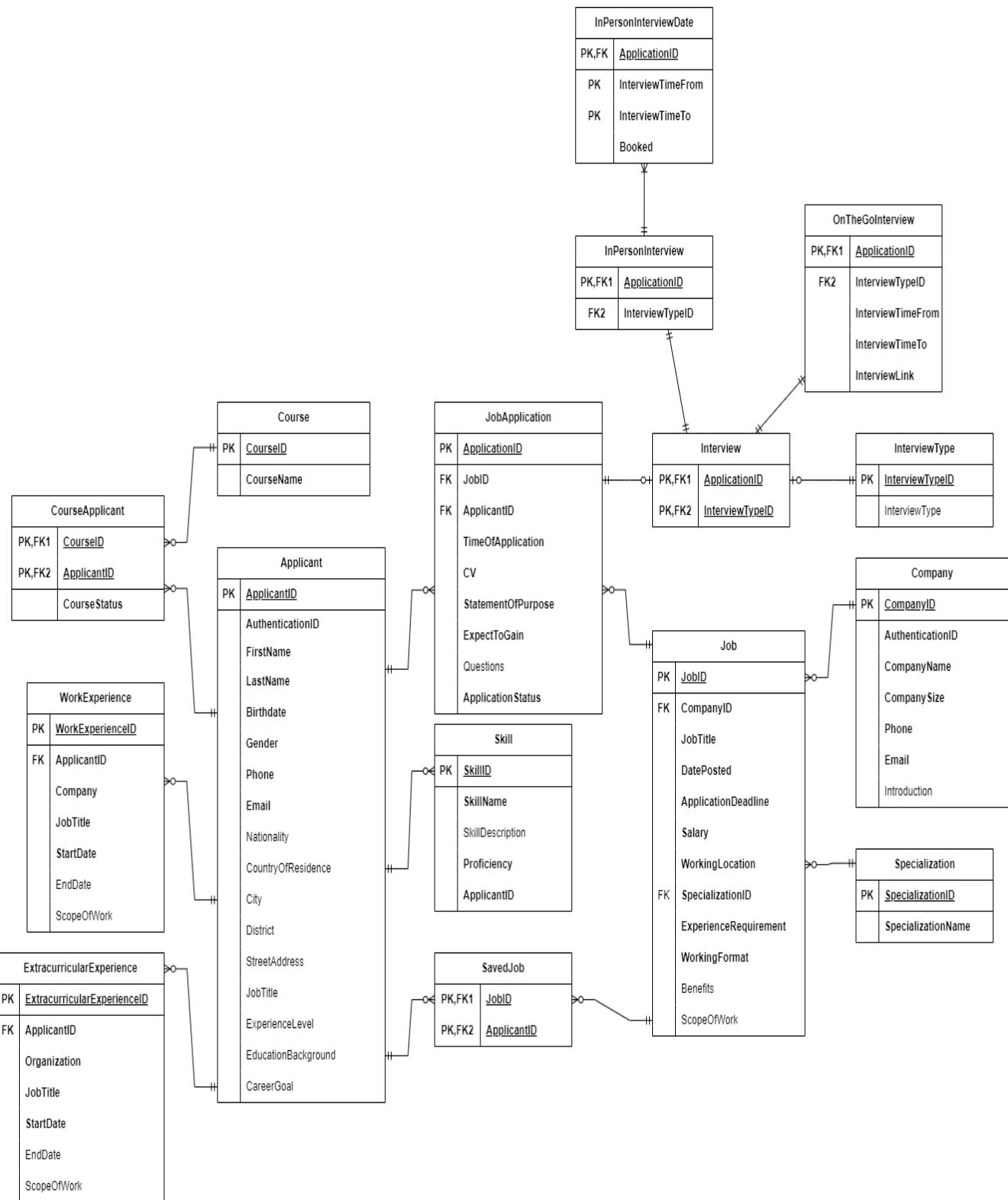
## 💡 Assumptions and constraints

These are the assumptions we have made about the desired operations:

- Learners can enroll in as many courses as they wish. These will be recorded in their profiles.
- Job-seekers can describe as many work experiences, extracurricular experiences, and skills in their profiles.
- Job-seekers can apply as many times to a job as they want. Employers can review these applications and pick the one they like most. Once submitted, an application cannot be updated by job-seekers.
- Employers can change the status of an application. These statuses are "Applying", "Reviewing", "Failed", "Succeeded", "Interviewing".
- Only one interview can be associated with an application. An interview must either be in-person or online (on-the-go). The employer decides the format of the interview. If an in-person interview is chosen, the employer must specify a list of interview times for the applicant to book. If an online interview is chosen, the employer must specify the meeting time and meeting link.
- Only one employer is associated with a company. Therefore, multiple employers creating accounts on the platform to post jobs for the same company is not allowed.
- Each job posted by a company is associated with only one specialization.

## 🧠 Conceptual model & ER diagram

The final database will contain 16 tables, as described below.



## Physical implementation

See: [Database schema in SQL on GitHub](#)

Aside from the queries to create the table above, we have also added a trigger that runs each time a row is inserted into the JobApplication table. It causes an error when the application is created after the deadline of the corresponding job.

```

1  DELIMITER $$ 
2  CREATE TRIGGER greeliving.JobApplication_Deadline_Trigger

```

```

3   BEFORE INSERT ON greeliving.JobApplication
4   FOR EACH ROW
5 BEGIN
6   DECLARE Deadline DATETIME;
7
8   SELECT ApplicationDeadline INTO Deadline FROM greeliving.Job WHERE JobID = new.JobID;
9
10 IF new.TimeOfApplication > Deadline THEN
11     SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = "Cannot apply after the application deadline!";
12 END IF;
13 END $$
14
15 DELIMITER ;

```

## 🤖 Data generation

 See: [Dummy data SQL script on GitHub](#)

As described in detail in [Revision 3 - Week 7 - Data types and data generation](#), we will generate our data on Mockaroo. Because Mockaroo does not guarantee uniqueness for some data types, we have to remove rows with repeated unique columns with a custom C# script ([link to GitHub repo](#)).

## 📋 Use cases

 See: [Use case SQL script on GitHub](#)

Refer to [Revision 4 - Week 8 - Use cases and transactions](#) for more details of each use case.

## 💡 Indexing

 1 `CREATE INDEX i_salary ON greeliving.Job (Salary);`

For this database, we have decided to create only one index on the column `Salary` of the `Job` table. During testing, we found that the index is effective only if the value of `Salary` in `WHERE` is large enough to make the result set a small fraction of the original table. For details on other candidate columns for indexing and why we didn't choose them, refer to [Revision 5 - Week 9 - Indexing](#).

## 🔗 Extras

Downloadable SQL files for the database schema, dummy data and use cases.



# Major-specific contributions

Link to project's repository:  <https://github.com/gnut04/GreeLiving> Connect your Github account

This document describes the major-specific contributions we have made to this project. Our contributions come from the majors Cybersecurity and Software development.

## Cybersecurity

Contributor: [@Tung Ta Quang](#)

For this project, we use Auth0 to handle user authentication for the website. Auth0 is an Identity and Access Management provider that supports many of the authentication and authorization features required by modern applications such as a smooth login flow, storage of users' credentials, and exchange of security tokens for verification.

Auth0 is used in this project to provide login features to job-seekers (also called applicants) and employers (also called companies). When a job-seeker or employer requests a page that requires authentication, they will be redirected to Auth0's universal login page. This provides users with a smooth authentication flow for a better experience.

User credentials are stored by Auth0 instead of on our own databases. As Auth0 is an industry-standard and ready-to-use solution, we rely on it instead of developing our custom solutions. Two Auth0 tenants are created for the storage of user credentials, one for job-seekers and the other for employers.

The website, which is written in PHP, uses the Auth0/PHP SDK to connect to Auth0 services. For sensitive pages, the website first checks if the user is logged in as the correct party (job-seeker/employer), then redirects them to Auth0 to complete their authentication as necessary. After successful authentication, a JWT token is returned containing the user's information, including their Auth0 ID, which will then be stored in MySQL to associate that user with a user profile on the platform.

Auth0 also supports authentication through social identity providers such as Google or Facebook. However, since we are using the free trial of Auth0, these are not available.

## Software development

Contributors: [@Tung Ta Quang](#) (frontend and backend), [@Nguyen Quang Huy \(Swinburne HN\)](#) (backend), [@Nguyen Tran Quang Minh \(Swinburne HN\)](#) (frontend), [@Hải Anh Trần Hoàng](#) (frontend), [@SY TUAN PHAN](#) (frontend).

The Software Development contribution to this project comes in the form of a website. For the backend, it uses PHP as the scripting language and MySQL as the database. For the frontend, it is written in basic HTML, CSS, and JavaScript with a little Bootstrap. The backend makes use of the Auth0/PHP library for authentication and a simple routing library for routing.

These technologies require a bit of setup before the website can be run. The instructions are as follows:

### Necessary software

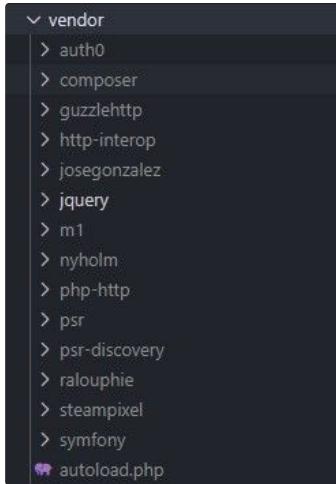
This project requires the installation of PHP, Git, Composer (which is a package manager for PHP), and MySQL.

- Download PHP: [PHP: Downloads](#) (if you have XAMPP, you can use the `php.exe` file in `xampp/php/` instead. However, please make sure that the PHP version is above 8.2 because some packages might not work. You can check the version of PHP with `php -v` in the terminal.)
- Download Composer: [Composer](#) (during installation, please refer to the PHP executable from the previous step.)
- Download Git: [Git - Downloads](#) (this is required for the installation of Composer packages).
- Download MySQL: [MySQL :: MySQL Community Downloads](#)

Please check your environment variables to make sure that the paths to the PHP, Composer, and Git executables are present.

## Cloning the project and installing packages

Use Git to clone the project on  <https://github.com/gnut04/GreeLiving>. Connect your Github account to your local device. Then, `cd` into the project directory and run `composer install` to install the necessary packages. You may encounter issues if you have not set up Composer correctly, for instance by not having it in PATH. If you succeed, your `/vendor` folder should look like this:



## Defining environment variables and creating the database

Copy the contents pertaining to the `.env` file on the project's `README.md` and change the information related to the database as necessary. Most importantly, please specify the password to connect to your MySQL server. If you use XAMPP, the password might not be necessary, so leave it as a blank `''`.

```
1 AUTH0_BASE_URL='http://127.0.0.1:3000'
2
3 AUTH0_APPLICANTS_DOMAIN='https://dev-26j7nd5wbpafvpg2.us.auth0.com'
4 AUTH0_APPLICANTS_CLIENT_ID='vDNw4iiDOHGHD7Bb1TusIKJ8V0jiANUX'
5 AUTH0_APPLICANTS_CLIENT_SECRET='2d9v7-0XT6xx-ux1ZQekw3CwNMtW0mC7Nfh3GGvG7oSLbnsgtkdjeq9BnhKpxFkz'
6 AUTH0_APPLICANTS_COOKIE_SECRET='c89c4ca664c98b58379aa03d351fb96775379319bdf17e8a446fee724ca30a0e'
7
8 AUTH0_COMPANIES_DOMAIN='https://greliving-employer.us.auth0.com'
9 AUTH0_COMPANIES_CLIENT_ID='5u20cQ1jCqPBkBmaZq4ErGt3cuZUlXee'
10 AUTH0_COMPANIES_CLIENT_SECRET='M0_DbmlIHkaMBQzsQHf3-6yw2zRgtwbNnDGDRmqhNgp-Zm-59FyuffsmeneNsHHuy'
11 AUTH0_COMPANIES_COOKIE_SECRET='12171f2c09bea41648f7ec3c58e98c27a9bac5ecade7f437bf0dec34f3bf5b45'
12
13 DATABASE_HOST='localhost'
14 DATABASE_USER='root'
15 DATABASE_PASSWORD='<IMPORTANT: YOUR MYSQL DATABASE PASSWORD>'
16 DATABASE_DATABASE='greliving'
```

Then, run the `.sql` scripts on your database engine to create the database. Please go to the folder `/sql` in the project directory and run the file `schema.sql` followed by `dummydata.sql`.

```

> .git
> assets
> components
> functions
> localization
> pages
< sql
  > csv
  > sql
    └ dummydata.sql
    └ schema.sql
    └ use-cases.sql
  > uploads
  > vendor
  .env
  .gitignore
  composer.json
  composer.lock
  index.php
  php.ini
  README.md
  server.bat

```

## Running the project

In the project's directory, type `server` to start the PHP server. It runs a batch script that starts a server at 127.0.0.1:3000. Please **do not** change this address. Provided you have done the above steps correctly, the website should run and you should see the following.



## Troubleshooting

Sometimes, you may encounter errors related to the installation of packages or the running of the server. Many of these errors are caused by the `php.ini` file in the same folder as the `php.exe` file. You can use the `php.ini` file included in the project's repository as a possible quick fix.

## 📋 Team reflection

### 📋 Overview

<b>Team</b>	Maverick Mates 2.0
<b>Team members</b>	<a href="#">@Nguyen Quang Huy (Swinburne HN)</a> <a href="#">@Tung Ta Quang</a> <a href="#">@SY TUAN PHAN</a> <a href="#">@Hải Anh Trần Hoàng</a> <a href="#">@Nguyen Tran Quang Minh (Swinburne HN)</a>
<b>Date</b>	Nov 23, 2023
<b>Retrospective period</b>	Sep 4, 2023 to Nov 26, 2023

### ☁️ 4Ls retrospective

Milestones	Loved	Longed for	Loathed	Learned
Sprint 0 (Warm-up, team bonding, and project proposal).	<ul style="list-style-type: none"> <li>• Team communication and meeting.</li> <li>• Clear understanding of what each person has to do for the first assignment.</li> </ul>	<ul style="list-style-type: none"> <li>• Better communication with the client.</li> </ul>	<ul style="list-style-type: none"> <li>• A vague understanding of the purpose of the project.</li> </ul>	<ul style="list-style-type: none"> <li>• How to use Confluence and Jira for collaboration.</li> <li>• The team's favorite communication channel and meeting habits.</li> <li>• How to work with a client and how to express their requirements in the language of personas and user stories.</li> </ul>
Sprint 1 (Authentication, profile management, training courses, internationalization, and progress report).	<ul style="list-style-type: none"> <li>• Exchanging technical knowledge to decide on the final tech stack to use.</li> <li>• Learning new technologies to build the project.</li> <li>• Working on the database.</li> </ul>	<ul style="list-style-type: none"> <li>• Better communication within the frontend and backend teams.</li> </ul>	<ul style="list-style-type: none"> <li>• The disconnect between frontend and backend teams.</li> </ul>	<ul style="list-style-type: none"> <li>• How to construct a conceptual model of the database, translate it into a physical implementation and supplying it with dummy data.</li> <li>• The need for better communication to make sure every member understands their part in building the website.</li> <li>• The need to elect one member (<a href="#">@Tung Ta Quang</a>) to bridge the frontend and backend teams.</li> </ul>
Sprint 2 (Course registration, job posting, job search, job application, and database finalization).	<ul style="list-style-type: none"> <li>• The process of mapping use cases to SQL queries and experimenting with indexes.</li> <li>• Satisfaction from having finished 75% of the website.</li> </ul>	<ul style="list-style-type: none"> <li>• More streamlined communication on job posting requirements.</li> <li>• More clarity on specific aspects of the finalization process.</li> </ul>	<ul style="list-style-type: none"> <li>• Initial challenges in integrating job search and application features.</li> <li>• Disagreement on the database structure.</li> </ul>	<ul style="list-style-type: none"> <li>• How to apply indexing appropriately to speed up queries and when not to use indexes.</li> <li>• Collaborative decision-making in finalizing the complex database structure.</li> <li>• How to interact with the database from the backend in the most efficient manner.</li> </ul>

	<ul style="list-style-type: none"> <li>Sense of accomplishment in completing the database design.</li> </ul>	<ul style="list-style-type: none"> <li>Feedback on the work done during the previous sprint.</li> </ul>		
Sprint 3 (Responsiveness, minor features, and project wrap-up).	<ul style="list-style-type: none"> <li>Achievement in implementing responsive design elements.</li> <li>Satisfaction in bringing the project to its completion.</li> </ul>	<ul style="list-style-type: none"> <li>More detailed guidelines for addressing minor feature requests.</li> <li>More structured documentation guidelines and templates.</li> </ul>	<ul style="list-style-type: none"> <li>Frustration with minor bugs that delayed the sprint progress.</li> <li>Time constraints for thorough documentation.</li> </ul>	<ul style="list-style-type: none"> <li>The need for more detailed guidelines for addressing minor feature requests.</li> <li>How to fix bugs in the most time-efficient manner.</li> <li>The importance of responsiveness in user interfaces and how to achieve it with minimal code.</li> <li>Enhanced project completion skills and the importance of balanced workflows and efficient time management in documentation.</li> </ul>

## ⚡ Action plan

Action	Owner	Due date	Action items
Foster team communication and meeting.	@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Hải Anh Trần Hoàng	Oct 5, 2023	<ul style="list-style-type: none"> <li>Include more engaging activities during team meetings.</li> <li>Hold regular but short meetings where team can share progress and ask for help.</li> </ul>
Prevent the disconnect between frontend and backend teams.	@Tung Ta Quang	Nov 2, 2023	<ul style="list-style-type: none"> <li>Clearly specify the requirements of the user on the frontend.</li> <li>Base the backend on the frontend requirements.</li> <li>Review both the frontend and backend code to ensure compatibility.</li> </ul>
Alleviate time constraints on writing thorough documentation.	@Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) @SY TUAN PHAN	Nov 23, 2023	<ul style="list-style-type: none"> <li>Look for online templates that the team can use.</li> <li>Review everything the team has done to write concise but informative documentation.</li> </ul>

## 🤝 Working agreement

### 👤 Team Preferences

<b>Team Member</b>	Ta Quang Tung	Nguyen Quang Huy	Nguyen Tran Quang Minh	Tran Hoang Hai Anh	Phan Sy Tuan
<b>Working location and time zone</b>	Hanoi, Vietnam (GMT +7)				
<b>Working hours and commitments</b>	9 A.M. to 5 P.M. and 8 P.M. to 10:30 P.M.	9AM to 12PM and 9PM to 2AM	8 A.M to 5 P.M and 9 P.M to 11 P.M	8 A.M to 12 P.M and 1 P.M to 5 P.M	9 A.M. to 5 P.M. and 8 P.M. to 10:00 P.M.
<b>Working environment and preferences</b>	I work at home on all days except Wednesday afternoon and Thursday where I am at university. I prefer working online.	I work at home and sometimes at university. Often busy in the afternoon.	I work from home and university.	I work from university mostly but at home also	I work at home and sometimes at university.
<b>How I like receiving feedback</b>	Online or in-person but privately.	Online via Messenger or in-person during the workshop section.	Face to face conversation or feedback thought Messenger or Zalo.	Mostly online but in-person is fine	Online or in-person.
<b>Context about me</b>	Swiftie, love listening to new music, currently learning Spanish, also learning to lead :3	Talkative and sometimes lazy.	If you know, you know	Why am I learning IT ?	I love engineering. ❤️

### 💬 Communication Channels

Channel	Purpose	Audience	Standards
<b>Messenger</b>	Announcements and daily conversations.	All team members.	Open by default. Questions should be answered within 12 hours.
<b>Zalo</b>	Consultation with lecturer/tutor.	All team members.	No group chat. Team members ask questions independently.
<b>Google Meet</b>	Online meetings.	All team members.	Meeting time announced 3 days before. Team members must inform their absence 1

			day before. Webcams must be on for all participants.
<b>Classroom</b>	In-person meetings and discussions.	All team members.	All team members are expected to attend. Absence should be informed 1 day before the classroom session. Team members must complete their independent learning before the session.
<b>Confluence</b>	Documentation of the project. Maintains a list of questions and answers related to the project and the unit.	All team members.	All members are allowed to edit all pages in the Confluence space. Team members are expected to complete their assigned work on Confluence.
<b>Google Drive</b>	File sharing.	All team members.	All members are allowed to read, upload, and modify files on the team's Drive folder. These documents should not be leaked outside.
<b>GitHub</b>	Storage of the team's code repository.	All team members.	Members must not directly commit to the main/master branch. They must create and commit to a different branch, then create a pull request. The team leader will make any final adjustments before merging it to the main branch.

## Meetings

Meeting type	Team meeting	Daily check-up	Client meeting
<b>Objective</b>	Discussing the project with members.	Getting progress updates from members.	Informing clients/stakeholders of project progress.
<b>Outcomes</b>	Updating everyone of the project's current progress, formulating plans, and allocating work to team members.	Knowing each member's progress as well as any difficulties they are encountering to adjust the workload appropriately.	Clients/stakeholders are informed of the team's progress, provide feedback to improve the team's work and resolve difficulties.
<b>Format</b>	Online/in-person, whole team.	Online/in-person, individual team members. Must be very brief (5-10 minutes only)	Online/in-person, whole team with clients/stakeholders.

<b>Who</b>	All members	All members individually.	All members and clients/stakeholders.
<b>Resources</b>	Online: Google Meet, microphones, laptops/phones/etc.  Offline: Laptops, sticky notes.	Online: Messenger  Offline: A note pad and pen to write down responses.	Laptop, slides, projector.
<b>How will we show up?</b>	All members are expected to attend with prior reading of the agenda and preparation.  Members should show up positive and ready to contribute to the meeting.	If the check-up takes place online, each team member is expected to respond within 4 hours.  If the check-up takes place in-person, it will be done during class where everyone is expected to attend.	Members are expected to grasp the progress of and be ready to present their assigned parts to clients/stakeholders.  It is important that members arrive with a positive attitude and a readiness to actively participate in the meeting.
<b>How will we manage follow up?</b>	Record discussion points and further actions on Confluence.  Set deadlines for allocated work.	Adjust the team's workload and work division appropriately if team members are encountering issues. Provide guidance on how to complete tasks as needed.	Record clients' feedback on Confluence, decide on further actions to finish the project to the clients' standard, and set deadlines.

### Team member underperformance

<b>Underperformance signals and how they are detected</b>	<p><b>In regard to work quality:</b></p> <ul style="list-style-type: none"> <li>Producing poor quality work (code/reports/etc.). (Detection: Confluence, team's GitHub repository.)</li> <li>Plagiarizing other sources. (Detection: Confluence, team's GitHub repository.)</li> <li>Not assigning oneself to work. (Detection: Jira.)</li> </ul> <p><b>In regard to work productivity:</b></p> <ul style="list-style-type: none"> <li>Failing to meet deadlines without a valid reason. (Detection: Jira.)</li> <li>Coming unprepared to team meetings. (Detection: During meetings.)</li> </ul> <p><b>In regard to collaboration:</b></p> <ul style="list-style-type: none"> <li>Not informing team of current progress. (Detection: In communication channels, during daily check-ups.)</li> <li>Coming to meetings late or doing unrelated things during meetings. (Detection: During meetings.)</li> <li>Not contributing ideas to discussions. (Detection: During meeting discussions.)</li> <li>Not communicating with team in a timely manner. (Detection: In communication channels.)</li> <li>Using unprofessional or disrespectful language. (Detection: In communication channels or meetings.)</li> <li>Discouraging or patronizing other members. (Detection: In communication channels or meetings.)</li> </ul>
<b>Resolution policy</b>	<p>At the end of each week, the project managers will review the work done during that week and reflect on team members' performance.</p> <p>If one or two underperformance signals are detected for a team member, the project managers will inform that member in person or through text messages to help them get back on track.</p> <p>After three or more signals are detected for a team member, a Performance Improvement Plan (PIP) will be created for that member.</p>

The team member is expected to follow the plan to address the identified issues. They will be monitored over the following 2 weeks to see if there are any improvements. If the issues persist, this member will be reported to the unit facilitator for mark deductions as per the Poor Contribution Weighting Rubric.

All team members should be informed of the decision to ensure transparency.

## Escalation Process

Decider	How	Transparency	Feedback Loop
@Tung Ta Quang - team leader	Each week, review the Jira board to identify which tasks are falling behind schedule and who are responsible. Discuss the issue with team members to arrive at a resolution.	The final decision will be shared with everyone in the team.	Stakeholders will be informed of the situation through email or in person.
Unit lecturer/tutor	If a member persistently underperforms and negatively impacts the team's output, this issue will be discussed with the unit lecturer/tutor in person. A decision will be made to deduce the member's marks.	All members, including the underperforming member, will be informed of the decision.	Stakeholders will be informed of the situation through email or in person.

## Continuous Improvement

Purpose	How	Standards
Identify how to make the project more complete.	Meetings and discussions with clients/stakeholders.	Key improvement areas will be listed on Confluence.
Provide feedback for team members to learn.	Collect frequent feedbacks from the customer/ individual team member.	Valuable/ constructive feedbacks will be listed on Confluence.
Celebrate success.	Hanging out and bonding with all team members.	Personal and team's achievement will be listed on Confluence.

## Roles and responsibilities

### Overview

Team	Maverick Mates 2.0
Team members	<a href="#">@Tung Ta Quang</a> <a href="#">@Nguyen Tran Quang Minh (Swinburne HN)</a> <a href="#">@SY TUAN PHAN</a> <a href="#">@Nguyen Quang Huy (Swinburne HN)</a> <a href="#">@Hải Anh Trần Hoàng</a>
Date	Sep 1, 2023 to Nov 26, 2023
Team mission	Develop a full-stack website featuring a performant database for GreeLiving, a training and recruitment platform.

### Roles and responsibilities

Roles	Assignee(s)	Responsibilities	Why they fit this role?
Team leader	<a href="#">@Tung Ta Quang</a>	<ul style="list-style-type: none"> <li>Submit the team deliverables on time.</li> <li>Oversee the operation of the entire team.</li> <li>Coordinate teamwork.</li> <li>Facilitate meetings.</li> <li>Meet or contact clients to receive feedback on the team's output.</li> <li>Ask clients questions on behalf of the team.</li> </ul>	<p>Tung has previous experience leading teams. He is familiar with a range of web technologies, and his knowledge will help guide the team. Tung is also highly proficient in English, allowing him to easily communicate with teammates and clients. Additionally, he is responsible and always ensures that the work is of the highest standard.</p> <p>See  <a href="#">Ta Quang Tung</a>'s profile.</p>
Project manager	<a href="#">@Tung Ta Quang</a> <a href="#">@Nguyen Quang Huy (Swinburne HN)</a>	<ul style="list-style-type: none"> <li>Manage the Jira board, initiate sprints, and set up and assign user stories.</li> <li>Monitor the team's progress to ensure that the project is not behind schedule.</li> <li>Have daily check-ins with team members to ensure they are on track.</li> <li>Remind team members when deadlines are due.</li> <li>Solve issues that arise during project execution (e.g.: a change in scope, members underperforming.)</li> </ul>	<p>Tung and Huy are organized and goal-oriented members with great communication and adaptability. Aside from being good problem solvers and decision makers, they can also foster a convivial team culture. This is important because project managers have to meet the team frequently and solve team issues.</p> <p>See  <a href="#">Ta Quang Tung</a>'s and  <a href="#">Nguyen Quang Huy</a>'s</p>

			profiles.
Database designer	<a href="#">@Tung Ta Quang</a> <a href="#">@Nguyen Quang Huy</a> (Swinburne HN) <a href="#">@Nguyen Tran Quang</a> Minh (Swinburne HN) <a href="#">@Hai Anh Tran Hoang</a> <a href="#">@SY TUAN PHAN</a>	<ul style="list-style-type: none"> <li>Identify the kinds of data the business will need to store and the operations that will be performed on this data.</li> <li>Design the entities and relationships within the database.</li> <li>Test the database to ensure that it is consistent, performant, and secure.</li> <li>Decide on the database management system to use based on the business requirements.</li> </ul>	The database is the central component of the entire project as all of the business logic revolves around it. As such, everyone needs to contribute to its design. All members of the team have previous experience with MySQL, so their contributions can add more value to the database.
Backend designer	<a href="#">@Tung Ta Quang</a> <a href="#">@Nguyen Quang Huy</a> (Swinburne HN)	<ul style="list-style-type: none"> <li>Design and implement the server-side architecture.</li> <li>Implement the business logic that happens on the server to support the functions required by the platform.</li> <li>Write code that securely connects the frontend to the business database.</li> <li>Write tests and analyze the backend logic to identify bugs and bottlenecks.</li> <li>Collaborate with the frontend team to deliver code that enhances the user experience.</li> </ul>	Tung and Huy have previous experience in server-side development, good understanding of databases, and familiarity with web protocols. As good problem solvers, they can implement business logic that is correct, effective, and secure.  See <a href="#">Ta Quang Tung</a> 's and <a href="#">Nguyen Quang Huy</a> 's profiles.
Frontend designer	<a href="#">@Nguyen Tran Quang</a> Minh (Swinburne HN) <a href="#">@Hai Anh Tran Hoang</a> <a href="#">@SY TUAN PHAN</a>	<ul style="list-style-type: none"> <li>Identify the characteristics of the website's primary user groups to design a user experience that best suits their needs.</li> <li>Design the website's user interface.</li> <li>Implement design changes and develop smooth user interactions.</li> <li>Ensure that the website is visually pleasing on different devices.</li> <li>Collaborate with the backend team to deliver a smooth user experience.</li> </ul>	Minh, Hai Anh, and Tuan have a keen eye for design and are skilled in frontend tools such as HTML, CSS, and JavaScript. They are detail-oriented, creative, and can translate designs into functional interfaces.  See <a href="#">Nguyen Tran Quang Minh</a> 's, <a href="#">Tran Hoang Hai Anh</a> 's, and <a href="#">Phan Sy Tuan</a> 's profiles.
Note-taker	<a href="#">@Nguyen Quang Huy</a> (Swinburne HN)	<ul style="list-style-type: none"> <li>Take meeting notes.</li> <li>Take notes of clients' feedback.</li> </ul>	Huy is attentive, organized, and has excellent listening skills. He can distill complex information into clear, concise notes and is proficient in the use of note-taking tools.  See <a href="#">Nguyen Quang Huy</a> 's profile.

# ⚠ Risk assessment matrix

## 📋 Background

The goal of the project is to build a full-stack website for GreeLiving, a training and recruitment platform. The platform will include a number of features, most notably:

- Offer learners a wide range of courses in a variety of categories, including F&B, beauty & spa, and tourism & hospitality.
- Let job-seekers search for and apply to jobs that are suited to them.
- Allow employers to write job postings and select applied candidates.
- Allow candidates and employers to arrange interview dates.

To achieve the requirements set out by the company, the project will need the following:

- A database to store data such as user profiles, job postings, and recruitment data.
- A content management system to facilitate the creation of user content such as job postings or personal profiles.
- A user-friendly interface to ensure a smooth and simple experience on the platform.

## 🎲 Risks management

### Risk rating

LOW	MEDIUM	HIGH	EXTREME
<ul style="list-style-type: none"><li>• Acceptable</li><li>• Ok to proceed</li></ul>	<ul style="list-style-type: none"><li>• As low as reasonably practicable</li><li>• Take mitigation efforts</li></ul>	<ul style="list-style-type: none"><li>• Generally unacceptable</li><li>• Seek support</li></ul>	<ul style="list-style-type: none"><li>• Intolerable</li><li>• Place event on hold</li></ul>

		SEVERITY			
		ACCEPTABLE (1) <i>Little to no effect on event</i>	TOLERABLE (2) <i>Effects are felt, but not critical to outcome</i>	UNDESIRABLE (3) <i>Serious impact to the course of action and outcome</i>	INTOLERABLE (4) <i>Could result in disaster</i>
LIKELIHOOD	IMPROBABLE (A) <i>Risk is unlikely to occur</i>		<ul style="list-style-type: none"><li>• 2A.1 - Membership changes disrupting the team's structures and operations.</li></ul>	<ul style="list-style-type: none"><li>• 3A.1 - Inefficient project management.</li></ul>	<ul style="list-style-type: none"><li>• 4A.1 - DDOS attacks on the server.</li></ul>
	POSSIBLE (B) <i>Risk will likely occur</i>			<ul style="list-style-type: none"><li>• 3B.1 - Scope creep and frequent changes.</li></ul>	<ul style="list-style-type: none"><li>• 4B.2 - SQL injection attacks.</li></ul>

<b>PROBABLE (C)</b> <i>Risk will occur</i>		<ul style="list-style-type: none"> <li>• 2C.1 - Routine technical issues causing periodic platform downtime.</li> </ul>	<ul style="list-style-type: none"> <li>• 3C.1 - Spike in website usage during peak recruitment seasons.</li> </ul>
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## Risk descriptions

Title	Severity	Description
Membership changes disrupting the team's structures and operations.	MEDIUM	Happens when the team loses or gains a new member, which can affect how the team works together.
Inefficient project management.	MEDIUM	Happens when the team leader and project manager does not manage the project effectively to keep the project moving forward. This could be due to lack of dedication, not communicating the requirements to the team while, not checking up on the team regularly, etc.
DDOS attacks on the server.	HIGH	Happens when a bad actor inundates the server with requests, preventing it from serving other users.
Scope creep and frequent changes.	HIGH	Happens when the project scope grows during the project's execution due to the client's sudden demands and/or the team's failure to define the scope clearly.
Routine technical issues causing periodic platform downtime.	HIGH	Happens during the maintenance periods of the server.
Spike in website usage during peak recruitment seasons.	HIGH	Happens when the number of users is greater than the amount the server can support at any given time.
SQL injection attacks.	EXTREME	Happens when an attacker attempts to place malicious code in a MySQL statement through web forms or text entries.

## Action items

- (2A.1) Defines granular roles and responsibilities that can be dynamically assigned to different members in the event of membership changes.
- (2A.1) Encourage continuous learning to help members obtain a diverse skillset, including skills outside their current roles.
- (2C.1) Implement robust technical monitoring & support.
- (3A.1) Get frequent feedback from team members to adjust the workload.
- (3A.1, 3B.1) Define and communicate the scope clearly.
- (3C.1) Optimize backend logic to speed up servers.
- (3C.1) Implement database indexing, regularly clean up unused data, and use caching mechanisms to reduce database load.
- (4A.1) Implement load balancing to ease the load on each server and prevent DDOS attacks.
- (4B.2) Sanitize all user input before performing database operations.



## Personas

 [Persona - Employer \(COS20031 Group 6 - Maverick Mates 2.0\)](#)

persona

 [Persona - Learner \(COS20031 Group 6 - Maverick Mates 2.0\)](#)

persona

 [Persona - Job seeker \(COS20031 Group 6 - Maverick Mates 2.0\)](#)

persona

## Persona - Learner



Bao Vo

<b>Persona name</b>	<b>Bao Vo</b>
<b>Persona role</b>	Learner
<b>Job description</b>	No job at the moment but is looking for a training course to receive a certificate for his portfolio.

### 🏢 Company

<b>Company name</b>	N/A
<b>Company size</b>	N/A
<b>Industry</b>	N/A

### 👤 Demographic information

<b>Age</b>	20
<b>Gender</b>	Male
<b>Income</b>	N/A
<b>Education level</b>	High school
<b>Residential environment</b>	Suburban

### ✍ Personal quote

*"Learning has never been late"*

### 📜 Biography

Bao has finished his high school and just returned from his military duty. With no prior experience in bartending, he is searching for a bartender course with a reasonable price. He is also very passionate about bartending and hope to have a chance to work overseas.

<b>Professional goals</b>	<b>Motivators</b>
<ul style="list-style-type: none"><li>Bao wants to obtain official skill certification in order to get a job.</li></ul>	<ul style="list-style-type: none"><li>Bao has just finished his military duty and is looking for a high-paying job.</li><li>Bao is passionate about bartending.</li><li>Bao is looking to hone his bartending skills before becoming a professional bartender.</li></ul>

Challenges	Sources of information
<ul style="list-style-type: none"> <li>Having been out of military duty for only some time, Bao does not have the money for expensive courses.</li> <li>With so many choices of training course on the Internet, Bao does not know which one to choose.</li> </ul>	<ul style="list-style-type: none"> <li>Bao finds bartending tutorials by reading online articles and watching YouTube videos.</li> <li>Bao looks for training courses on Facebook and Google.</li> </ul>

# Persona - Job seeker



Thi Hang Nguyen

Persona name	Thi Hang Nguyen
Persona role	Job-Seeker
Job description	Makeup Artist

## 🏢 Company

Company name	N/A
Company size	N/A
Industry	Beauty and Fashion

## 👤 Demographic information

Age	28
Gender	Female
Income	\$5,000 annually
Education level	Bachelor's Degree in National Economics University
Residential environment	Urban

## ✍ Personal quote

*"Enhancing natural beauty is not just my job; it's my passion."*

## 📜 Biography

Hang is a highly motivated and creative makeup artist with three years of experience. She pursued formal education in economic; however, she found her passion in cosmetology after graduation. Hang has worked in various roles, including freelance makeup artist, in-store beauty advisor, and even as a makeup artist for local theater productions. She's known for her attention to detail and her ability to create diverse looks, from natural to avant-garde.

Professional goals	Motivators
<ul style="list-style-type: none"><li>To secure a full-time makeup artist position with a reputable beauty salon or cosmetics company.</li></ul>	<ul style="list-style-type: none"><li>Hang is motivated by her passion for makeup artistry and the opportunity to make people feel</li></ul>

<ul style="list-style-type: none"> <li>Continue to expand her portfolio by working on high-profile projects, such as fashion shows and photoshoots.</li> <li>Obtain certification in special effects makeup to diversify her skill set.</li> </ul>	<p>confident and beautiful.</p> <ul style="list-style-type: none"> <li>She seeks professional growth and recognition within the beauty industry.</li> <li>Financial stability and the prospect of earning a competitive salary are significant motivators.</li> </ul>
<b>Challenges</b>	<b>Sources of information</b>
<ul style="list-style-type: none"> <li>Competition in the makeup artist job market can be fierce, making it challenging to stand out.</li> <li>Keeping up with the latest makeup trends and techniques requires ongoing learning and skill development.</li> <li>Balancing a freelance career with the stability of a full-time job is a challenge Hang face</li> </ul>	<ul style="list-style-type: none"> <li>Hang relies on job search websites and platforms to find job openings and networking opportunities.</li> <li>She follows beauty and fashion magazines, makeup artists on social media, and attends industry trade shows to stay updated on trends.</li> <li>Online makeup tutorials and courses help her continue to refine her skills and learn new techniques.</li> </ul>

# Persona - Employer



Grace Anderson

<b>Persona name</b>	Grace Anderson
<b>Persona role</b>	Employer
<b>Job description</b>	Owner/Manager

## 🏢 Company

<b>Company name</b>	Belle Éclat Beauty Salon
<b>Company size</b>	Small (3 employees)
<b>Industry</b>	Beauty

## 👤 Demographic information

<b>Age</b>	40
<b>Gender</b>	Female
<b>Income</b>	Varies (based on salon revenue)
<b>Education level</b>	Diploma in Beauty Therapy
<b>Residential environment</b>	Urban

## ✍ Personal quote

*"Creating beauty and boosting confidence one client at a time."*

## 📜 Biography

Grace Anderson is a passionate entrepreneur in the beauty industry. She founded "Belle Éclat Beauty Salon" in Melbourne, Australia, 10 years ago. Grace's journey began as a licensed beauty therapist, and her dream was to create a space where clients could experience exceptional beauty and wellness services. Over the years, her salon has become known for its personalized approach, top-notch services, and a tranquil atmosphere.

Professional goals	Motivators
<ul style="list-style-type: none"><li>To maintain a reputation for excellence in beauty and wellness services in the Melbourne area.</li></ul>	<ul style="list-style-type: none"><li>Grace is motivated by her passion for helping clients feel and look their best, which drives her commitment to quality services.</li></ul>

<ul style="list-style-type: none"> <li>• Expand the business by opening a second location in a high-traffic area.</li> <li>• Offer eco-friendly and sustainable beauty products and services to cater to environmentally conscious clients.</li> </ul>	<ul style="list-style-type: none"> <li>• She takes pride in being a successful small business owner and seeks to grow her brand further.</li> <li>• The opportunity to contribute to the local community by creating job opportunities and promoting self-confidence is a significant motivator.</li> </ul>
<p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>• Staying updated with evolving beauty trends and technologies is a constant challenge in the beauty industry.</li> <li>• Managing the salon's day-to-day operations while also focusing on long-term growth requires careful planning.</li> <li>• Adapting to changing regulations and health protocols, especially in the post-COVID era, has been challenging.</li> </ul>	<p><b>Sources of information</b></p> <ul style="list-style-type: none"> <li>• Grace relies on industry trade magazines, professional beauty networks, and local business associations for industry insights and connections.</li> <li>• She actively uses social media to promote her salon's services and engage with clients.</li> <li>• Attending beauty expos and conferences helps her stay updated on the latest products and techniques in the beauty industry.</li> </ul>

## Empathy maps

- [!\[\]\(aa5c0656a8e4e2df1d99f989fa12681c\_img.jpg\) Empathy map - Learner \(COS20031 Group 6 - Maverick Mates 2.0\)  
empathy-map](#)
- [!\[\]\(6c14dc62386cd7fbc92b4bea3fa98584\_img.jpg\) Empathy map - Employer \(COS20031 Group 6 - Maverick Mates 2.0\)  
empathy-map](#)
- [!\[\]\(34194bf4e3ba19c69a3cb2bdd5946d27\_img.jpg\) Empathy map - Job seeker \(COS20031 Group 6 - Maverick Mates 2.0\)  
empathy-map](#)

## Empathy map - Learner

What they say	What they feel
<ul style="list-style-type: none"> <li>"I just completed high school and returned from military duty."</li> <li>"I have no prior experience in bartending, but I'm eager to learn from the best."</li> <li>"I'm passionate about bartending and hope to work overseas someday."</li> </ul>	<ul style="list-style-type: none"> <li>Exciting and ready to start a new chapter for his life.</li> <li>Anxious about finding an affordable bartender course.</li> <li>Eager to gain skills and knowledge in bartending.</li> </ul>
What they think	What they do
<ul style="list-style-type: none"> <li>Bao know that he lacks bartending skills and knowledge. He's determined to gain expertise in mixing drinks, understanding flavors, and providing excellent customer service.</li> <li>He also thinks about how to afford training while managing his finances responsibly.</li> </ul>	<ul style="list-style-type: none"> <li>Watching some online tutorials about how to bartending.</li> <li>Try to do some simple mixture at home.</li> <li>Seeking an opportunity to get a degree in this expertise to work overseas.</li> </ul>
Pains	Gains
<ul style="list-style-type: none"> <li>He finds it difficult to learn from scratch.</li> <li>Financial constrain is also a big problem.</li> </ul>	<ul style="list-style-type: none"> <li>The opportunity to learn bartending skills and pursue his passion.</li> <li>Potential career growth and the chance to work in different countries.</li> </ul>

## Empathy map - Job seeker

What they say	What they feel
<ul style="list-style-type: none"> <li>"I love experimenting with different makeup looks."</li> <li>"Finding a job in the beauty industry is tough but fulfilling."</li> <li>"I'm always learning and trying to improve my makeup skills."</li> <li>"I want to work with a team that appreciates creativity."</li> <li>"Balancing freelance work and stability is challenging."</li> </ul>	<ul style="list-style-type: none"> <li>Passionate about makeup artistry.</li> <li>Excited when she lands a new job opportunity.</li> <li>Frustrated by the competitive job market.</li> <li>Proud of her portfolio and progress.</li> <li>Anxious about financial stability.</li> </ul>
What they think	What they do
<ul style="list-style-type: none"> <li>"I need to keep up with the latest makeup trends to stay competitive."</li> <li>"I hope to find a job that values my artistic abilities."</li> <li>"Networking can help me discover job opportunities."</li> <li>"Having a stable income is essential for my financial security."</li> <li>"I want to build a strong portfolio to showcase my talent."</li> </ul>	<ul style="list-style-type: none"> <li>Attends makeup workshops and courses to enhance her skills.</li> <li>Follows makeup artists and beauty brands on social media for inspiration.</li> <li>Regularly updates her portfolio with new makeup looks.</li> <li>Submits job applications and attends interviews.</li> <li>Collaborates with photographers and models for portfolio photoshoots.</li> </ul>
Pains	Gains
<ul style="list-style-type: none"> <li>Struggles with the uncertainty of freelance work and the need for a stable income.</li> <li>Feels the pressure to keep up with rapidly evolving makeup trends and techniques.</li> <li>Faces competition and difficulty in standing out in the job market.</li> <li>Balancing her creative aspirations with financial security can be challenging.</li> </ul>	<ul style="list-style-type: none"> <li>Gains satisfaction and fulfillment from makeup artistry.</li> <li>Builds a diverse portfolio showcasing her talent and versatility.</li> <li>Develops a strong network within the beauty industry.</li> <li>Achieves financial stability through a fulfilling makeup artist job.</li> </ul>

## Empathy map - Employer

What they say	What they feel
<ul style="list-style-type: none"> <li>“I want to find applicants that align with my company’s values and fit my makeup styles.”</li> <li>“It’s hard for me to connect with prospective employees.”</li> <li>“Building a talent pool for my job is challenging.”</li> <li>“I would love to see a list of people who have applied to my company all in one place.”</li> </ul>	<ul style="list-style-type: none"> <li>Frustrated as she has to go through applications that do not meet basic requirements.</li> <li>Bewildered by the number of applications and not being able to manage them.</li> <li>Inconvenienced as she cannot effectively arrange interviews with candidates.</li> </ul>
What they think	What they do
<ul style="list-style-type: none"> <li>“How do I decide which application is better?”</li> <li>“How do I filter and sort my list of applications based on certain criteria?”</li> <li>“Maybe I will need to rely on industry peers or word of mouth to build a talent pool.”</li> <li>“Can I trust my that my applicants write honest portfolios?”</li> <li>“How do I quickly rule out applications that fail to meet the minimum requirements?”</li> <li>“How can I effectively schedule interviews with applicants? How can I keep track of all interview dates in one place?”</li> </ul>	<ul style="list-style-type: none"> <li>Find potential candidates on recruitment platforms, industry peers, and word of mouth.</li> <li>Publish job postings on recruitment platforms to get applicants.</li> <li>Schedule interviews, makeup tests with promising candidates.</li> </ul>
Pains	Gains
<ul style="list-style-type: none"> <li>She finds it difficult to find candidates that align with her company’s values and styles.</li> <li>She cannot easily review the list of candidates that applied to her job postings.</li> <li>She has to rely on recommendations from industry peers to accumulate her talent pool.</li> <li>She does not know if she can rely on what the candidate says in their applications.</li> <li>She finds the recruitment process slow and ineffective.</li> </ul>	<ul style="list-style-type: none"> <li>She can build a talent pool and attract suitable applicants to her company.</li> <li>She can easily go through the list of applications to find the most suitable candidate for each makeup position.</li> <li>She can streamline the recruitment process to save time and effort.</li> </ul>

# Product requirements

Target release date	Nov 26, 2023
Epics	Provide a training platform for learners / Provide job-seekers with a job search platform / Provide employers with an efficient recruitment platform
Document status	PUBLISHED
Document owner	@Tung Ta Quang
Designer	@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @SY TUAN PHAN @Hải Anh Trần Hoàng @Nguyen Tran Quang Minh (Swinburne HN)
Tech lead	@Tung Ta Quang
Technical writers	@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN)
QA	@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @SY TUAN PHAN @Hải Anh Trần Hoàng @Nguyen Tran Quang Minh (Swinburne HN)

## Objective

This project aims to develop a full-stack website for GreeLiving, a training and recruitment platform that seeks to connect job-seekers to employers. The website features a database and a Content Management System (CMS) as required by the business as well as a user-friendly interface to make the platform accessible to all users.

## Success metrics

Goal	Metric
Improve the user experience	<ul style="list-style-type: none"><li>Increase in user engagement</li><li>Reduced bounce rate</li></ul>
Enhance content management	<ul style="list-style-type: none"><li>Content upload efficiency</li></ul>
Optimize data management	<ul style="list-style-type: none"><li>Data integrity</li><li>Data retrieval speed</li></ul>
Facilitate effective job matching	<ul style="list-style-type: none"><li>Successful job placements</li><li>Employer satisfaction</li></ul>
Enhance user satisfaction	<ul style="list-style-type: none"><li>User feedback</li></ul>
Increase user base	<ul style="list-style-type: none"><li>User registrations</li><li>User retention rate</li></ul>

## Assumptions

- Users are assumed to have basic computer literacy and Internet access to engage with the online platform.
- Users will access the platform through various devices, including desktop computers, laptops, smartphones, and tablets. The platform needs to be responsive and accessible across these devices.

- Payment gateways and financial transactions are assumed to function reliably to facilitate course enrollment. We will only be implementing a mock-up payment system to show how course registration works, not a fully-fledged and secure system as this is not possible within the time limit.
- User-generated content, such as job listings and candidate profiles, is assumed to be accurate and authentic. We will not have mechanisms to detect false information.

## Milestones



## Requirements

Requirement	Stakeholder	User Story	Importance	Jira Issue	Notes
Allow job-seekers to select interview dates on the platform.	Job-seekers	As a job-seeker, I want to schedule interviews with potential employers conveniently through the platform.	HIGH	<input checked="" type="checkbox"/> CMM20EP-16: As a job-seeker, I want to schedule interviews with potential employers conveniently through the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Provide a user-friendly interface.	Learners	As a low-tech learner, I would like to have a simple and user-friendly interface.	MEDIUM	<input checked="" type="checkbox"/> CMM20EP-17: As a low-tech user, I would like to have a simple and user-friendly interface. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Provide an authentication mechanism for employers.	Employers	As an employer, I want to create and log into an account that represents my company in order to use the platform.	HIGH	<input checked="" type="checkbox"/> CMM20EP-18: As an employer, I want to create and log into an account that represents my company in order to use the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow employers to write, edit, and publish job postings through an interface similar to Docs or Word.	Employers	As an employer, I want to write, publish, and edit job postings for my company without having to write custom HTML/CSS/etc.	HIGH	<input checked="" type="checkbox"/> CMM20EP-19: As an employer, I want to write, publish, and edit job postings for my company. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow employers to view and modify their profile page, which represent their companies.	Employers	As an employer, I want to be able to view and modify my company's profile page.	MEDIUM	<input checked="" type="checkbox"/> CMM20EP-20: As an employer, I want to be able to view and modify my company's profile page. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow employers to give candidates a list of available interview dates to choose from.	Employers	As an employer, I want to set a list of interview dates for my candidates to choose from.	HIGH	<input checked="" type="checkbox"/> CMM20EP-21: As an employer, I want to set a list of interview dates for my candidates to choose from (if I interview in person). <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Present employers a list of applied candidates and options to sort and filter them.	Employers	As an employer, I want to see a list of all candidates who have applied to my company in one place. I also want to sort and filter this list based on certain criteria.	HIGH	<input checked="" type="checkbox"/> CMM20EP-22: As an employer, I want to see a list of all applications to my company in one place. <span style="border: 1px solid green; padding: 2px;">DONE</span>	

Present employers a list of interview dates that their candidates have accepted.	Employers	As an employer, I want to see a list containing the interview dates my candidates have chosen.	HIGH	<input checked="" type="checkbox"/> CMM20EP-23: As an employer, I want to see a list containing the interview dates my candidates have chosen. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Provide English language support for the website.	Employers	As an employer coming from Australia, I want to be able to use the website in English.	MEDIUM	<input checked="" type="checkbox"/> CMM20EP-24: As an employer coming from Australia, I want to be able to use the website in English. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow employers to see the profiles of their candidates (only public information should be displayed.)	Employers	As an employer, I want to be able to see the public profile of my candidates so that I can understand them better.	LOW	<input checked="" type="checkbox"/> CMM20EP-25: As an employer, I want to be able to see the public profile of my candidates so that I can understand them better. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow employers to update the status of applications to their companies (reviewing/rejected/selected/etc.)	Employers	As an employer, I want to be able to mark the applications as rejected/selected/etc.	HIGH	<input checked="" type="checkbox"/> CMM20EP-26: As an employer, I want to be able to mark the application to my company as rejected/rejected/etc. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Provide an authentication mechanism to learners and job-seekers.	Learners, job-seekers	As a learner and/or job-seeker, I want to create and log into a user account so that I can use the platform.	HIGH	<input checked="" type="checkbox"/> CMM20EP-27: As a learner and/or job-seeker, I want to create and log into a user account so that I can use the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Present a list of available training courses to learners.	Learners	As a learner, I want to see the list of available training courses offered by the platform.	HIGH	<input checked="" type="checkbox"/> CMM20EP-28: As a learner, I want to see the list of available training courses offered by the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Present the details of each training course to learners.	Learners	As a learner, I want to see the details of each course listed on the platform.	HIGH	<input checked="" type="checkbox"/> CMM20EP-29: As a learner, I want to see the details of each course listed on the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow learners to register courses.	Learners	As a learner, I want to be able to register to courses offered by the platform.	HIGH	<input checked="" type="checkbox"/> CMM20EP-30: As a learner, I want to be able to register to courses offered by the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Keep track of the courses learners are taking or have completed successfully in their profiles.	Learners	As a learner, I want the platform to record the courses I am taking/have completed successfully so that I can show them to future employers.	MEDIUM	<input checked="" type="checkbox"/> CMM20EP-31: As a learner, I want the platform to record the courses I am taking/have completed successfully so that I can show them to future employers. <span style="border: 1px solid green; padding: 2px;">DONE</span>	

Provide Vietnamese language support for the website.	Learners, job-seekers	As a learner and/or job-seeker from Vietnam, I want to be able to use the platform in Vietnamese.	LOW	<input checked="" type="checkbox"/> CMM20EP-32: As a learner and/or job-seeker from Vietnam, I want to be able to use the platform in Vietnamese. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Implement a job search engine that can filter jobs by the criteria specified by the user.	Job-seekers	As a job-seeker, I want to be able to search for jobs based on certain criteria so that I can find the jobs best suited for me.	HIGH	<input checked="" type="checkbox"/> CMM20EP-33: As a job-seeker, I want to be able to search for jobs based on certain criteria so that I can find the jobs best suited for me. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow users to submit information (personal information, documents, short answer questions, etc.) for the job application.	Job-seekers	As a job-seeker, I want to be able to provide all the necessary information required by the job application through the platform.	HIGH	<input checked="" type="checkbox"/> CMM20EP-34: As a job-seeker, I want to be able to make and submit a job application through the platform. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
List the jobs a user has applied to along with their status and interview dates (if applicable.)	Job-seekers	As a job-seeker, I want to see a list of all the jobs I have applied to, their status, and upcoming interview dates.	HIGH	<input checked="" type="checkbox"/> CMM20EP-35: As a job-seeker, I want to see a list of all the jobs I have applied to, their status, and upcoming interview dates. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow users to view and modify their personal profiles.	Job-seekers	As a job-seeker, I want to view and edit my personal user profile so that I can present this information to future employers.	HIGH	<input checked="" type="checkbox"/> CMM20EP-36: As a job-seeker, I want to view and edit my personal user profile so that I can present this information to future employers. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow job-seekers to read job descriptions posted by employers.	Job-seekers	As a job-seeker, I want to be able to see detailed job descriptions so I can decide which jobs are suitable for me.	HIGH	<input checked="" type="checkbox"/> CMM20EP-37: As a job-seeker, I want to be able to see the detailed description of any given job to decide if it is suitable for me. <span style="border: 1px solid green; padding: 2px;">DONE</span>	
Allow job-seekers to save job postings to their profile.	Job-seekers	As a job-seeker, I want to be able to save jobs that I am interested in for future consideration.	MEDIUM	<input checked="" type="checkbox"/> CMM20EP-38: As a job-seeker, I want to be able to save jobs that I am interested in for future consideration. <span style="border: 1px solid green; padding: 2px;">DONE</span>	



## User interaction and design

- Database:  [Database documentation](#)

## Open Questions

Question	Answer	Date Answered
How might we ensure data security and privacy for user	We will use Auth0 for user authentication. Auth0 is a secure and industry-standard third-	Oct 5, 2023

profiles?	party service that supports a wide range of login options such as Email/Password or Google account.	
How might we encourage users to provide feedback on their experience on the platform?	We can design a Contact page where users can send us questions and feedback.	Oct 5, 2023
How do we enable multiple employers having different accounts to edit job postings of the same company?	No, we will not allow this. There should only be one account that writes job postings for each company.	Oct 12, 2023

## ⚠️ Out of Scope

- A secure payment system for course registration.
- A mechanism to easily add more training courses in the future.
- Search engine optimization (SEO) for the website.

## Member profiles

Find out more about each member here! 

- [!\[\]\(d6c7b7ea5a7d3229376a78904696c6f2\_img.jpg\) Ta Quang Tung](#)
- [!\[\]\(80760c7ee1a87d7f5bc5f0e0571e203c\_img.jpg\) Tran Hoang Hai Anh](#)
- [!\[\]\(874a5e026ce238e3886ce475895194b1\_img.jpg\) Nguyen Tran Quang Minh](#)
- [!\[\]\(6bc4d3a16dfaf0906ba28070f1ec3b70\_img.jpg\) Phan Sy Tuan](#)
- [!\[\]\(c167b2569d70971ecb42a936bce94c14\_img.jpg\) Nguyen Quang Huy](#)

## Ta Quang Tung

### Skills and knowledge

What do you bring to the table? Show that you are an invaluable asset to the team!

<b>Technical skills/knowledge</b>	<ul style="list-style-type: none"><li>• Programming languages: JavaScript (TypeScript), C#.</li><li>• Full-stack web development with the following tools: ReactJS, TailwindCSS, NodeJS, Express.js, MySQL, PHP.</li><li>• Familiarity with OOP and design patterns.</li><li>• Familiarity with Git and GitHub.</li></ul>
<b>Soft skills/knowledge</b>	<ul style="list-style-type: none"><li>• Excellent English proficiency. Good listening, reading, and writing skills.</li><li>• Previous experience leading small student groups.</li><li>• Quite good communication skills.</li></ul>

### Teamwork preferences

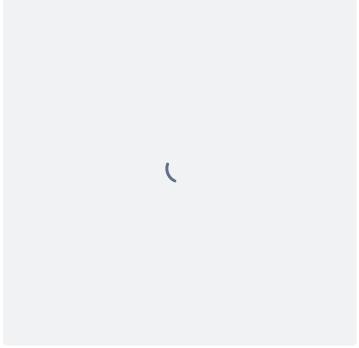
What is your ideal team?

<b>Environments I like to work in</b>	The ones that: <ul style="list-style-type: none"><li>• Support and encourage learning.</li><li>• Accept differences.</li><li>• Make me feel comfortable being myself.</li><li>• Breed discussion and idea exchange, not just about work but also about other random things.</li></ul>
<b>Preferred working hours</b>	Daytime (9 A.M. to 5 P.M.) and evening (8 P.M. to 10 P.M.) on some days.
<b>Communication preferences</b>	Texting on Messenger or Zalo.
<b>Preferred ways to receive feedback</b>	Through text or private meetings.

### Personal questions

We're going to work together for 12 weeks straight. To make things more fun, it will be great if we know a little more about each other.

<b>Things I need</b>	To have: My phone, my laptop, a pencil and a notebook, and my music library.  To learn: Data structures and algorithms, some AI/ML stuff, another language, articulation skills.
<b>How I learn best</b>	When I am genuinely interested in a topic and have a detailed plan on how to approach my learning.
<b>Things I struggle with</b>	Perfectionism and withholding work just to make it perfect.
<b>Things I love</b>	<ul style="list-style-type: none"><li>• Taylor Swift.</li><li>• Listening to new music.</li></ul>

	<ul style="list-style-type: none"> <li>• Learning a language.</li> <li>• That feeling when I solve a problem after thinking hard for a while.</li> <li>• Being able to articulately express my ideas.</li> <li>• Fantasizing about literally anything and seeing my life as a grand movie.</li> </ul>
If I were an animated gif/meme/animal/song, I would be...	 <p>It's great to be everything.</p>
My favorite saying(s)	<p>“Never be ashamed of trying. Effortlessness is a myth.” - Taylor Swift</p> <p>“The worst kind of person is someone who makes someone feel bad, dumb, or stupid for being excited about something.” - Taylor Swift</p>
Other things I want you to know about me	I am a Swiftie if you cannot tell by now. I would like to try archery so if you have any experience please contact me :)

## Nguyen Quang Huy

### Skills and knowledge

What do you bring to the table? Show that you are an invaluable asset to the team!

<b>Technical skills/knowledge</b>	<ul style="list-style-type: none"><li>• Programming languages: Ruby, Python, C#, Java.</li><li>• Back-end development: PHP and MySQL.</li><li>• Have prior experience with database management.</li><li>• Mastering in using collaborative tools for coding (Live Share) and information tracking applications (Onenote, notepad,...).</li></ul>
<b>Soft skills/knowledge</b>	<ul style="list-style-type: none"><li>• Attentive and punctual.</li><li>• Good typing and listening skills.</li><li>• Have a good memory.</li><li>• Open-minded and willing to assist other member.</li></ul>

### Teamwork preferences

What is your ideal team?

<b>Environments I like to work in</b>	<ul style="list-style-type: none"><li>• Supportive and motivative environment</li><li>• Helpful and responsive team members</li><li>• All the member should be on time</li></ul>
<b>Preferred working hours</b>	<ul style="list-style-type: none"><li>• 8PM- 12AM everyday</li><li>• 9AM - 12PM everyday ( except Friday and Saturday)</li></ul>
<b>Communication preferences</b>	Messenger > Zalo > Instagram
<b>Preferred ways to receive feedback</b>	Direct message via Messenger or in the team meeting

### Personal questions

<b>Things I need</b>	My computer, notes and maybe some helps from my teammates.
<b>How I learn best</b>	I will learn best when knowing what I have to do and be a part of a collaborative team.
<b>Things I struggle with</b>	Database is not my expertise so I feel a little bit uncomfortable when working with it. However, I will try my best to handle this topic in this semester.
<b>Things I love</b>	<p>There are some of my favorites:</p> <ul style="list-style-type: none"><li>• Listening to music (I listen to popular songs only so don't force me to listen the whole album 😊)</li><li>• Playing mobile games</li><li>• Gym</li><li>• Travelling</li></ul>

If I were an animated gif/meme/animal/song,  
I would be...



i wish i was a cat,  
no school, no works,  
just meow meow

I am lazy

**My favorite saying**

"Nothing is impossible"

**Other things I want you to know about me**

If you want to see me more often you should apply  
Swinburne Green and Blue.



## 🛠 Skills and knowledge

What do you bring to the table? Show that you are an invaluable asset to the team!

<b>Technical skills/knowledge</b>	Profesional in Python language Phenomenal skills in HTML and CSS as well as Javascript web coding Can use fluently AWS Cloud Computing System without any issues
<b>Soft skills/knowledge</b>	Great at Teamwork Excellent in Communication World class Problem Solving techniques

## ⌚Teamwork preferences

<b>Environments I like to work in</b>	<ul style="list-style-type: none"><li>Helpful and friendly group</li><li>Hardworking and respectful teammates</li><li>Every member try their best</li></ul>
<b>Preferred working hours</b>	<ul style="list-style-type: none"><li>8AM- 12PM weekday</li><li>1PM - 5PM weekday</li></ul>
<b>Communication preferences</b>	Messenger
<b>Preferred ways to receive feedback</b>	Via messenger or google meet

## 🔒Personal questions

<b>Things I need</b>	An simple but effective solutions for every challanges in this unit
<b>How I learn best</b>	Doing or learning in a logical way
<b>Things I struggle with</b>	Doing writting tasks which i'm not that good
<b>Things I love</b>	Sleeping
<b>If I were an animated gif/meme/animal/song, I would be...</b>	Tien Quan Ca
<b>My favorite saying</b>	"Im too sleepy"
<b>Other things I want you to know about me</b>	I love to learn Japanese



Phan Sy Tuan

## 🛠 Skills and knowledge

What do you bring to the table? Show that you are an invaluable asset to the team!

<b>Technical skills/knowledge</b>	Programming languages: JavaScript, C#, Ruby. Front-end web development Knowledge about OOP and design patterns.
<b>Soft skills/knowledge</b>	Good English proficiency. Good listening, reading, and writing skills. Good communication skills.

## ⌚Teamwork preferences

<b>Environments I like to work in</b>	<ul style="list-style-type: none"><li>Supportive and motivative environment</li><li>Helpful and responsive team members</li><li>All the member should be on time</li></ul>
<b>Preferred working hours</b>	<ul style="list-style-type: none"><li>Daytime (9 A.M. to 5 P.M.) and night time (8 P.M. to 10 P.M.) everyday.</li></ul>
<b>Communication preferences</b>	Messenger & Zalo & Google Meet
<b>Preferred ways to receive feedback</b>	Direct message via Messenger or in the team meeting

## 🔒Personal questions

<b>Things I need</b>	Resources: Ensure access to the necessary resources, including hardware, software, tools, and any additional materials required for my project.
<b>How I learn best</b>	I will learn best when having reason for what I am going to do or when I am genuinely interested in a topic.
<b>Things I struggle with</b>	I'm not particularly skilled in data structures, so I do experience some unease when dealing with them. Nevertheless, I'm committed to making an earnest effort to grasp this subject during the current semester.
<b>Things I love</b>	There are some of my favorites: <ul style="list-style-type: none"><li>Listening to music</li><li>Coding</li><li>Gym</li><li>Travelling</li></ul>

If I were an animated gif/meme/animal/song,  
I would be...



when you are naturally funny because your life is a joke.

**My favorite saying**

"Talk is cheap!" Just do it.

**Other things I want you to know about me**

Nothing br.



## 🛠 Skills and knowledge

What do you bring to the table? Show that you are an invaluable asset to the team!

<b>Technical skills/knowledge</b>	As a database designer, I can create and optimize database structures, data security, and query performance. Also, I can contribute proficiency in HTML, CSS, JavaScript, and UI/UX design, ensuring an appealing, responsive, and user-friendly web interface as a frontend designer.
<b>Soft skills/knowledge</b>	In order to accomplish my role, I possess strong communication and collaboration skills to work effectively within cross-functional teams. Effective problem-solving and creativity are also crucial soft skills to tackle complex design challenges and deliver user-centered solutions.

## Teamwork preferences

<b>Environments I like to work in</b>	<ol style="list-style-type: none"> <li>1. Foster and motivate continuous learning.</li> <li>2. Embrace diversity and individual differences.</li> <li>3. Create a comfortable space for you to express your true self.</li> <li>4. Promote open discussions and the exchange of ideas, not limited to work but also encompassing various topics.</li> </ol>
<b>Preferred working hours</b>	Available from 8 A.M to 5 P.M daytime and 9 P.M to 11 P.M night time
<b>Communication preferences</b>	Contact through Messenger or Zalo.
<b>Preferred ways to receive feedback</b>	Through chatbox or meetings.

## Personal questions

We're going to work together for 12 weeks straight. To make things more fun, it will be great if we know a little more about each other.

<b>Things I need</b>	My phone, my laptop, a pen, a notebook, and headphone in case I need some music to stay focused.
<b>How I learn best</b>	When I have enough energy to focus on the work and have resources related.
<b>Things I struggle with</b>	Resource limitations is the struggle I may face with. This constraint can impact the ability to implement specific design elements effectively, requiring creative solutions or alternative approaches to address project requirements within these limitations.
<b>Things I love</b>	<ul style="list-style-type: none"> <li>• Reading to motivation quotes.</li> </ul>

	<ul style="list-style-type: none"> <li>• Watching an insightful movie.</li> <li>• Reading self-help books.</li> <li>• Hitting the GYM.</li> <li>• Having deep conversation with family and friends.</li> </ul>
If I were an animated gif/meme/animal/song, I would be...	 <p>The Gif says it all</p>
My favorite saying(s)	<p>"Glory is fleeting, but obscurity is forever." - Napoleon Bonaparte</p> <p>"Give me six hours to chop down a tree and I will spend the first four sharpening the ax." - Abraham Lincoln</p>
Other things I want you to know about me	Please contact if you want to know more about me.

# Meeting notes

[Create meeting note](#)

## Incomplete tasks from meetings

### Task report

Looking good, no incomplete tasks.

## Decisions from meetings

Page Title	Decisions
<a href="#">2023-11-23 Meeting notes</a>	<ul style="list-style-type: none"><li>👉 The presentation will be recorded at home, with each member recording their own parts before being edited into one video.</li><li>👉 Everything should be submitted at least 1 hour before the deadline on Sunday.</li></ul>
<a href="#">2023-11-16 Meeting notes</a>	<ul style="list-style-type: none"><li>👉 We will not make any IoT contributions to the project.</li><li>👉 For Cybersecurity, we will use Auth0 to add authentication to the website.</li></ul>
<a href="#">2023-11-09 Meeting notes</a>	<ul style="list-style-type: none"><li>👉 The Software Development contribution is to build a web application based on the database, using the WAMP stack.</li><li>👉 The frontend of the website will be designed with Bootstrap and additional CSS.</li><li>👉 The backend of the website will be written in PHP, use a routing library, and use Composer as a package manager.</li></ul>
<a href="#">2023-11-02 Meeting notes</a>	<ul style="list-style-type: none"><li>👉 Document use cases and their need for indexing in Confluence, explaining potential attributes that might require indexing and whether the created indexes were used.</li><li>👉 Upload the latest structure of the database (excluding the data) in Confluence.</li><li>👉 Ensure that the Jira backlog accurately reflects the tasks to be completed after the workshop for the project submission.</li></ul>
<a href="#">2023-10-5 Meeting notes</a>	<ul style="list-style-type: none"><li>👉 The chosen naming convention will be applied consistently to the project database.</li><li>👉 Constraints will be added to user stories/requirements to enhance data integrity.</li><li>👉 Many-to-many relationships will be resolved.</li></ul>

	<ul style="list-style-type: none"> <li>👉 Denormalization, if deemed necessary, will be supported by documented reasoning, including the consequences of database usage.</li> </ul>
📅 2023-10-26 Meeting notes	<ul style="list-style-type: none"> <li>👉 Document use cases in Confluence, explaining the user scenarios and the corresponding SQL statements. Include discussions on the need for transactions with each use case.</li> <li>👉 Ensure that the Jira backlog accurately reflects the tasks to be completed after the workshop for the project submission.</li> </ul>
📅 2023-10-19 Meeting notes	<ul style="list-style-type: none"> <li>👉 Document the process in Confluence and include these details in the final project submission.</li> <li>👉 Ensure that the Jira backlog accurately reflects the tasks to be completed after the workshop for the project submission.</li> </ul>
📅 2023-10-12 Meeting notes	<ul style="list-style-type: none"> <li>👉 Include the documentation of the physical database in Confluence as part of the final project submission.</li> <li>👉 Update the Jira backlog to ensure that the progress of the workshop activities is accurately reflected for the project submission.</li> </ul>
📅 2023-09-28 Meeting notes	<ul style="list-style-type: none"> <li>👉 The ER diagram draft will be completed by the end of the week.</li> <li>👉 Persona and Empathy maps will be finalized and their insights shared.</li> <li>👉 User stories will be written for various features, and the Product Requirements page will be completed.</li> <li>👉 Confluence pages will be finalized and prepared for submission in the Project Proposal.</li> </ul>
📅 2023-09-21 Meeting notes	<ul style="list-style-type: none"> <li>👉 The team will utilize <a href="#">Flowchart Maker &amp; Online Diagram Software</a> for creating ER diagrams.</li> <li>👉 The ER diagram design for the business' database will commence with Tung as the lead.</li> <li>👉 Backlog items from the first 2 weeks have been reviewed and prioritized for completion.</li> </ul>
📅 2023-09-14 Meeting notes	<ul style="list-style-type: none"> <li>👉 The project plan will be completed based on the discussion and shared with the team.</li> <li>👉 Roles and responsibilities have been assigned to team members to ensure clarity.</li> <li>👉 A risk assessment matrix has been developed to manage potential project risks.</li> <li>👉 Jira will be used as the project management tool, and the setup process will commence.</li> </ul>

### 2023-09-07 Meeting notes

👉 The team will hold a team-building event next month to improve cohesion.

👉 The revised team agreement is accepted and will be followed by all team members.

👉 Confluence will be adopted as the team's collaboration tool.

👉 Regular check-in meetings will be scheduled to address team issues.

## All meeting notes

Title	Creator	Modified
<a href="#">2023-11-16 Meeting notes</a>	Nguyen Quang Huy (Swinburne HN)	Nov 23, 2023
<a href="#">2023-11-09 Meeting notes</a>	Nguyen Tran Quang Minh (Swinburne HN)	Nov 23, 2023
<a href="#">2023-11-23 Meeting notes</a>	Hải Anh Trần Hoàng	Nov 23, 2023
<a href="#">2023-11-02 Meeting notes</a>	Nguyen Tran Quang Minh (Swinburne HN)	Nov 23, 2023
<a href="#">2023-10-26 Meeting notes</a>	Nguyen Tran Quang Minh (Swinburne HN)	Nov 23, 2023
<a href="#">2023-10-19 Meeting notes</a>	Tung Ta Quang	Nov 23, 2023
<a href="#">2023-10-12 Meeting notes</a>	Tung Ta Quang	Nov 23, 2023
<a href="#">2023-10-5 Meeting notes</a>	Tung Ta Quang	Nov 23, 2023
<a href="#">2023-09-28 Meeting notes</a>	Tung Ta Quang	Nov 23, 2023
<a href="#">2023-09-21 Meeting notes</a>	Tung Ta Quang	Nov 23, 2023
<a href="#">2023-09-14 Meeting notes</a>	Hải Anh Trần Hoàng	Nov 23, 2023
<a href="#">2023-09-07 Meeting notes</a>	Tung Ta Quang	Nov 23, 2023

# 2023-09-07 Meeting notes

## Date

Sep 7, 2023

## Participants

- @Tung Ta Quang
- @Hải Anh Trần Hoàng
- @Nguyen Quang Huy (Swinburne HN)
- @SY TUAN PHAN
- @Nguyen Tran Quang Minh (Swinburne HN)

## Goals

- Identify team building strategies.
- Establish a team agreement.
- Discuss the use of Confluence.
- Address any team-related details or issues.

## Discussion topics

Time	Item	Presenter	Notes
3:00PM	Team Building	Tung	<ul style="list-style-type: none"><li>• Discussed team bonding activities.</li><li>• Brainstormed ways to improve team cohesion.</li></ul>
3:30PM	Team Agreement	Tung	<ul style="list-style-type: none"><li>• Reviewed and revised team norms and expectations.</li><li>• Discussed consequences for not meeting team norms.</li><li>• Everyone agreed to the updated team agreement.</li></ul>
4:00PM	Confluence	Dr. Dai	<ul style="list-style-type: none"><li>• Introduced Confluence as a collaboration tool.</li><li>• Demonstrated its features and benefits.</li></ul>

## Action items

- @Tung Ta Quang organize and plan the team-building event for next month.
- @Nguyen Quang Huy (Swinburne HN) circulate the revised team agreement for everyone's acknowledgment.
- @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) @Hải Anh Trần Hoàng @SY TUAN PHAN set up Confluence accounts and provide training materials.
- @Nguyen Quang Huy (Swinburne HN) schedule regular check-in meetings to address team issues.

## Decisions

👉 The team will hold a team-building event next month to improve cohesion.

👉 The revised team agreement is accepted and will be followed by all team members.

 Confluence will be adopted as the team's collaboration tool.

 Regular check-in meetings will be scheduled to address team issues.

# 2023-09-14 Meeting notes

## Date

Sep 14, 2023

## Participants

- @Hải Anh Trần Hoàng
- @Tung Ta Quang
- @Nguyen Tran Quang Minh (Swinburne HN)
- @SY TUAN PHAN
- @Nguyen Quang Huy (Swinburne HN)

## Goals

- Discuss the project brief and finish the project plan
- Allocate roles and responsibilities to team members
- Develop the risk assessment matrix
- Set up Jira

## Discussion topics

Time	Item	Presenter	Notes
3:00PM	Project Brief and Project Plan	Tung	<ul style="list-style-type: none"><li>Reviewed the project brief.</li><li>Discussed key project milestones and deadlines.</li><li>Brainstormed ideas to complete the project plan.</li></ul>
3:15PM	Allocation of Roles and Responsibilities	Hai Anh	<ul style="list-style-type: none"><li>Discussed the skillsets of team members.</li><li>Assigned specific roles and responsibilities.</li><li>Emphasized the importance of clear expectations.</li></ul>
3:30PM	Risk Assessment Matrix	Tuan, Minh	<ul style="list-style-type: none"><li>Discussed potential project risks.</li><li>Identified risk mitigation strategies.</li><li>Developed a risk assessment matrix.</li></ul>
4:00PM	Setting up Jira	Tung	<ul style="list-style-type: none"><li>Introduced Jira as a project management tool.</li><li>Discussed the benefits of using Jira.</li><li>Outlined steps to set up Jira for the project.</li></ul>

## Action items

- @Tung Ta Quang finalize the project plan and share it with the team.
- @Nguyen Quang Huy (Swinburne HN) @Hải Anh Trần Hoàng distribute a document outlining each team member's roles and responsibilities.
- @Nguyen Tran Quang Minh (Swinburne HN) @SY TUAN PHAN create and share the risk assessment matrix with the team.
- @Tung Ta Quang initiate the process of setting up Jira for the project.

## Decisions

- 👉 The project plan will be completed based on the discussion and shared with the team.
- 👉 Roles and responsibilities have been assigned to team members to ensure clarity.
- 👉 A risk assessment matrix has been developed to manage potential project risks.
- 👉 Jira will be used as the project management tool, and the setup process will commence.

# 2023-09-21 Meeting notes

## Date

Sep 21, 2023

## Participants

- @Tung Ta Quang
- @Nguyen Quang Huy (Swinburne HN)
- @Nguyen Tran Quang Minh (Swinburne HN)
- @Hải Anh Trần Hoàng
- @SY TUAN PHAN

## Goals

- Learn how to draw ER diagrams with draw.io.
- Design the ER diagram for the business' database.
- Complete any backlog from the first 2 weeks.

## Discussion topics

Time	Item	Presenter	Notes
2:30PM	Learning <a href="#">Flowchart Maker &amp; Online Diagram Software</a> for ER Diagrams	Tung	<ul style="list-style-type: none"><li>• Introduced <a href="#">Flowchart Maker &amp; Online Diagram Software</a> as a tool for ER diagram creation.</li><li>• Discussed key features and functionalities of <a href="#">Flowchart Maker &amp; Online Diagram Software</a>.</li><li>• Shared resources for learning <a href="#">Flowchart Maker &amp; Online Diagram Software</a> efficiently.</li></ul>
3:00PM	ER Diagram Design	Tung, Huy	<ul style="list-style-type: none"><li>• Presented the requirements for the business' database.</li><li>• Discussed the structure and entities for the ER diagram.</li><li>• Brainstormed ideas and design concepts for the ER diagram.</li></ul>
3:30PM	Backlog Review and Prioritization	Huy, Hai Anh	<ul style="list-style-type: none"><li>• Reviewed the backlog from the first 2 weeks of the project.</li><li>• Identified incomplete tasks and their current status.</li><li>• Prioritized backlog items based on project needs.</li></ul>

## Missed deadlines

Item	Responsible	Reason	Action
Risk assessment matrix	@Nguyen Tran Quang Minh (Swinburne HN) @SY TUAN PHAN	Not fully understanding the project's	<input checked="" type="checkbox"/> @Tung Ta Quang discuss again with

		requirements and needing more time.	the team what we will do.
Roles and responsibilities	@Hải Anh Trần Hoàng @Nguyen Quang Huy (Swinburne HN)	Not yet clear on who does what in the team.	<input checked="" type="checkbox"/> @Tung Ta Quang clarify members' roles and responsibilities during this meeting.

## ✓ Action items

- @Tung Ta Quang lead a session on learning [Flowchart Maker & Online Diagram Software](#) for ER diagrams and share relevant resources.
- @Tung Ta Quang start the design process of the ER diagram for the business' database and keep the team updated.
- @Tung Ta Quang prioritize and assign backlog items from the first 2 weeks, ensuring they are completed.

## -Decisions

👉 The team will utilize [Flowchart Maker & Online Diagram Software](#) for creating ER diagrams.

👉 The ER diagram design for the business' database will commence with Tung as the lead.

👉 Backlog items from the first 2 weeks have been reviewed and prioritized for completion.

# 2023-09-28 Meeting notes

## Date

Sep 28, 2023

## Participants

- @Tung Ta Quang
- @Nguyen Quang Huy (Swinburne HN)
- @Nguyen Tran Quang Minh (Swinburne HN)
- @Hải Anh Trần Hoàng
- @SY TUAN PHAN

## Goals

- Finish the first draft of the ER diagram.
- Complete the Persona and Empathy maps.
- Write user stories and complete the Product Requirements page.
- Finalize Confluence pages to prepare for the Project Proposal submission.

## Discussion topics

Time	Item	Presenter	Notes
2:00PM	ER Diagram Draft	Hai Anh	<ul style="list-style-type: none"><li>• Discussed progress on the ER diagram design.</li><li>• Addressed any challenges and sought input from the team.</li><li>• Agreed to aim for completion by the end of the day.</li></ul>
3:00PM	Persona and Empathy Maps	Minh, Huy	<ul style="list-style-type: none"><li>• Reviewed the purpose of creating Persona and Empathy maps.</li><li>• Shared progress on creating these visual representations.</li><li>• Discussed any insights gained from the mapping exercise.</li></ul>
4:00PM	User Stories and Product Requirements Page	Tuan, Huy	<ul style="list-style-type: none"><li>• Defined the structure and format for user stories.</li><li>• Assigned team members to write user stories for different features.</li><li>• Discussed the content and sections of the Product Requirements page.</li></ul>
4:30PM	Finalizing Confluence Pages for Proposal	Tung	<ul style="list-style-type: none"><li>• Reviewed the content of Confluence pages for the proposal.</li><li>• Checked for consistency, completeness, and formatting.</li><li>• Addressed any missing information.</li></ul>

## Action items

- @Hải Anh Trần Hoàng complete the first draft of the ER diagram.
- @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) finalize Persona and Empathy maps and share insights with the team.
- @Tung Ta Quang @SY TUAN PHAN oversee the writing of user stories and complete the Product Requirements page.
- @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) make necessary revisions and finalize Confluence pages for the Project Proposal submission.

## Decisions

-  The ER diagram draft will be completed by the end of the week.
-  Persona and Empathy maps will be finalized and their insights shared.
-  User stories will be written for various features, and the Product Requirements page will be completed.
-  Confluence pages will be finalized and prepared for submission in the Project Proposal.

# 2023-10-5 Meeting notes

## Date

Oct 5, 2023

## Participants

- @Tung Ta Quang
- @Nguyen Quang Huy (Swinburne HN)
- @Nguyen Tran Quang Minh (Swinburne HN)
- @Hải Anh Trần Hoàng
- @SY TUAN PHAN

## Goals

- Ensure the project database follows a chosen naming convention.
- Review user stories/requirements for the need to add constraints.
- Identify and resolve many-to-many relationships in the database.
- Assess the database for the third normal form and provide reasoning for any denormalization, along with its consequences.

## Discussion topics

Time	Item	Presenter	Notes
2:00PM	Naming Convention for the Database	Huy, Minh	<ul style="list-style-type: none"><li>• Discussed and decided on the naming convention for the project database.</li><li>• Ensured the team understands and follows the chosen convention.</li></ul>
2:30PM	User Stories and Constraints	Hai Anh, Tuan	<ul style="list-style-type: none"><li>• Reviewed user stories/requirements for potential constraints.</li><li>• Discussed constraints to be added to enhance data integrity.</li></ul>
3:00PM	Many-to-Many Relationships	Tung	<ul style="list-style-type: none"><li>• Identified many-to-many relationships in the database.</li><li>• Discussed resolution strategies for these relationships.</li></ul>
4:00PM	Database Normalization and Denormalization	Tung, Huy	<ul style="list-style-type: none"><li>• Assessed the database for third normal form.</li><li>• Provided arguments for denormalization when necessary.</li><li>• Discussed the consequences of denormalization on database usage.</li></ul>

## Action items

- ✓ @Hải Anh Trần Hoàng ensure the project database follows the chosen naming convention.
- ✓ @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) update user stories/requirements with necessary constraints.

- @Tung Ta Quang resolve identified many-to-many relationships in the database.
- @Nguyen Tran Quang Minh (Swinburne HN) @SY TUAN PHAN document reasoning for denormalization (if required) and its consequences for the use of the database.

## Decisions

-  The chosen naming convention will be applied consistently to the project database.
-  Constraints will be added to user stories/requirements to enhance data integrity.
-  Many-to-many relationships will be resolved.
-  Denormalization, if deemed necessary, will be supported by documented reasoning, including the consequences of database usage.

# 2023-10-12 Meeting notes

## Date

Oct 12, 2023

## Participants

- [@Tung Ta Quang](#)
- [@Nguyen Quang Huy \(Swinburne HN\)](#)
- [@Nguyen Tran Quang Minh \(Swinburne HN\)](#)
- [@Hải Anh Trần Hoàng](#)
- [@SY TUAN PHAN](#)

## Goals

- Create the physical database, including table creation statements, foreign key constraints, integrity constraints, and data types, suitable for implementation in MySQL or an alternative DBMS.
- Execute the scripts generated in Activity 1 against the chosen DBMS to create the physical database.
- Document the physical database in Confluence, potentially using mysqldump or equivalent methods for other DBMS.
- Update the Jira backlog to reflect completed tasks and those remaining.

## Discussion topics

Time	Item	Presenter	Notes
2:00PM	Creating the Physical Database	Huy	<ul style="list-style-type: none"><li>• Discussed the structure of the physical database.</li><li>• Generated table creation statements, constraints, and data types.</li></ul>
3:00PM	Running Database Scripts	Minh	<ul style="list-style-type: none"><li>• Executed the database creation scripts against the chosen DBMS.</li><li>• Ensured the database is successfully implemented.</li></ul>
3:30PM	Documenting in Confluence	Tung, Hai Anh	<ul style="list-style-type: none"><li>• Explored methods for documenting the physical database in Confluence.</li><li>• Used mysqldump (or equivalent) to export database structures.</li></ul>
4:00PM	Updating Jira Backlog	Tuan	<ul style="list-style-type: none"><li>• Reviewed the progress of the workshop activities in Jira.</li><li>• Updated the backlog to reflect completed and remaining tasks.</li></ul>

## Action items

- [@Tung Ta Quang](#) [@Nguyen Quang Huy \(Swinburne HN\)](#) complete the creation of the physical database.
- [@Tung Ta Quang](#) ensure the successful execution of database creation scripts in the chosen DBMS.
- [@Nguyen Tran Quang Minh \(Swinburne HN\)](#) [@SY TUAN PHAN](#) document the physical database in Confluence using mysqldump (or equivalent).

@Hải Anh Trần Hoàng update the Jira backlog to reflect the progress and remaining tasks.

## ⌚ Decisions

👉 Include the documentation of the physical database in Confluence as part of the final project submission.

👉 Update the Jira backlog to ensure that the progress of the workshop activities is accurately reflected for the project submission.

# 2023-10-19 Meeting notes

## Date

Oct 19, 2023

## Participants

- @Tung Ta Quang
- @Nguyen Quang Huy (Swinburne HN)
- @Nguyen Tran Quang Minh (Swinburne HN)
- @Hải Anh Trần Hoàng
- @SY TUAN PHAN

## Goals

- Discuss which attributes in the project database should be nullable.
- Create data for the database using the chosen tool, considering decisions about nullable fields.
- Determine the best method to upload the data into the team database.
- Organize the remaining tasks in the Jira backlog after the workshop.

## Discussion topics

Time	Item	Presenter	Notes
2:00PM	Nullable Attributes in Database	Huy	<ul style="list-style-type: none"><li>• Discussed attributes in the database that should be nullable.</li><li>• Reached a consensus on which fields can allow null values.</li></ul>
3:00PM	Data Creation with Nullable Fields	Minh	<ul style="list-style-type: none"><li>• Used the chosen tool to create data for the database.</li><li>• Ensured that decisions about nullable fields were applied.</li></ul>
3:30PM	Data Upload Strategies	Hai Anh	<ul style="list-style-type: none"><li>• Decided on the best method to upload data into the team database.</li><li>• Ensured a smooth and error-free data transfer process.</li></ul>
3:45PM	Jira Backlog Update	Tuan	<ul style="list-style-type: none"><li>• Reviewed the current Jira backlog to organize remaining tasks.</li><li>• Updated the backlog to reflect post-workshop tasks.</li></ul>

## Action items

- @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) document the decisions about nullable attributes.
- @Tung Ta Quang ensure data creation with considerations for nullable fields.

@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) execute the chosen method to upload data into the team database.

@Hải Anh Trần Hoàng @SY TUAN PHAN update the Jira backlog to organize post-workshop tasks.

## Decisions

👉 Document the process in Confluence and include these details in the final project submission.

👉 Ensure that the Jira backlog accurately reflects the tasks to be completed after the workshop for the project submission.

# 2023-10-26 Meeting notes

## Date

Oct 26, 2023

## Participants

- @Nguyen Tran Quang Minh (Swinburne HN)
- @Tung Ta Quang
- @Nguyen Quang Huy (Swinburne HN)
- @SY TUAN PHAN
- @Hải Anh Trần Hoàng

## Goals

- Collaboratively work on refining use cases and user stories within the group.
- For each use case/user story, define the user scenario.
- Determine the necessary SQL statements (SELECT, INSERT, UPDATE, DELETE) required to achieve the use case.
- Assess the need for transactions and formulate them if necessary.
- Update the Jira backlog to organize post-workshop tasks.

## Discussion topics

Time	Item	Presenter	Notes
2:00PM	Refining Use Cases/User Stories	Huy	<ul style="list-style-type: none"><li>• Collaboratively worked on improving use cases and user stories.</li><li>• Focused on enhancing clarity and specificity in user scenarios.</li></ul>
2:30PM	Defining User Scenarios	Minh	<ul style="list-style-type: none"><li>• Described what a user needs to do for each use case/user story.</li><li>• Ensured that the user scenarios are well-defined and understandable.</li></ul>
3:00PM	SQL Statements for Use Cases	Hai Anh	<ul style="list-style-type: none"><li>• Determined the required SQL statements (SELECT, INSERT, UPDATE, DELETE) for each use case.</li><li>• Ensured that the SQL statements align with the user scenarios.</li></ul>
3:30PM	Transactions and Jira Backlog	Tung	<ul style="list-style-type: none"><li>• Assessed the need for transactions in specific use cases.</li><li>• Formulated transactions where required.</li><li>• Updated the Jira backlog to reflect post-workshop tasks.</li></ul>

## 😞 Missed deadlines

Item	Responsible	Reason	Action
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Generate mock data for the database.	<p><input type="checkbox"/> @Tung Ta Quang  <input type="checkbox"/> @Nguyen Quang Huy (Swinburne HN)  <input type="checkbox"/> @Nguyen Tran Quang Minh (Swinburne HN)</p>	Not familiar with the data creation and cleanup tools.	<p><input checked="" type="checkbox"/> @Tung Ta Quang  <input checked="" type="checkbox"/> @Nguyen Quang Huy (Swinburne HN)  <input checked="" type="checkbox"/> @Nguyen Tran Quang Minh (Swinburne HN) discuss how they will use Mockaroo efficiently.</p> <p><input checked="" type="checkbox"/> @Tung Ta Quang create a C# script to remove rows with repeated unique columns.</p>
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## ✓ Action items

- @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) refine use cases and user stories for improved clarity.
- @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) @Hải Anh Trần Hoàng @SY TUAN PHAN define user scenarios for each use case/user story.
- @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) @Hải Anh Trần Hoàng @SY TUAN PHAN determine the necessary SQL statements for achieving the use cases.
- @Nguyen Quang Huy (Swinburne HN) formulate transactions where necessary.
- @Hải Anh Trần Hoàng @SY TUAN PHAN update the Jira backlog to organize post-workshop tasks.

## ▢ Decisions

- 👉 Document use cases in Confluence, explaining the user scenarios and the corresponding SQL statements. Include discussions on the need for transactions with each use case.
- 👉 Ensure that the Jira backlog accurately reflects the tasks to be completed after the workshop for the project submission.

# 2023-11-02 Meeting notes

## Date

Nov 2, 2023

## Participants

- @Nguyen Tran Quang Minh (Swinburne HN)
- @Tung Ta Quang
- @Nguyen Quang Huy (Swinburne HN)
- @SY TUAN PHAN
- @Hải Anh Trần Hoàng

## Goals

- Identify use cases for potential speed optimization through index creation.
- Formulate and create the necessary indexes in the database.
- Investigate and document the usage of indexes by the DBMS.
- Update the Jira backlog to organize post-workshop tasks and document findings in Confluence.

## Discussion topics

Time	Item	Presenter	Notes
2:00PM	Speed Optimization of Use Cases	Huy	<ul style="list-style-type: none"><li>• Assessed use cases for optimization opportunities.</li><li>• Identified scenarios for index creation to enhance execution.</li></ul>
2:30PM	CREATE INDEX Formulation	Minh	<ul style="list-style-type: none"><li>• Formulated CREATE INDEX statements for identified indexes.</li><li>• Ensured statements aligned with optimization needs.</li></ul>
3:00PM	Index Creation and DBMS Investigation	Tung	<ul style="list-style-type: none"><li>• Created indexes in the database based on formulated statements.</li><li>• Executed statements and investigated DBMS index usage.</li><li>• Documented factors influencing index usage.</li></ul>
3:45PM	Documentation and Backlog Update	Tuan	<ul style="list-style-type: none"><li>• Documented findings in Confluence regarding index usage.</li><li>• Removed unused indexes to optimize database performance.</li><li>• Updated the Jira backlog to organize post-workshop tasks.</li></ul>

## Missed deadlines

Item	Responsible	Reason	Action
Identifying SQL queries for each use case.	@Hải Anh Trần Hoàng @SY TUAN PHAN @Nguyen Tran Quang Minh (Swinburne HN)	Not fully understanding the database & the database has not been finalized.	<input checked="" type="checkbox"/> @Tung Ta Quang finalize the database and explain in detail the tables and relationships. <input checked="" type="checkbox"/> @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) assist the other members in writing SQL queries.

## ✓ Action items

- ✓ @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) identify use cases for potential speed optimization through index creation.
- ✓ @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) formulate and create the necessary indexes in the database.
- ✓ @Nguyen Quang Huy (Swinburne HN) @Nguyen Tran Quang Minh (Swinburne HN) investigate and document the usage of indexes by the DBMS.
- ✓ @Hải Anh Trần Hoàng @SY TUAN PHAN update the Jira backlog to organize post-workshop tasks and document findings in Confluence.

## ⌚ Decisions

- 👉 Document use cases and their need for indexing in Confluence, explaining potential attributes that might require indexing and whether the created indexes were used.
- 👉 Upload the latest structure of the database (excluding the data) in Confluence.
- 👉 Ensure that the Jira backlog accurately reflects the tasks to be completed after the workshop for the project submission.

# 2023-11-09 Meeting notes

## Date

Nov 9, 2023

## Participants

- @Nguyen Tran Quang Minh (Swinburne HN)
- @Tung Ta Quang
- @Hải Anh Trần Hoàng
- @SY TUAN PHAN
- @Nguyen Quang Huy (Swinburne HN)

## Goals

- Explore potential Software Development contributions to the project.
- Complete all unfinished work from previous weeks.

## Discussion topics

Time	Item	Presenter	Notes
3:00PM	Discussing a web application for the project.	Tung	<ul style="list-style-type: none"><li>• Compare the pros and cons of different tech stacks, most notably WAMP and MERN.</li><li>• Decide on which tech stack to use.</li></ul>
3:45PM	Discussing the front-end of the web application.	Minh, Tuan, Hai Anh	<ul style="list-style-type: none"><li>• Compare the various ways to design the frontend of the website.</li><li>• Discuss the UX flow of the website (how the user will navigate across different pages).</li><li>• Decide on the technologies to use.</li></ul>
4:30PM	Discussing the back-end of the web application.	Tung, Huy	<ul style="list-style-type: none"><li>• Discuss and decide the libraries/packages that will be used for the backend.</li><li>• Discuss how the backend will interact with the database.</li></ul>

## Missed deadlines

Item	Responsible	Reason	Action
Indexing the database.	@Tung Ta Quang @Nguyen Quang Huy (Swinburne HN)	Need more time to evaluate the effectiveness of the indexes.	<input checked="" type="checkbox"/> @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) will review the lecture slides, browse online materials, and ask the lecturer/tutor to see when indexes should be added.

## Action items

- @Tung Ta Quang set up the GitHub repository for the project.
- @Nguyen Tran Quang Minh (Swinburne HN) @Hải Anh Trần Hoàng @SY TUAN PHAN design the mockup of the website.
- @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) set up the backend routing and database interaction.
- @Hải Anh Trần Hoàng @SY TUAN PHAN update Jira tasks and Confluence pages.

## Decisions

 The Software Development contribution is to build a web application based on the database, using the WAMP stack.

 The frontend of the website will be designed with Bootstrap and additional CSS.

 The backend of the website will be written in PHP, use a routing library, and use Composer as a package manager.

# 2023-11-16 Meeting notes

## Date

Nov 16, 2023

## Participants

- @Nguyen Quang Huy (Swinburne HN)
- @Tung Ta Quang
- @Nguyen Tran Quang Minh (Swinburne HN)
- @Hải Anh Trần Hoàng
- @SY TUAN PHAN

## Goals

- Explore potential IoT and Cybersecurity contributions to the project.
- Discuss progress on the web application.
- Update the Jira backlog to reflect completed tasks and those remaining.

## Discussion topics

Time	Item	Presenter	Notes
3:00 PM	IoT contributions	Minh, Hai Anh	<ul style="list-style-type: none"><li>• Discuss the IoT technologies that can be used.</li></ul>
3:30 PM	Cybersecurity contributions	Tung, Huy	<ul style="list-style-type: none"><li>• Discuss the Cybersecurity technologies that can be used.</li><li>• Discuss the use of Auth0 for website authentication.</li></ul>
4:00 PM	Progress on web application	Huy, Minh	<ul style="list-style-type: none"><li>• Review the work done by the frontend team.</li><li>• Review the work done by the backend team.</li><li>• Reconcile any disagreements between the front and backend code.</li></ul>
4:40 PM	Update Jira	Sy Tuan	<ul style="list-style-type: none"><li>• Manage and update the status of the previous Jira tasks.</li><li>• Add new tasks related to the function of the website.</li></ul>

## Action items

- ✓ @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) integrate Auth0 to the backend to prevent unauthorized access.
- ✓ @Nguyen Tran Quang Minh (Swinburne HN) @Hải Anh Trần Hoàng ensure a smooth UX flow with Auth0 integrated.
- ✓ @SY TUAN PHAN update Jira timeline and tasks.

## Decisions

👉 We will not make any IoT contributions to the project.

 For Cybersecurity, we will use Auth0 to add authentication to the website.

# 2023-11-23 Meeting notes

## Date

Nov 23, 2023

## Participants

- @Nguyen Tran Quang Minh (Swinburne HN)
- @Tung Ta Quang
- @Nguyen Quang Huy (Swinburne HN)
- @SY TUAN PHAN
- @Hải Anh Trần Hoàng

## Goals

- Finalize and finish the website, checking bugs that still occur in the database and backend.
- Finalize Jira timeline and tasks.
- Finalize the Confluence space, most importantly documenting the database development and major-specific contributions.
- Prepare the project demonstration and presentation.

## Discussion topics

Time	Item	Presenter	Notes
2:30PM	Fix bugs and finalize the website.	Tung	<ul style="list-style-type: none"><li>• Ensure everyone can run the project on their local device. Assist members with setup errors.</li><li>• Make sure the interactions on the site are smooth even though it might not be perfect.</li></ul>
3:30PM	Finalize Jira	Hai Anh, Tuan	<ul style="list-style-type: none"><li>• Check with the tutor to review mistakes on the timeline.</li><li>• Ensure tasks are in the correct sprints and all tasks are assigned to members.</li></ul>
4:00PM	Finalize Confluence	Huy, Tung	<ul style="list-style-type: none"><li>• Identify incomplete documents and assign members to complete them.</li><li>• Ensure all required documents are present for the final report.</li></ul>
4:30PM	Prepare the project presentation	Tung and Minh	<ul style="list-style-type: none"><li>• Decide what to include in the presentation slides.</li><li>• Estimate the speaking length for each presenter.</li><li>• Write presentation draft.</li></ul>

## Action items

- ✓ @Tung Ta Quang ensure the project can be set up and run correctly by all members.
- ✓ @Nguyen Tran Quang Minh (Swinburne HN) @Hải Anh Trần Hoàng @SY TUAN PHAN polish the frontend design.
- ✓ @Tung Ta Quang @Nguyen Quang Huy (Swinburne HN) ensure the backend functions correctly.
- ✓ @Hải Anh Trần Hoàng @SY TUAN PHAN finalize Jira.

- @Nguyen Quang Huy (Swinburne HN) @Tung Ta Quang finalize Confluence.
- @Tung Ta Quang @Nguyen Tran Quang Minh (Swinburne HN) prepare the presentation.

## ⌚ Decisions

👉 The presentation will be recorded at home, with each member recording their own parts before being edited into one video.

👉 Everything should be submitted at least 1 hour before the deadline on Sunday.

# ⌚ Team Health Monitor

Team name	Maverick Mates 2.0
Sponsor	GreeLiving
Health monitor cadence	Biweekly

## 👩‍💻 Team health assessment

With your team, read the definition of each attribute of healthy, high-performing teams out loud. On the count of three have each person rate how they feel the team is doing compared to each definition (thumbs-up/green, thumbs-sideways/yellow, thumbs-down/red). Record the results of each attribute rating in the table. Highlight each cell using this color code: **HEALTHY** = "We're strong here", **BIT SICK** = "We're ok... but a little shaky", **SICK** = "We're not healthy".

Area	Oct 21, 2023		
🚩 Full-time owner	<p><b>BIT SICK</b></p> <p>We all agree that @Tung Ta Quang is the full-time owner of the project, so there is no confusion. However, he is unable to dedicate at least 80% of his time to the project because he has to work on other subjects as well.</p>	<p><b>BIT SICK</b></p> <p>"We're not healthy"</p>	<p><b>HEALTHY</b></p> <p>We're strong here</p>
⚖️ Balanced team	<p><b>HEALTHY</b></p> <p>We have roles and responsibilities clearly defined at the start of the project, and we have adhered to them since. There will be no change in team membership until the end of the project, so we do not have to reallocate roles.</p>	<p><b>BIT SICK</b></p> <p>We're ok... but a little shaky; Some role adjustments are being considered due to unforeseen challenges.</p>	<p><b>HEALTHY</b></p> <p>We're strong here</p>
❤️ Shared understanding	<p><b>HEALTHY</b></p> <p>The team has a common understanding of why they're here, the problem/need, are convinced about the idea, confident they have what they need, and trust each other.</p>	<p><b>BIT SICK</b></p> <p>We're ok... but a little shaky; Communication challenges persist, leading to some uncertainties in project understanding.</p>	<p><b>HEALTHY</b></p> <p>We're strong here</p>

 <b>Value and metrics</b>	<b>HEALTHY</b>  It's clear <b>what success means</b> from a business and user's perspective, and there is a unique value proposition in place for the target users and to the business. Success is defined, with a goal, and how it will be measured.	<b>BIT SICK</b>  We have a clear understanding of the project's success. We have identified user groups and their requirements and defined metrics to measure our success in the Project Requirements page.	<b>HEALTHY</b>  We're ok... but a little shaky; Clear success metrics are outlined, but the team is struggling with consistent progress tracking.	We're strong here; Progress is being tracked effectively, and success metrics remain clear.
 <b>Proof of concept</b>	<b>SICK</b>  Some sort of demonstration has been created and tested, that demonstrates why this problem needs to be solved, and demonstrates its value.	<b>BIT SICK</b>  We are currently working on the first sprint of our project, which hopes to deliver some basic features and set the groundwork for future additions. We have not completed it yet and we are not getting as much client feedback as we should be getting.	<b>BIT SICK</b>  We're ok... but a little shaky; The ongoing sprint is encountering delays and insufficient client feedback, affecting the proof of concept.	<b>HEALTHY</b>  We're strong here
 <b>One-pager</b>	<b>HEALTHY</b>  The <b>project is summarized</b> in a one-pager and shared with anyone so that they understand the purpose of the project, and its value.	<b>BIT SICK</b>  We have summarized our whole project in the  <b>Project plan</b> . Other relevant information is all included in our Confluence space.	<b>BIT SICK</b>  We're ok... but a little shaky; Some stakeholders lack a comprehensive understanding due to gaps in the one-pager.	<b>HEALTHY</b>  We're strong here
 <b>Managed dependencies</b>	<b>BIT SICK</b>  Clear understanding of complexity, infrastructure involved, risks, resources, effort, and timeline. Clear understanding of <b>who we depend on, and who depends on us</b> .	<b>BIT SICK</b>  Since we are a small team, we are really only dependent on our clients. We have done quite a bit in regard to the database design and website development. However, to finalize the first sprint of our project, we need the feedback of the client after the meeting next week.	<b>BIT SICK</b>  We're ok... but a little shaky; Client dependencies are managed, but the upcoming client meeting is critical for project progress.	<b>HEALTHY</b>  We're strong here; Dependencies are well-managed, and efforts have been made to mitigate potential risks.
 <b>Velocity</b>	<b>BIT SICK</b>  The team is making <b>incremental progress</b> by shipping concrete iterations to stakeholders (and, even better, to production), learning along the way, and	<b>BIT SICK</b>  The team is making decent progress overall, but we are not moving forward as quickly as we had hoped and the sprint is taking longer than we had planned. However, we have	<b>BIT SICK</b>  We're ok... but a little shaky; Progress is slower than planned, but adjustments are being made to improve collaboration and efficiency.	<b>HEALTHY</b>  We're strong here; The team has learned from challenges and is actively adapting, resulting in a more efficient workflow.

<b>implementing lessons learned,</b> resulting in greater success.  <b>Focus areas</b> Ask your team to collectively come up	learned to adjust our workload and collaborate more closely to work more efficiently in the next sprint.		
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**HEALTHY**. Make sure they are actionable, specific, and measurable.

Date	Focus areas and action items
Oct 21, 2023	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Full-time owner (<b>BIT SICK</b>): @Nguyen Quang Huy (Swinburne HN) will jointly manage this project with @Tung Ta Quang , the team leader, to ensure that the project is adequately looked after.</li> <li><input checked="" type="checkbox"/> Proof of concept (<b>SICK</b>): In the next meeting with client, @Tung Ta Quang will represent the team to discuss more about the team's current progress and future direction, which will help us understand the value of the project.</li> <li><input checked="" type="checkbox"/> Managed dependencies (<b>BIT SICK</b>): Because we cannot get regular feedback from our clients, we will instead consult the feedback of our tutors to improve the project.</li> <li><input checked="" type="checkbox"/> Velocity (<b>BIT SICK</b>): In the last few weeks, due to the workload of other subjects, our members have not been able to make much progress after the project proposal. However, in the upcoming weeks, we will try to make up for lost time and move the project forward.</li> </ul>
Nov 4, 2023	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Full-time owner (<b>BIT SICK</b>) Continue to jointly manage the project with , the team leader, ensuring that both individuals are actively involved in decision-making and project oversight. Explore potential adjustments to workloads or responsibilities to increase the project owner's dedication to at least 80%.</li> <li><input checked="" type="checkbox"/> Proof of concept (<b>BIT SICK</b>): Prioritize the upcoming client meeting as an opportunity to present the team's progress and discuss the project's value. Assign specific responsibilities to team members, ensuring that relevant insights are gathered to strengthen the proof of concept.</li> <li><input checked="" type="checkbox"/> Managed dependencies (<b>BIT SICK</b>): Given the challenge of obtaining regular client feedback, establish a feedback loop with tutors. Discuss project progress, challenges, and potential improvements with tutors to ensure a valuable external perspective is considered in refining the project.</li> <li><input checked="" type="checkbox"/> Velocity (<b>BIT SICK</b>): Acknowledge the recent slowdown in progress and workload challenges. Develop a plan to catch up on the delayed tasks, considering adjustments to timelines or redistributing tasks among team members. Implement strategies to enhance collaboration and efficiency during the next sprint.</li> </ul>
Nov 18, 2023	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Full-time owner (<b>HEALTHY</b>): Reevaluate the project owner's commitment and workload distribution. Explore potential solutions to allow for a more dedicated time commitment, such as reassigning certain tasks or responsibilities. Aim to achieve a more significant dedication of at least 80%.</li> <li><input checked="" type="checkbox"/> Proof of concept (<b>HEALTHY</b>): Reflect on the outcomes of the client meeting and adjust the proof of concept accordingly. Ensure that the insights gathered are incorporated into the project's direction. Consider additional client feedback mechanisms to enhance the proof of concept continuously.</li> <li><input checked="" type="checkbox"/> Managed dependencies (<b>HEALTHY</b>): Evaluate the effectiveness of the feedback loop with tutors. Identify areas for improvement and consider alternative sources of feedback, ensuring that the project remains responsive to external input.</li> </ul>

Velocity (HEALTHY): Assess the progress made in the last few weeks and identify the reasons for any ongoing challenges. Implement strategies to mitigate workload pressures, enhance time management, and ensure consistent progress in the upcoming weeks. Encourage open communication within the team to address any obstacles promptly.

# Progress report

This document lists all the progress we have made since the submission of the Project Proposal.

## Deliverables at this stage

- The SQL commands for the database, available on [Revision 2 - Week 6 - Feature addition and physical implementation](#).
- Some code for the website written in PHP, available on the team's GitHub (which we have kept internal for security reasons).

## Changes to Confluence

Item	Description	Page(s) affected
Team health monitor.	Added the Team Health Monitor page as part of the Progress Report.	 <a href="#">Team Health Monitor</a>
Database documentation.	Added subpages in the Database documentation page which show the different iterations of the database since the Project Proposal.	 <a href="#">Database documentation</a>
Stakeholder column for requirements.	Added a column indicating the stakeholder of each requirement on the Project Requirements page based on the feedback from the Project Proposal.	 <a href="#">Product requirements   \uD83D\uDDD2 Requirements</a>
Business rules for the database.	Added a few business rules relevant to the database following the feedback from the Project Proposal.	 <a href="#">Revision 2 - Week 6 - Feature addition and physical implementation</a>
Project objectives.	Rephrased the project's objectives in terms of its business values following the feedback from the Project Proposal.	 <a href="#">Project plan</a>
Project plan timeline.	Adjusted the width of the project plan timeline to prevent some parts from being obscured following the feedback from the Project Proposal.	 <a href="#">Project plan   \uD83D\uDDD3 Timeline</a>
Project scope.	Amended the project scope to include the feedback from the Project Proposal.	 <a href="#">Project plan   ⚡ Scope</a>
Risk amendment.	Removed unclear and general risks and identified a new risk as per the feedback from the Project Proposal.	 <a href="#">Risk assessment matrix   🧙 Risks management</a>
Risk description.	Added a table describing each risk following the feedback from the Project Proposal.	 <a href="#">Risk assessment matrix   📈 Risk descriptions</a>