

Project Proposal

Welcome to Team 2

Team metrics
Team Unity ON TRACK
Team Morale ON TRACK
Team Efficiency ON TRACK

About Team 2
Team 2 aims to develop an outstanding Archery Club Database, improving score tracking and competition management for archers and club recorders. Our goal is a user-friendly platform for precise and efficient archery data management.

Project goals
<input checked="" type="checkbox"/> Project Proposal Due 24 Mar, 2024
<input checked="" type="checkbox"/> Progress Report Due 21 April, 2024
<input checked="" type="checkbox"/> Process and Product Video Due 26 May, 2024
<input checked="" type="checkbox"/> Reflection and Peer Assessment Due 26 May, 2024
<input checked="" type="checkbox"/> Final Report Due 26 May, 2024

Meet the team

Title	Name	Introduction
Member	Anlee Nguyen	Year 2 student at Swinburne University, major in Software Development
Member	Nhat Minh Tran	Year 2 student at Swinburne University, major in Software Development
Member	Ba Viet Anh Nguyen	Year 2 student at Swinburne University, major in Data Science
Member	Rohit Raj	Year 2 student at Swinburne University, major in Software Development

Resources

Restrict search to this space's space key.

Where to find us

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 @BA VIET ANH NGUYEN
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 @Rohit Raj Saha
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Featured resources

- [Roles and Responsibilities](#)
- [Risks Management](#)
- [Team Health Check Monitor](#)
- [Project Entity Relationship Diagram](#)
- [Computing Technology Design Project](#)

Working Agreement

Overview

Team	Team 2
Team members	@Minh Tran @Anlee Nguyen @BA VIET ANH NGUYEN @Rohit Raj Saha
Date	May 1st, 2024

💡 Working Agreements

Goal:	Working Agreements:
Team Commitment:	<ul style="list-style-type: none"> Every member of the Team 2 is committed to collaborating effectively and efficiently. Adapting to new roles and responsibilities as needed is essential. Ensure the team's progress remains uninterrupted, even in the face of unexpected challenges.
Encouraging Open Communication:	<ul style="list-style-type: none"> The success of our team depends on open and honest communication. We recognize that some members may be hesitant to voice their opinions. Actively foster a supportive environment where everyone feels comfortable sharing their ideas and feedback. Regular check-ins and anonymous feedback options will be available to ensure all voices are heard.
Roles & Responsibilities:	<ul style="list-style-type: none"> Anlee has been appointed as the team leader. The team leader is responsible for ensuring that tasks are submitted on time. All team members must meet their deadlines.
Regular Team Meetings:	<ul style="list-style-type: none"> Weekly meeting for all tasks during workshop. Weekly meeting on social platform,

👤 Team Preferences

Team Member	@Anlee Nguyen	@Minh Tran	@BA VIET ANH NGUYEN	@Rohit Raj Saha
Working location and timezone	Remote; GMT+10	Remote; GMT+10	Remote; GMT+10	Remote; GMT+10
Working hours and commitments	Flexible, primarily business hours	Flexible, adaptive	Flexible	Flexible, synchronous availability
Working environment and preferences	Quiet workspace with tech access	Prefers quiet, organized space	Comfortable with remote tools	Equipped for remote work
How I like receiving feedback	Direct, face-to-face or written	Open to direct communication	Open to constructive criticism	Prefers clear, actionable feedback

💬 Communication Channels

Channel	Purpose	Audience	Standards
Confluence	Document collaboration	Leadership, core team, project team	Regular updates, collaborative editing.

📅 Meetings

Objective	Clarify project progress and address any obstacles.
Outcomes	Clear understanding of tasks and timelines.
Format	Weekly meeting calls
Who	<ul style="list-style-type: none"> @Anlee Nguyen Project Lead @Minh Tran Team Member @BA VIET ANH NGUYEN Team Member

	<ul style="list-style-type: none"> • @Rohit Raj Saha Team Member
Resources	Facebook, Laptop
How will we show up?	Prioritize accountability, sticking to agendas, and creating a respectful, fair environment.
How will we manage follow up?	Keep track of our discussions, decisions, and tasks in a structured way to ensure everyone stays informed and accountable.

⬆ Escalation Process

Decider	How	Transparency	Feedback Loop
All team members	Clearly define the escalation path and steps for resolving issues.	Ensure all team members are aware of the process and criteria for escalation.	Regularly review the effectiveness of the escalation process and make adjustments as necessary.

💡 Continuous Improvement

Purpose	How	Standards
Aim to continually enhance team performance and processes.	<ul style="list-style-type: none"> • Implement regular feedback sessions and retrospectives to identify areas for improvement. • Encourage brainstorming and experimentation to find innovative solutions. 	<ul style="list-style-type: none"> • Set measurable goals for improvement initiatives. • Regularly review and adjust processes based on feedback and performance metrics.

☒ Team Member Underperformance

Purpose

This document outlines the procedure for adjusting individual team member marks in response to insufficient contribution to team deliverables.

Group Underperformance Process:

Stage	Identifiers	Outcome
Initial Identification	<ul style="list-style-type: none"> • Poor quality work, showing a lack of knowledge, skills, or abilities. • Not assigning oneself to work as per the Team Agreement. • Missing agreed work deadlines. • Failing to keep the team updated on progress. • Not responding to communication in a timely manner. 	Schedule a meeting with the team member to discuss the identified issues.
Escalation	<ul style="list-style-type: none"> • Continued underperformance despite intervention efforts. • Ongoing negative impact on the team's progress and dynamics. 	Escalate the issue to higher authorities, such as the Facilitator or Convenor.

Poor Contribution Weighting Rubric:

Outcome	Weighting
No meaningful contribution	0% of Team Mark
Minimal contribution, reduced effectiveness, efficiency, morale	25% of Team Mark
Adequate contribution, affected two team dynamics	50% of Team Mark
Adequate contribution, affected one team dynamic	75% of Team Mark

Signature Table

Team Member	Date	Signature

@Anlee Nguyen	23 Mar 2024	Anlee Nguyen
@Minh Tran	23 Mar 2024	Minh Tran
@BA VIET ANH NGUYEN	23 Mar 2024	Ba Viet Anh Nguyen
@Rohit Raj Saha	23 Mar 2024	Rohit Raj Saha

Project Plan

Driver	Nhat Minh Tran
Approver	Afzaal Hassan
Contributors	@Minh Tran @Anlee Nguyen @Rohit Raj Saha @BA VIET ANH NGUYEN
Informed	Archers, Archery Recorder
Objective	A comprehensive archery club database that would enable archers to review scores, check round details, and retrieve competition outcomes. The system is created to support the recorder in managing archer information, scores, rounds, competition, and archer data while taking into consideration of previous modifications in equivalent periods.
Due date	March 24, 2024
Key outcomes	<ol style="list-style-type: none"> Efficient Data Management: Scores are viewed easily by archers, and Recorder can store archery information, rounds, competitions. Database Management: Scores are updated over time with filtered date range and round type, and multiple devices are able to see it. Club Champion Support: The system looks up and identifying the winners and showcasing players scores.
Status	COMPLETE

Problem Statement

The archery club lacks comprehensive database system for data scoring which results in inefficiencies in score management, historical tracking. Archers may find it challenging to see and retrieve the scores.

The absence of systematic creates a potential challenge of managing rounds and players. As the consequence, this affects the club's reliability and the ability to organize larger competitions.

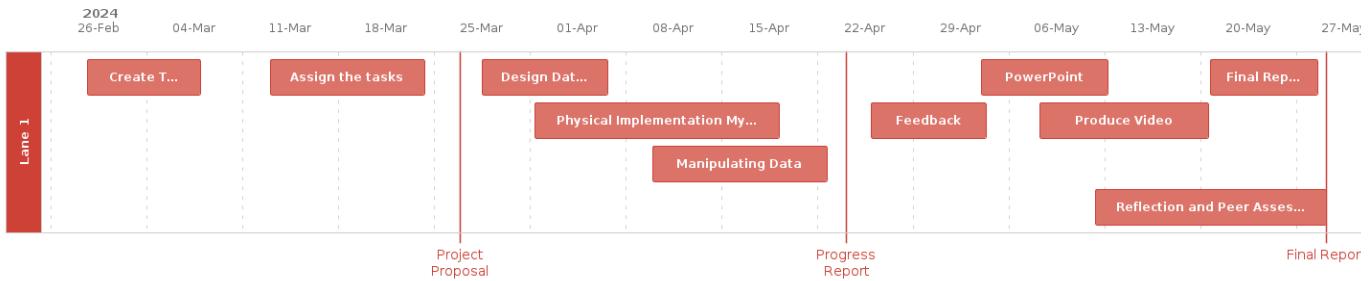
Archery Australia's modifications to the equivalent rounds pose a danger of invalid previous competition results and historical record.

Implementing a strong and reliable database system for the club enhance archer experience, improve tournament management, and ensure history accuracy.

Scope

Must have:	<ul style="list-style-type: none"> Score competition management Personal score lookup for archers with filtering options Archers need to be classified by age and gender Personal and club best scoring Tournament and annual club championship Round lookup overtimes Record time, date, round and equipment that archers used Round definition Rounds and scores from championship defined Enter archer information, rounds and ranges
Nice to have:	<ul style="list-style-type: none"> Upcoming notification events Recorder dashboard Advanced details analytics
Not in scope:	<ul style="list-style-type: none"> External integrations (Third-party applications) Cloud synchronization Historical tracking User interface

Timeline



▶ Milestones and deadlines

Milestone	Owner	Deadline	Status
Join Confluence and Jira	Everyone	March 03, 2024	COMPLETE
Create Template and Team Home Page	@Anlee Nguyen	March 03, 2024	COMPLETE
Create Team Agreement	@Anlee Nguyen	March 10, 2024	COMPLETE
Team Member Profiles and Meeting Notes	Everyone	March 20, 2024	COMPLETE
Create Project Plan	@Minh Tran	March 10, 2024	COMPLETE
Create Roles and Responsibilities	@Minh Tran	March 10, 2024	COMPLETE
Create Risk Management	@BA VIET ANH NGUYEN	March 10, 2024	COMPLETE
Create Persona	@BA VIET ANH NGUYEN	March 10, 2024	COMPLETE
Create Initial ER diagram	Everyone	March 17, 2024	COMPLETE
Create Empathy Map	@Rohit Raj Saha	March 17, 2024	COMPLETE
Create Product Requirements	@Rohit Raj Saha	March 17, 2024	COMPLETE
Progress Report	Everyone	April 21, 2024	COMPLETE
Presentation and Video	Everyone	May 27, 2024	COMPLETE
Final Report	Everyone	May 27, 2024	COMPLETE

Roles and Responsibility

📋 Overview

Team	Team 2
Team members	@Minh Tran @Anlee Nguyen @BA VIET ANH NGUYEN @Rohit Raj Saha
Date	March 06, 2024
Team mission	<p>The overall goals of the team are to handle the development, implementation, and continuously improving the database system of the archery club. We mainly concentrate on the system efficiency, user satisfaction, and future scalability.</p> <ul style="list-style-type: none"> Management of Databases: Establish the core database structure, placing the effective data administration on priority. Software Testing and Quality Assurance (QA): Comprehensive testing system parts to find and fix any bugs and issues so that the platform is error-free. Interaction and Collaboration: Encourage honest and open communication among team members to guarantee that everyone is on time. Study and understand deeply with how instructions, rules of archery club work, make sure the systems meet criteria and expectations.

📋 Roles and responsibilities

Roles	Name	Responsibilities (what others think)	Responsibilities (what I think)
Team Leader	Anlee Nguyen	<ul style="list-style-type: none"> Project Planning: Leads the overall of the plan. Organize meeting plans and researching resources using for the task. Monitor Progress: Keep track of the team's activities, ensure the project goals and deadlines. Team Management: Create discussions forums and social media for communication. Using internet platforms to share documentations and achievements. Software Debug and Testing: Integrated debugging and testing, gather feedback for better coding style. Future Maintenance and Improvement: Constantly improving the system application. Maintenance the front-end and back-end source code, collect data for better enhancement and performance. 	<ul style="list-style-type: none"> Managing project team Monitoring progress Assigning tasks
Member	Nhat Minh Tran	<ul style="list-style-type: none"> System Architecture: Write code, design the architecture and database structure of the system. Database Administration: Track database performance and implement optimizations if needed. Software Debug and Testing: Integrated debugging and testing, gather feedback for better coding style. Team Collaboration: Discuss and collaborate with members to find solutions and develop the application. Documentation Report: Foster great connection between layers of system. Report and provide any updates to teammates and team leader. 	<ul style="list-style-type: none"> Research about the projects Finding information for team members Control database
Member	Henry Nguyen	<ul style="list-style-type: none"> QA and Risk Management: Ensure the quality and the reliability of the system. Identify and recognize the threats to the system. Notify the team and manage the risks when it happens. Software Debug and Testing: Integrated debugging and testing, gather feedback for better coding style. Team Collaboration: Discuss and collaborate with members to find solutions and develop the application. Documentation Report: Foster great connection between layers of system. Report and provide any updates to teammates and team leader. 	<ul style="list-style-type: none"> Identifying the issues Software testing
Member	Rohit Raj Saha	<ul style="list-style-type: none"> Security Management: Put strong security measures in place and keep data up to date. Have multiple security layers, such as authentication and encryption procedures. Software Debug and Testing: Integrated debugging and testing, gather feedback for better coding style. Documentation Report: Foster great connection between layers of system. Report and provide any updates to teammates and team leader. Team Collaboration: Discuss and collaborate with members to find solutions and develop the application. 	<ul style="list-style-type: none"> Security check Gather documents for future report

Unassigned responsibilities

- Documentation and Maintenance
- Constant Enhancement
- Meeting notes for upcoming weeks
- Project Team Health Monitor
- SQL Queries
- Indexes
- Jira RoadMap
- Study on different major (software, cybersecurity, AI...)

Risks management

Background

We're working on a complex project with numerous moving pieces, including human resources, task management, and software challenges. To stay on track, identify potential problems early on. This helps us to determine the severity and take prompt action to minimize the situation. We will use Confluence's risk assessment matrix template to identify these issues, but we will need to create our own score scheme.

Risk Rating

Our Risks are categorized into four levels: **Low**, **Medium**, **High**, **Extreme**.

LOW	MEDIUM	HIGH	EXTREME
<ul style="list-style-type: none"> • Acceptable • Ok to proceed • Low probability 	<ul style="list-style-type: none"> • As low as reasonably practicable • Take mitigation efforts • Minimal impact • could mention but less effort 	<ul style="list-style-type: none"> • Generally unacceptable • Need of support • Significant • Most likely to occur 	<ul style="list-style-type: none"> • Intolerable • Severe repercussions • The first challenge is to work on neutralizing probability. • It is imperative to prevent.

SEVERITY				
LIKELIHOOD	ACCEPTABLE Moderate effect on progress.	TOLERABLE Effects are noticeable, with no or very little impact.	UNDESIRABLE Serious influence on project goals and outcomes.	INTOLERABLE Catastrophic incident. Would cancel the enterprise, with unfathomable consequences.
IMPROBABLE <i>Risk is unlikely to occur</i>	Lack of resources: The project needs further resources.	Technical issues: The gadget became stuck for a variety of reasons, preventing it from progressing.	Penalties: Cannot earn 100% total mark for various reasons.	Team member with language barrier: Team members speak two distinct languages.
POSSIBLE <i>Risk will likely occur</i>	Task adjustment: Members can not do a certain task.	Team members are late to a meeting	Erroneous task requirements: team members completing erroneous tasks or meeting requirements (submit file, word limit, context, etc.).	Personal matters: a team member is in poor health and a significant occasion requires their presence.
PROBABLE <i>Risk will occur</i>	Lack of knowledge: Team members must investigate the new allocated work.	Falling behind schedule: progress does not meet the schedule, resulting in a decrease in progress.	Incorporate team members who refuse to do assigned duties or attend team meetings.	Can't establish a collective voice: Team members are in dispute, which will lead to a tragedy.

✓ Action items

We will concentrate on probable events and ones with serious consequences: please tick ✓ to select the appropriate box based on your selection.

1. Managing the risk of integrating members:

- Wait for higher-level people, such as tutors or academic participants.
- Vote for replacements by team members.

2. Reducing the likelihood of random penalties:

- It is unlikely to happen, therefore, we will disregard it.
- An email in hopes of reducing or eliminating fines.

3. Mitigating the danger of being unable to find a common voice in the team:

- It is unlikely to happen; therefore, we will disregard it.
- Vote to disband the squad and look for a new one.
- Remove members who could not develop a common voice.

4. Reducing the danger of inaccurate job requirements:

- Every day, the team leader does research on each specific assignment.
- A pinned notice includes the necessary information for each individual.
- Don't do anything. No action will be taken.

5. Reducing the danger of a personal affair:

- We'll dismiss it because it's unlikely to happen.
- Report to our instructors and await further action.

6. Reducing the likelihood of linguistic barriers

- Since no one in our class is a foreigner, we will just overlook this issue.

Anlee's Persona



Ms. Anlee Nguyen

Persona name	Anlee Nguyen
Persona role	Archer
Job description	<ul style="list-style-type: none"> Participate in club-organized archery events and tournaments. Record and monitor her own archery scores and performance over time. Enter her scores into the club's staging table using a handheld device. Look for definitions of various archery rounds, including the ranges, lengths, number of ends, and target faces utilized. Understand the corresponding rounds and their differences. Stay informed about any changes or updates to archery laws and regulations.

Company

Company name	Archery Club
Company size	Medium
Industry	Sport

Demographic information

Age	20
Gender	Female
Income	100,000 annually
Education level	Bachelor of Computer Science (Majoring in Software Development)
Residential environment	Melbourne

Personal quote

"Archery is more than a sport to me; it is a way of life that allows me to find balance and focus in the midst of daily stress."

Biography

Anlee Nguyen, 20, is a software developer from a suburb near a big metropolis. She found her love of archery approximately ten years ago when a buddy urged her to try it out. Since then, she has been an active member of her local archery club, competing in a variety of events and contests. Archery has become an important part of her life, giving her a sense of calm and concentration that she frequently lacks in her fast-paced job.

Professional goals	Motivators
<ul style="list-style-type: none"> Improve her archery abilities and performance. Compete in national archery events. Become a mentor to young archers at her club. 	<ul style="list-style-type: none"> Archery promotes attention and awareness. The chance to push herself and enhance her abilities. The companionship and fellowship among fellow archers
Challenges	Sources of information
<ul style="list-style-type: none"> Balancing her rigorous software development career with her archery training and competition. 	<ul style="list-style-type: none"> Online archery forums and communities. Archery publications and blogs.

- | | |
|---|--|
| <ul style="list-style-type: none"> Maintaining motivation and preventing exhaustion during intensive competition seasons. Keeping up with the ever-changing rules and regulations of archery competition. | <ul style="list-style-type: none"> Advice and instruction from veteran archers in her club. Official archery organizations' websites and rulebooks |
|---|--|

Minh's Persona



Mr. Nhat Minh Tran

Persona name	Nhat Minh Tran
Persona role	Club Recorder
Job description	<ul style="list-style-type: none"> Enter new archers' information in the database. Add additional rounds and contests into the system. Keep track of archer scores, including arrow-by-arrow results and final information. Connect archers' scores to appropriate tournaments and club championships. Ensure that archer divisions (age, gender) and categories are properly established. Maintain current information on equivalent rounds and rule modifications.

Company

Company name	Archery Club
Company size	Medium
Industry	Sport

Demographic information

Age	30
Gender	Male
Income	85,000 annually
Education level	Bachelor of Computer Science (Majoring in Software Development)
Residential environment	Melbourne

Personal quote

"Archery scoring relies heavily on accuracy and attention to detail. I take pride in keeping our club's records exact and up to date."

Biography

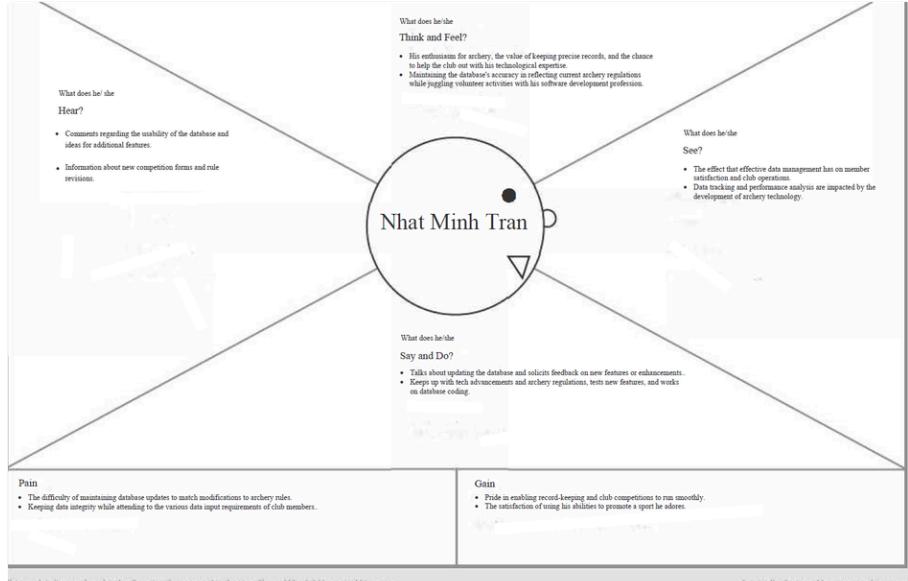
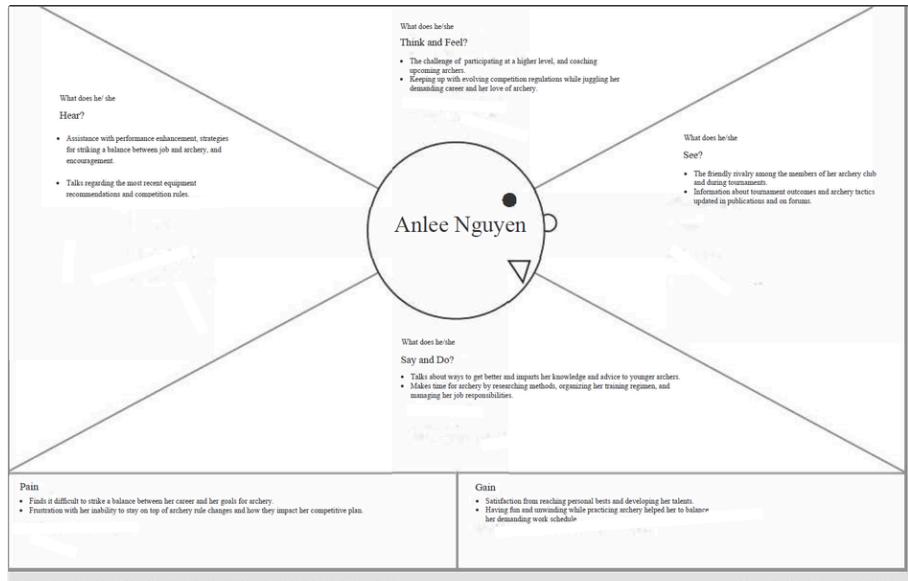
Nhat Minh Tran is a 30-year-old software developer with an interest in archery. He found archery in college and has been an active member of his local club ever since. Nhat, as the club recorder, is in charge of managing the club's database of archer information, scores, and competition records.

With a background in computer science, Nhat has played a key role in building and maintaining the club's scoring database, ensuring that it is user-friendly and complies with the most recent archery laws and regulations. He takes tremendous pride in his position and recognizes the significance of good record-keeping for archers and club competitions.

Professional goals	Motivators
<ul style="list-style-type: none"> Streamline the score database to increase productivity and user experience. 	<ul style="list-style-type: none"> His passion for archery and desire to help the sport flourish. The joy of keeping correct and dependable records.

<ul style="list-style-type: none"> Stay up to speed with archery rule changes and make sure the database reflects them. Create reporting tools to give archers with more specific performance data. 	<ul style="list-style-type: none"> The chance to use his technological talents in a voluntary manner.
Challenges <ul style="list-style-type: none"> Balancing his charitable work with his full-time software development career. Keeping up with regular rule changes and updates from the archery regulating organizations. Ensure data integrity and uniformity at numerous entry points (archers, recorder). 	Sources of information <ul style="list-style-type: none"> Official archery websites and rulebooks. Online archery forums and communities. Input and comments from other club members and archers. Technical documents and resources for database administration.

Empathy map



Product Requirements for Archery Club Database

Target release	March 23, 2024
Epic	Archery Scoring Database
Document status	DRAFT
Document owner	@Rohit Raj Saha
Designer	@Rohit Raj Saha
Tech lead	@Anlee Nguyen
Technical writers	@Minh Tran
QA	@BA VIET ANH NGUYEN

🎯 Objective

To design a comprehensive and user-friendly database system for recording and managing archery scores, which will provide better performance tracking for archers and club recorders.

📊 Success metrics

Goal	Metric
Project proposal and design of the database.	Clarity and completeness of the document with all the essential parts and requirements.
Creating a database for Archery Score Recording.	Good functional structure ,design and performance of the database.
Simplify score recording process and entry of new data sets	Accuracy and ease increased using the system for recording scores and entering new sets of data.
Enhance member satisfaction	Increase in member satisfaction .

🤔 Assumptions

- Users will mostly use tablets and smartphones to access the functionality.
- The club has a reliable internet connection that enables real-time data processing.
- Archers and recorders are eager to switch to a digital recording system.

📝 Requirements

Requirement	User Story	Importance	Notes
Efficient analytical tool	As an archer, I want to analyse my performance.	MEDIUM	Use filters for detailed analysis.
Round definition look-up	As an archer, I want to access the round description.	HIGH	Should include distance, target and number of faces.
Personal best	As an archer, I want to see my personal best records.	HIGH	Display the best score.
Club Records	As an archer, I want to see the best club records.	HIGH	Display who achieved the best club record.
Competition results and placement	As an archer, I want to look-up to club competition results and placement	MEDIUM	Should display participating round and scores.
Entry of new data	As a recorder, I want to enter sets of data.	HIGH	Includes new archer, rounds, scores and competitions.
Age and gender classification	As a recorder, I need to categorize the data according to age and gender	MEDIUM	Classify users based on profile information.
Equipment type recording	As a recorder, I want to record the scores of different equipment used.	HIGH	Allow selection of equipment.
Competition and championship related data entry	As a recorder, I want to organize competitions and identify championship	HIGH	Link scores to specific

	rounds.		championship.
Previous data access	As a recorder, I want to access previous scores and round definitions.	MEDIUM	Include history of previous scores and rounds.

⚠ Out of Scope

- Integration with sports management systems other than archery.
- Supports multi-language other than English.
- Real-time scoring and live during the competitions.

Minh's User Manual

Environments I like to work in	<ul style="list-style-type: none"> • I like enthusiastic environments and people where we have chances to know more about each other. • Library, Schools, Labs, Cafe Shops
Preferred working hours	<ul style="list-style-type: none"> • Preferred in the morning and at the weekends when I have lots of time.
Communication preferences	<ul style="list-style-type: none"> • Discord • Facebook
Preferred ways to receive feedback	<ul style="list-style-type: none"> • In person so that I can discuss further about the solutions.
Things I need	<ul style="list-style-type: none"> • Reliability and responsibility teammates.
How I learn best	<ul style="list-style-type: none"> • Hands-on experience • Practical relevant jobs
Things I struggle with	<ul style="list-style-type: none"> • Multi-tasking • Stress during peak periods.
Things I love	<ul style="list-style-type: none"> • I love animals such as cats, dogs, birds...
If I were an animated gif/meme/animal/song, I would be...	<ul style="list-style-type: none"> • I would be myself; I am happy with myself at the moment.
My favorite saying	<ul style="list-style-type: none"> • Great things take time.
Other things I want you to know about me	<ul style="list-style-type: none"> • I am dedicated to learning more about technology. • I am passionate about contributing to clubs and projects.

Anlee's User Manual

Environments I like to work in	I thrive in environments that foster creativity and collaboration, such as co-working spaces, coffee shop.
Preferred working hours	I love to work whenever I feel ready and happy, embracing flexibility and spontaneity in my schedule.
Communication preferences	I strongly prefer real-life communication, such as face-to-face interactions or phone calls, as it allows for more personal and meaningful exchanges.
Preferred ways to receive feedback	I appreciate receiving feedback through in-person discussions as it allows for clearer understanding and deeper connection.
Things I need	I value working alongside teammates who demonstrate adaptability, creativity, and a strong sense of responsibility.
How I learn best	I excel in environments that offer hands-on learning opportunities and encourage experimentation and exploration.
Things I struggle with	Balancing multiple tasks and managing stress during demanding periods are areas where I continuously strive to improve.
Things I love	I have a deep love for nature and enjoy spending time outdoors.
If I were an animated gif/meme/animal/song, I would be...	If I were an animated gif/meme/animal/song, I would be a relaxed and cuddly koala, embodying a laid-back attitude and a love for cozy moments.
My favorite saying	"Keep calm and koala on!"
Other things I want you to know about me	I enjoy trying out new recipes and experimenting in the kitchen

Rohit's User Manual

Environments I like to work in	I like to work in a quiet environment like a library. At home, I like to work alone in my room, my favorite place which is my workstation.
Preferred working hours	I am not a morning person, so I mostly prefer working at night. Moreover, it helps me to concentrate on my work more at night because most people are asleep when there is nobody to disturb me.
Communication preferences	My most preferred communication mode is via calls or online meetings(on messenger, discord, etc.), where I can discuss any matter or issue with my teammates in person, rather than chatting where I may not get an instant reply.
Preferred ways to receive feedback	I prefer to receive constructive feedback face to face in a one-on-one meeting.
Things I need	I need access to necessary resources and tools for performing my tasks, a clear understanding of the project, and deadlines for a certain task.
How I learn best	I learn best through practical knowledge, by seeing examples, and by exchanging ideas with others. Such as - watching videos, and discussing with teammates.
Things I struggle with	I struggle when I am being interrupted in the middle of my work. Besides, whenever my workload piles up a bit it stresses me out.
Things I love	I love to work on creative group projects where I get a chance to explore many creative minds and also it gives me an opportunity to showcase my creativity.
If I were an animated gif/meme/animal/song, I would be...	If I were an animal I would be a butterfly - always in one stage of development and waiting for my day to fly.
My favorite saying	'Accept your limitations ,then go beyond them.'
Other things I want you to know about me	Personal development matters greatly to me so I am constantly seeking for ways to be better.

Ba Viet Anh Nguyen's User Manual

Environments I like to work in	<ul style="list-style-type: none"> • Library • Study room
Preferred working hours	<ul style="list-style-type: none"> • Monday: 9am - 6pm • Tuesday: 9am - 3pm • Wednesday: 9am - 3pm • Thursday: 9am - 3pm • Friday: 9am - 6pm • Saturday: 10am - 1pm • Sunday: 10am - 1pm
Communication preferences	via Gmail, Outlook, Discord
Preferred ways to receive feedback	via Gmail, Outlook
Things I need	<ul style="list-style-type: none"> • quiet space to study • good resources to research
How I learn best	<ul style="list-style-type: none"> • study without a phone • concentrate on only one field at a time.
Things I struggle with	<ul style="list-style-type: none"> • distance from home to work place
Things I love	<ul style="list-style-type: none"> • cat • technology(AI, cyber security..) • Car model
If I were an animated gif/meme/animal/song, I would be...	<ul style="list-style-type: none"> • I would be a british short hair cat
My favorite saying	Learning is never done without errors and defeat
Other things I want you to know about me	<ul style="list-style-type: none"> • I am really easy-going so feel free. • to ask me any questions.

2024-03-01 Meeting notes

Date

Mar 1, 2024

Participants

- @Rohit Raj Saha
- @Anlee Nguyen
- @BA VIET ANH NGUYEN
- @Minh Tran

Goals

- Week 1
- Communicating with teammates
- Discussing about the Project brief

Discussion topics

Time	Item	Presenter	Notes
01/03/2024 Fri 12.30-2.30	<ul style="list-style-type: none">Communicating in the teamCreating project proposal.	Everyone	<ul style="list-style-type: none">We tried to get along with all the members as a team.Created a group on Messenger for group meetings.Went through the project brief as a group and tried to understand the concepts.Tutor also gave us some advice how to approach the project.

Action items

- Introduction each member
- Discuss about the brief project internal

2024-03-08 Meeting notes

Date

Mar 8, 2024

Participants

- @Rohit Raj Saha
- @BA VIET ANH NGUYEN
- @Minh Tran
- @Anlee Nguyen

Goals

- Week 2
- Starting with the Project proposal
- Dividing tasks among the teammates

Discussion topics

Time	Item	Presenter	Notes
08/03/2024 Fri 12.30-2.30	<ul style="list-style-type: none">Project PlanTeam Home PageRoles and Responsibility	Everyone	<ul style="list-style-type: none">We divided tasks among the teammates.Discussed about the progress of the project and the overall skeleton of the document was created.Team decided to hold a personal team meeting on Sundays.

Action items

- Discuss about the in scope and what not in scope.

- Milestones and timelines for the unit.

2024-03-15 Meeting notes

Date

Mar 15, 2024

Participants

- @Minh Tran
- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 3
- Discuss and identify the requirements before the last submission for perfect.
- Ask the teacher questions about the project proposal.

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none">• Risk Assessment• Persona• Empathy Map• Product Requirements	Everyone	<ul style="list-style-type: none">• Cross out wrong things about persona.• Update risk assessment.

Action items

- Discuss how severity of risk assessment affects the team project.
- Learn how to draw empathy map.

2024-03-22 Meeting notes

Date

Mar 22, 2024

Participants

- @Minh Tran
- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 4
- ERD
- Running SQL queries

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none">• Running the SQL queries• ERD feedback by tutor	Everyone	<ul style="list-style-type: none">• Tutor gave us feedback about the ERD.• Guided us about creating tables according to ERD and run the queries to find out the errors.• We discussed about identifier and relationships.

2024-04-05 Meeting notes

Date

Apr 5, 2024

Participants

- @Minh Tran
- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 5
- Revision of Project Proposal
- Implementation of database

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none">• Normalisation• ERD	Everyone	<ul style="list-style-type: none">• Decided how to make the tables for the database implementation.• Tutor guided us how to proceed with the table making.• We also discussed to review requirements for the project and make improvisation.

2024-04-12 Meeting notes

Date

Apr 12, 2024

Participants

- @Minh Tran
- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 6
- Review the requirements of the Project
- Implementation of database

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none">• Database implementation• ERD	Everyone	<ul style="list-style-type: none">• We discussed on the physical implementation of the database in MySQL.• We planned to implement the design by running the queries.• We planned to create queries from the table and try how it goes which will also let us know our limitations.• Tutor reviewed our ERD and requirements and gave us feedback to fix some problems.• We also planned to do the round definition and arrow by arrow end implementation according to the tutor feedback.

2024-04-19 Meeting notes

Date

Apr 19, 2024

Participants

- @Minh Tran
- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 7
- Review Project requirements
- Implementation of database

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none">• Database implementation• ERD review by tutor	Everyone	<ul style="list-style-type: none">• Tutor reviewed the revised ERD and gave feedback.• Tutor advised on the physical implementation of the database in MySQL to know the limitations of the ERD.• Gave feedback about our assignment on the Project Proposal.• Guided us about our next assignment ,especially Jira roadmap.

2024-04-26 Meeting notes

Date

Apr 26, 2024

Participants

- @Minh Tran
- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 8
- Implementation of database
- Creating tables and running SQL queries

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none">• Database implementation• ERD feedback by tutor	Everyone	<ul style="list-style-type: none">• Tutor advised on the physical implementation of the database in MySQL to know the limitations of the ERD.• Gave feedback about our assignment on the Progress Report.• Guided us about creating tables according to ERD.• Tutor asked to run the queries and find out the errors and show it to him for feedback in the upcoming workshop.• Tutor gave us some guidance about the Final Project .

2024-05-03 Meeting notes

Date

May 3, 2024

Participants

- @Minh Tran

- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 9
- Fix ERD
- Running SQL queries

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none"> • Running the SQL queries • ERD feedback by tutor 	Everyone	<ul style="list-style-type: none"> • Tutor gave us feedback about the ERD and showed us the potential fixes of the ERD. • Guided us about creating tables according to ERD and run the queries to find out the errors. • Tutor asked to run the queries and find out the errors and show it to him for feedback in the upcoming workshop. • Tutor asked us to run two queries and show him next week : <ul style="list-style-type: none"> 1)Show archer information with score. 2)See the round table with round definition.

2024-05-10 Meeting notes

Date

May 10, 2024

Participants

- @Minh Tran
- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 10
- Work on ERD
- Work on database
- Indexing
- Major-specific work

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none"> • Indexing • Major-specific work 	Everyone	<ul style="list-style-type: none"> • We noted some changes to make the ERD better • We worked on the SQL code of the database and discussed about the indexing. • We discussed about the major-specific work amongst the group.

2024-05-17 Meeting notes

Date

May 17, 2024

Participants

- @Minh Tran
- @Anlee Nguyen
- @Rohit Raj Saha
- @BA VIET ANH NGUYEN

Goals

- Week 11
 - Inserting data
 - Indexing

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none"> • Data insertion in the database • Indexing 	Everyone	<ul style="list-style-type: none"> • Tutor gave us feedback about the data insertion to the database. • Tutor advised us to insert 500 sample data to the archers row. • Tutor advised to generate more sample data and use the indexing to see if it works. • Finalised the ERD and overall database structure.

2024-05-24 Meeting notes

Date

May 24, 2024

Participants

- @Minh Tran
 - @Anlee Nguyen
 - @Rohit Raj Saha
 - @BA VIET ANH NGUYEN

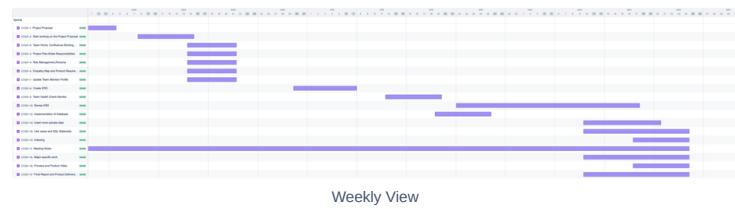
Goals

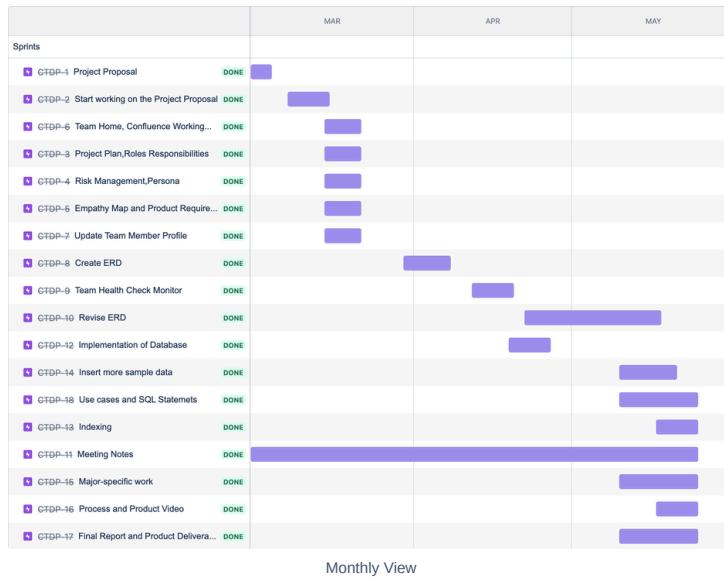
- Week 12
 - Major-specific work feedback
 - Indexing feedback
 - Database feedback

Discussion topics

Time	Item	Presenter	Notes
	<ul style="list-style-type: none"> • Indexing • Database feedback by tutor 	Everyone	<ul style="list-style-type: none"> • Tutor checked the database by seeing the data and asked us to run queries. • Advised us to put more data in the database. • Tutor asked to fix the end-scores. • Tutor talked about staging tables. • Tutor asked us to fix some bits like - championship winner, personal best and equivalent rounds. • Feedback on major-specific work was given.

Jira Roadmap





Monthly View

Team Health Check Monitor

Use the project team health monitor template to keep track of your team's health. Keep this template in your team space and if there are any areas that you're not confident are green, dive into the plays to get back on track. For detailed facilitation instructions, go to [health monitor for project teams](#).

Team name	Team 2
Sponsor	Team 2
Health monitor cadence	1

对人体健康状况的评估

与您的团队一起，阅读每个属性的定义，高绩效团队的定义。在三个人数的计数中，让每个人根据以下定义对团队的表现进行评分（竖起大拇指/绿色，竖起大拇指/黄色，竖起大拇指/红色）。记录每个属性的评分结果。使用此颜色代码高亮每个单元格：**HEALTHY** = “我们很强壮”，**BIT SICK** = “我们还可以...但有点摇晃”，**SICK** = “我们不健康”。

Area	Apr 5, 2024	Apr 12, 2024	Apr 16, 2024
▶ Full-time owner	We have to study 4 different courses at the university. We are not able to allocate 80% of our time (can only spend 40%). That would be just fine.... We have some little worries at this stage.	After some changes in the timetable and study strategies, we can spend at least 60% of our time for this project. Firstly, we can deal with almost missions inside the project.	At this time, we can dedicate more than 80% of our time to this project. We re-arranged the timetable again to work more efficiently and we eliminated some tasks that are not essential any more.
⚠️ Balanced team	We decided to divide the project into 4 smaller parts and each team members takes account for one of the parts. We would prefer give tasks for each members base on their strength. However, in some parts, we still do not have enough skills and knowledge. The roles and responsibilities are approved and agreed upon by everyone.	We acknowledged that sometimes, a team can not be perfect at the starting point so we keep all the current team members and improve all the skills and knowledge that we definitely need for the project. Everyone follows the their roles and responsibilities which are approved strictly.	Finally, we have all the skill that we need. The roles and responsibilities are established and well-defined.

Shared understanding 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.	The team has already had a common understanding of the project's requirements and we also explain briefly about the idea how we build the database for the archery club, how we can optimize all the resources in this project....	We explained more detailed about the topic and also gave everyone the better views into making efficiently database. At this moment, we are absolutely confident to say that we can articulate about our project or perform Elevator Pitching about our project.	The team believes in the idea, is certain they have what they need, trusts one another, and knows why they are here and what the problem/need is.
Value and metrics It's clear what success means 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.	We have clearly defined the measure of success based on the scoring scale which displays accurately the level of suitability for the user and user's experiences. Our goal is to continuously improve the user's experiences and functionality as much as possible.	We are constantly updating the scoring scale which is the way we measured the success.	We, finally, can provide the completed scoring scale to measure success. Thanks to this scoring scale, we are able to adjust the strategies, some features or functions are no longer usefull.
Proof of concept Some sort of demonstration has been created and tested, that demonstrates why this problem needs to be solved, and demonstrates its value.	We have discussed our project a lot, but have some problems on combining multiple tables in the database in the most efficient way.	We are gradually understanding how to combine several tables in the database by primary keys.	We successfully created the database for the club
One-pager The project is summarized in a one-pager and shared with anyone so that they understand the purpose of the project, and its value.	Our project is summarised in one-pager in Confluence space.	We double checked the summary again to make sure that the strategies we are currently following is absolutely right.	Finally, we can comprehend thoroughly the purpose of the project based on the project summarized paper.
Managed dependencies Clear understanding of complexity, infrastructure involved, risks, resources, effort, and timeline. Clear understanding of who we depend on, and who depends on us .	We have already had an general understanding about the risks, resources, complexity... when we discussed and listed in the Confluence	We read the Confluence again to make sure that all the risks, resources, ..etc.. are still under control. The timeline is brought out to be reconsidered carefully to improve the efficiency.	All the risks are mitigated. Infrastructure involved, resources are utilized to solve all the problems that we encountered when implement this project. We know we need to depend on the user's need to upgrade the system.
Velocity The team is making incremental progress by shipping concrete iterations to stakeholders (and, even better, to production), learning along the way, and implementing lessons learned , resulting in greater success.	We are currently making the detailed progress to complete the project in the best way and are generally on track.	We are still on track, on the way we have outlined.	In general, the progress is going right and we actually do not need to fix the strategies.

⌚ Focus areas

Ask your team to collectively come up with one attribute you want to focus on. Then, call out ways to move the **SICK** or **BIT SICK** toward **HEALTHY**. Make sure they are actionable, specific, and measurable.

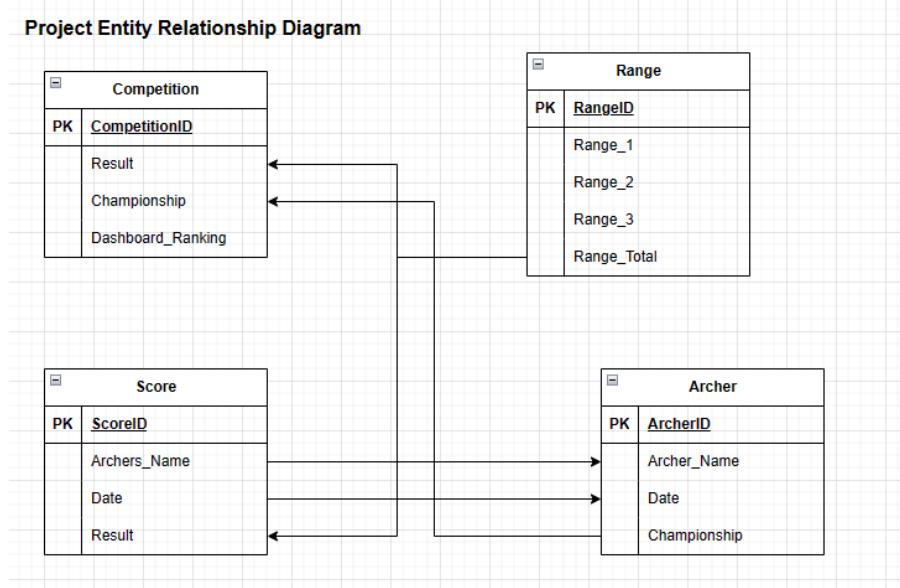
Date	Focus areas and action items
------	------------------------------

Apr 12, 2024	<p>Full-time owner</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> re-arrange the timetable to spend at least 80% of their time: <input checked="" type="checkbox"/> Everyone needs to balance their coursework and prioritize completing projects. (@Rohit Raj Saha @BA VIET ANH NGUYEN @Minh Tran @Anlee Nguyen) <input checked="" type="checkbox"/> Change another courses studying time (time management) <input checked="" type="checkbox"/> Change the study strategies <input checked="" type="checkbox"/> divide all the tasks in all courses into level of priority and difficulty. <input checked="" type="checkbox"/> Eliminate the unimportant tasks to improve the efficiency
Apr 12, 2024	<p>Balanced team</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> give tasks for everyone base on their strength <input checked="" type="checkbox"/> research and grow knowledge that is relevant to the project. <input checked="" type="checkbox"/> review the roles and responsibilities and make sure all team members follow these.

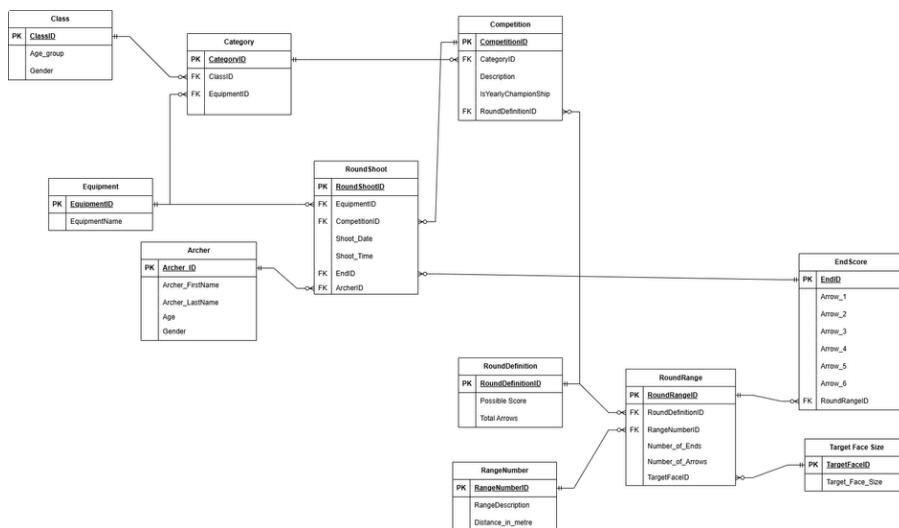
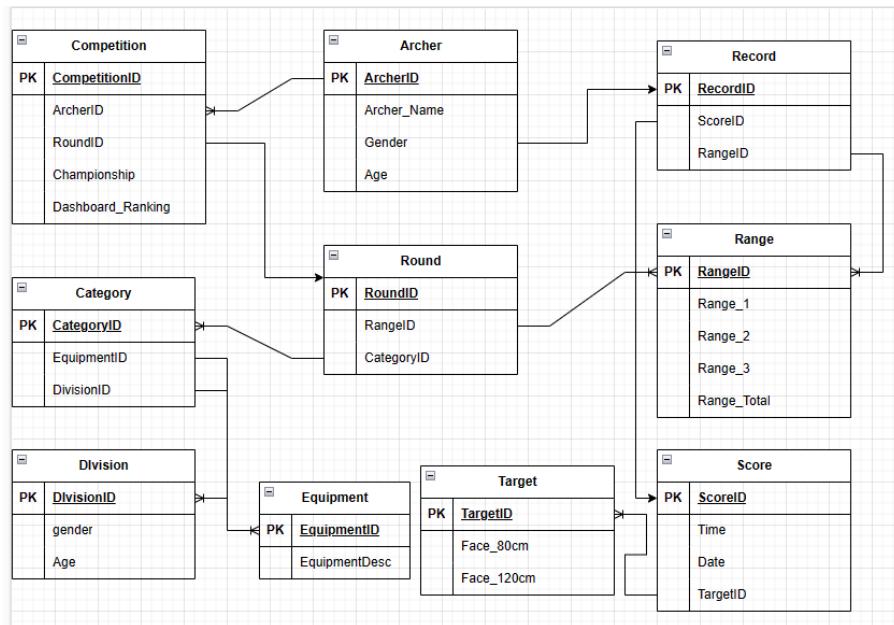
🌹 Next steps

Consider running the plays in suggested in [Step 2 of the facilitation instructions](#) for improving [BIT SICK](#) and [SICK](#) attribute areas. Don't treat these as prescriptions! You know your team better than anyone, so check them out, [explore other plays](#), and do what you think is best.

Project Entity Relationship Diagram



The old entity Diagram developed from week 4



After many revisions and discussions, as well as feedback from convenor throughout the workshop every week, we have finished the final ERD. Based on the comments from the convenor, we have removed the total scores from the EndScore table and uploaded round definition to competition table.

SQL Statements for Database

Physical Database: Create Table Statements

```

1 create DATABASE archery_club_DB;
2 use archery_club_D
3 B;
4 SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
5 START TRANSACTION;
6 SET time_zone = "+00:00";
7

```

```

8  DROP TABLE IF EXISTS class;
9  DROP TABLE IF EXISTS equipment;
10 DROP TABLE IF EXISTS category;
11 DROP TABLE IF EXISTS archer;
12 DROP TABLE IF EXISTS roundshoot;
13 DROP TABLE IF EXISTS competition;
14 DROP TABLE IF EXISTS rounddefinition;
15 DROP TABLE IF EXISTS rangenumber;
16 DROP TABLE IF EXISTS roundrange;
17 DROP TABLE IF EXISTS endscore;
18 DROP TABLE IF EXISTS targetfacesize;
19
20 CREATE TABLE archer (
21   Archer_ID INT NOT NULL,
22   Archer_FirstName varchar(50) DEFAULT NULL,
23   Archer_LastName varchar(50) DEFAULT NULL,
24   Age INT NOT NULL,
25   Gender varchar(10) DEFAULT NULL
26 );
27
28 CREATE TABLE category (
29   CategoryID INT NOT NULL,
30   ClassID INT NOT NULL,
31   EquipmentID INT NOT NULL
32 );
33
34 CREATE TABLE class (
35   ClassID INT NOT NULL,
36   Age_group varchar(50) NOT NULL,
37   Gender varchar(10) DEFAULT NULL
38 );
39
40 CREATE TABLE competition (
41   CompetitionID INT NOT NULL,
42   CategoryID INT,
43   Description varchar(255) DEFAULT NULL,
44   IsYearlyChampionship boolean NOT NULL,
45   RoundDefinitionID VARCHAR(50) NOT NULL
46 );
47
48 CREATE TABLE endscoretable (
49   EndID INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
50   Arrow1 INT DEFAULT NULL,
51   Arrow2 INT DEFAULT NULL,
52   Arrow3 INT DEFAULT NULL,
53   Arrow4 INT DEFAULT NULL,
54   Arrow5 INT DEFAULT NULL,
55   Arrow6 INT DEFAULT NULL,
56   RoundRangeID INT NOT NULL
57 );
58
59 CREATE TABLE equipment (
60   EquipmentID INT NOT NULL,
61   EquipmentName varchar(30) NOT NULL
62 );
63
64 CREATE TABLE rounddefinition (
65   RoundDefinitionID VARCHAR(50) NOT NULL,
66   PossibleScore INT NOT NULL,
67   TotalArrows INT NOT NULL
68 );
69
70 CREATE TABLE roundrange (
71   RoundRangeID INT NOT NULL,
72   RoundDefinitionID VARCHAR(50) NOT NULL,
73   RangeNumberID INT NOT NULL,
74   Number_of_Ends INT NOT NULL,
75   Number_of_Arrows INT NOT NULL,
76   TargetFaceID INT NOT NULL
77 );
78
79 CREATE TABLE roundshoot (
80   RoundShootID INT NOT NULL AUTO_INCREMENT PRIMARY KEY,
81   EquipmentID INT NOT NULL,
82   CompetitionID INT NOT NULL,
83   Shoot_Date date DEFAULT NULL,
84   Shoot_Time time DEFAULT NULL,
85   EndID INT NOT NULL,
86   Archer_ID INT NOT NULL
87 );
88
89 CREATE TABLE targetfacesize (
90   TargetFaceID INT NOT NULL,

```

```

91 Target_Face_Size enum('80cm','122cm') NOT NULL
92 );
93
94 CREATE TABLE rangenumber (
95 RangeNumberID INT NOT NULL,
96 RangeDescription varchar(50) NOT NULL,
97 Distance_in_metre int(10) NOT NULL
98 );
99
100 ALTER TABLE archer
101 ADD PRIMARY KEY (Archer_ID);
102
103 ALTER TABLE category
104 ADD PRIMARY KEY (CategoryID);
105
106 ALTER TABLE class
107 ADD PRIMARY KEY (ClassID);
108
109 ALTER TABLE competition
110 ADD PRIMARY KEY (CompetitionID);
111
112 ALTER TABLE equipment
113 ADD PRIMARY KEY (EquipmentID);
114
115 ALTER TABLE rounddefinition
116 ADD PRIMARY KEY (RoundDefinitionID);
117
118 ALTER TABLE roundrange
119 ADD PRIMARY KEY (RoundRangeID);
120
121 ALTER TABLE targetfacesize
122 ADD PRIMARY KEY (TargetFaceID);
123
124 ALTER TABLE rangenumber
125 ADD PRIMARY KEY (RangeNumberID);
126
127 ALTER TABLE category
128 ADD CONSTRAINT category_ibfk_1 FOREIGN KEY (ClassID) REFERENCES class (ClassID),
129 ADD CONSTRAINT category_ibfk_2 FOREIGN KEY (EquipmentID) REFERENCES equipment (EquipmentID);
130
131 ALTER TABLE competition
132 ADD CONSTRAINT competition_ibfk_1 FOREIGN KEY (CategoryID) REFERENCES category (CategoryID),
133 ADD CONSTRAINT competition_ibfk_2 FOREIGN KEY (RoundDefinitionID) REFERENCES rounddefinition (RoundDefinitionID);
134
135 ALTER TABLE endscoretable
136 ADD CONSTRAINT endscore_ibfk_1 FOREIGN KEY (RoundRangeID) REFERENCES RoundRange (RoundRangeID);
137
138 ALTER TABLE roundrange
139 ADD CONSTRAINT roundrange_ibfk_1 FOREIGN KEY (RoundDefinitionID) REFERENCES rounddefinition (RoundDefinitionID),
140 ADD CONSTRAINT roundrange_ibfk_2 FOREIGN KEY (RangeNumberID) REFERENCES rangenumber (RangeNumberID),
141 ADD CONSTRAINT roundrange_ibfk_3 FOREIGN KEY (TargetFaceID) REFERENCES targetfacesize (TargetFaceID);
142
143 ALTER TABLE roundshoot
144 ADD CONSTRAINT roundshoot_ibfk_1 FOREIGN KEY (EquipmentID) REFERENCES equipment (EquipmentID),
145 ADD CONSTRAINT roundshoot_ibfk_2 FOREIGN KEY (CompetitionID) REFERENCES competition (CompetitionID),
146 ADD CONSTRAINT roundshoot_ibfk_3 FOREIGN KEY (Archer_ID) REFERENCES archer (Archer_ID),
147 ADD CONSTRAINT roundshoot_ibfk_4 FOREIGN KEY (EndID) REFERENCES endscoretable (EndID);
148
149 COMMIT;

```

Document on data creation and null values: Insert Sample Data

These are sample data from SQL. Some tables have hundreds to thousands of rows of data, so we put some samples. The whole SQL file would have more than 4000 coding lines.

```

1 INSERT INTO class VALUES (1, 'Open', 'Female');
2 INSERT INTO class VALUES (2, 'Open', 'Male');
3 INSERT INTO class VALUES (3, '50+', 'Female');
4 INSERT INTO class VALUES (4, '50+', 'Male');
5 INSERT INTO class VALUES (5, '60+', 'Female');
6 INSERT INTO class VALUES (6, '60+', 'Male');
7 INSERT INTO class VALUES (7, '70+', 'Female');
8 INSERT INTO class VALUES (8, '70+', 'Male');
9 INSERT INTO class VALUES (9, 'Under 21', 'Female');
10 INSERT INTO class VALUES (10, 'Under 21', 'Male');
11 INSERT INTO class VALUES (11, 'Under 18', 'Female');
12 INSERT INTO class VALUES (12, 'Under 18', 'Male');
13 INSERT INTO class VALUES (13, 'Under 16', 'Female');
14 INSERT INTO class VALUES (14, 'Under 16', 'Male');
15 INSERT INTO class VALUES (15, 'Under 14', 'Female');

```

```

16 INSERT INTO class VALUES (16, 'Under 14', 'Male');
17
18 -- Insert into table equipment --
19 INSERT INTO equipment VALUES (1, 'Recurve');
20 INSERT INTO equipment VALUES (2, 'Compound');
21 INSERT INTO equipment VALUES (3, 'Recurve Barebow');
22 INSERT INTO equipment VALUES (4, 'Compound Barebow');
23 INSERT INTO equipment VALUES (5, 'Longbow');
24
25 -- Insert into table rounddefinition --
26 INSERT INTO rounddefinition VALUES ('WA90/1440',1440, 144);
27 INSERT INTO rounddefinition VALUES ('WA70/1440',1440, 144);
28 INSERT INTO rounddefinition VALUES ('WA60/1440',1440, 144);
29 INSERT INTO rounddefinition VALUES ('AA50/1440',1440, 144);
30 INSERT INTO rounddefinition VALUES ('AA40/1440',1440, 144);
31 INSERT INTO rounddefinition VALUES ('Long Sydney',1200, 120);
32 INSERT INTO rounddefinition VALUES ('Sydney',1200, 120);
33 INSERT INTO rounddefinition VALUES ('Long Brisbane',1200, 120);
34 INSERT INTO rounddefinition VALUES ('Brisbane',1200, 120);
35 INSERT INTO rounddefinition VALUES ('Adelaide',1200, 120);
36 INSERT INTO rounddefinition VALUES ('Short Adelaide',1200, 120);
37 INSERT INTO rounddefinition VALUES ('Hobart',900, 90);
38 INSERT INTO rounddefinition VALUES ('Perth',900, 90);
39
40 -- Insert into category table --
41
42 -- Male Open --
43 INSERT INTO category VALUES (1, 2, 1);
44
45 -- Female Open --
46 INSERT INTO category VALUES (6, 1, 1);
47
48 -- 50+ Male --
49 INSERT INTO category VALUES (11, 4, 1);
50
51 -- 50+ Female --
52 INSERT INTO category VALUES (16, 3, 1);
53
54 -- 60+ Male --
55 INSERT INTO category VALUES (21, 6, 1);
56
57 -- 60+ Female --
58 INSERT INTO category VALUES (26, 5, 1);
59
60 -- 70+ Male --
61 INSERT INTO category VALUES (31, 8, 1);
62
63 -- 70+ Female --
64 INSERT INTO category VALUES (36, 7, 1);
65
66 -- Under 21 Male --
67 INSERT INTO category VALUES (41, 10, 1);
68
69 -- Under 21 Female --
70 INSERT INTO category VALUES (46, 9, 1);
71
72 -- Under 18 Male --
73 INSERT INTO category VALUES (51, 12, 1);
74
75 -- Under 18 Female --
76 INSERT INTO category VALUES (58, 11, 1);
77
78 -- Under 16 Male --
79 INSERT INTO category VALUES (63, 14, 1);
80
81 -- Under 16 Female --
82 INSERT INTO category VALUES (68, 13, 1);
83
84 -- Under 14 Male --
85 INSERT INTO category VALUES (73, 16, 1);
86
87 -- Under 14 Female --
88 INSERT INTO category VALUES (78, 15, 1);
89
90 -- Insert into competition table --
91 INSERT INTO competition VALUES(1, NULL, "Practise WA90/1440", FALSE, 'WA90/1440');
92 INSERT INTO competition VALUES(18, 5, "Male Open Longbow", TRUE, "WA60/1440");
93 INSERT INTO competition VALUES(19, 6, "Female Open Recurve", TRUE, "WA70/1440");
94
95 -- Insert into RangNumber --
96 INSERT INTO rangenumber VALUES(1, "Range 1", 90);
97 INSERT INTO rangenumber VALUES(2, "Range 2", 70);
98 INSERT INTO rangenumber VALUES(3, "Range 3", 60);

```

```

99 INSERT INTO rangenumber VALUES(4, "Range 4", 50);
100 INSERT INTO rangenumber VALUES(5, "Range 5", 40);
101 INSERT INTO rangenumber VALUES(6, "Range 6", 30);
102 INSERT INTO rangenumber VALUES(7, "Range 7", 20);
103 INSERT INTO rangenumber VALUES(8, "Range 8", 10);
104
105 -- Insert into Target Face Size table --
106 INSERT INTO targetfacesize VALUES (1, '80cm');
107 INSERT INTO targetfacesize VALUES (2, '122cm');
108
109 -- Create roundrange table --
110
111 -- WA90/1440--
112 INSERT INTO roundrange VALUES(1, "WA90/1440", 1, 6, 36, 2);
113 INSERT INTO roundrange VALUES(2, "WA90/1440", 2, 6, 36, 2);
114 INSERT INTO roundrange VALUES(3, "WA90/1440", 4, 6, 36, 1);
115 INSERT INTO roundrange VALUES(4, "WA90/1440", 6, 6, 36, 1);
116 -- WA70/1440--
117 INSERT INTO roundrange VALUES(5, "WA70/1440", 2, 6, 36, 2);
118 INSERT INTO roundrange VALUES(6, "WA70/1440", 3, 6, 36, 2);
119 INSERT INTO roundrange VALUES(7, "WA70/1440", 4, 6, 36, 1);
120 INSERT INTO roundrange VALUES(8, "WA70/1440", 6, 6, 36, 1);
121
122 -- insert into Archer Table --
123 INSERT INTO archer VALUES ('100', 'Aubrey', 'Anderson', 19, 'Female');
124 INSERT INTO archer VALUES ('101', 'Christopher', 'Hernandez', 18, 'Male');
125 INSERT INTO archer VALUES ('102', 'Matthew', 'King', 60, 'Female');
126 INSERT INTO archer VALUES ('103', 'Daniel', 'Baker', 64, 'Female');
127 INSERT INTO archer VALUES ('104', 'Elizabeth', 'Nelson', 58, 'Female');
128
129 ----- insert into EndScore -----
130 INSERT INTO EndScoreTable (Arrow1, Arrow2, Arrow3, Arrow4, Arrow5, Arrow6, RoundRangeID)
131 VALUES (4, 3, 2, 2, 2, 5, 1);
132 INSERT INTO EndScoreTable (Arrow1, Arrow2, Arrow3, Arrow4, Arrow5, Arrow6, RoundRangeID)
133 VALUES (10, 8, 1, 4, 10, 3, 1);
134
135 -- archer 100 shoot WA70/1440 Recurve Comp: 19 --
136 INSERT INTO roundshoot(EquipmentID, CompetitionID, Shoot_Date, Shoot_Time, EndID, Archer_ID)
137 VALUES(1, 19, '2022-03-28', '12:00:00', 25, 100);
138 INSERT INTO roundshoot(EquipmentID, CompetitionID, Shoot_Date, Shoot_Time, EndID, Archer_ID)
139 VALUES(1, 19, '2022-03-28', '12:12:00', 26, 100);
140 INSERT INTO roundshoot(EquipmentID, CompetitionID, Shoot_Date, Shoot_Time, EndID, Archer_ID)
141 VALUES(1, 19, '2022-03-28', '12:25:00', 27, 100);
142 INSERT INTO roundshoot(EquipmentID, CompetitionID, Shoot_Date, Shoot_Time, EndID, Archer_ID)
143 VALUES(1, 19, '2022-03-28', '12:39:00', 28, 100);
144 INSERT INTO roundshoot(EquipmentID, CompetitionID, Shoot_Date, Shoot_Time, EndID, Archer_ID)
145 VALUES(1, 19, '2022-03-28', '12:53:00', 29, 100);

```

The screenshot shows the execution of a large SQL script in SSMS. The script inserts data into several tables, primarily focusing on the roundshoot and archer tables. The results grid displays the inserted data, showing rows of equipment ID, competition ID, shoot date, shoot time, end ID, and archer ID. The status bar at the bottom indicates the script has run for 1 minute and 49 seconds.

The entire SQL file

Use Cases and SQL Statements

```

1 -- show all the archer detail --
2 • SELECT *
3   FROM archers;
4
5
6

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

Archer_ID	Archer_FirstName	Archer_LastName	Age	Gender
100	Aubrey	Anderson	19	Female
101	Christopher	Hernandez	18	Male
102	Matthew	King	60	Female
103	Daniel	Baker	64	Female
104	Elizabeth	Nelson	58	Female
105	Daniel	Adams	54	Female
106	Olivia	Wilson	49	Male
107	Alexander	Edwards	62	Male
108	Lila	Young	33	Male
109	Joshua	Wright	50	Male
110	Amelia	Hernandez	39	Male
111	Ethan	Garcia	36	Female
112	William	Lopez	20	Male
113	Jacob	Mitchell	40	Female
114	Aubrey	Mitchell	60	Male

Show all the archer details

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

RoundDefinitionID	RangeNumberID	RangeDescription	Distance_in_metre	Number_of_Arrows	Number_of_Ends	Target_Face_Size
WA90/1440	1	Range 1	90	36	6	120cm
WA90/1440	2	Range 2	70	36	6	120cm
WA90/1440	4	Range 4	50	36	6	80cm
WA90/1440	6	Range 6	30	36	6	80cm

Look up definition of specific round

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

CompetitionID	RoundDefinitionID	Shoot_date	Archer_ID	TotalScore
WA90/1440	1	2022-04-10	100	816
WA90/1440	1	2022-03-15	100	806

Show the score of archer in a specific round

```

1   -- show the score of archer in all the round and also with the shoot_date --
2 • SELECT
3     RS.CompetitionID,
4     CP.RoundDefinitionID,
5     RS.Shoot_date,
6     RS.Archer_ID,
7     SUM(E.Arrow1 + E.Arrow2 + E.Arrow3 + E.Arrow4 + E.Arrow5 + E.Arrow6) AS TotalScore
8   FROM roundshoot RS
9   INNER JOIN EndScoreTable E ON RS.EndID = E.EndID
10  INNER JOIN Competition CP ON RS.CompetitionID = CP.CompetitionID
11  WHERE archer_id = 100
12  GROUP BY RS.CompetitionID, CP.RoundDefinitionID, RS.Shoot_date, RS.Archer_ID;
13
14

```

Result Grid Filter Rows: Export: Wrap Cell Content: FA					
	CompetitionID	RoundDefinitionID	Shoot_date	Archer_ID	TotalScore
▶	1	WA90/1440	2022-03-15	100	806
23	AA50/1440	2022-03-19	100	675	
19	WA70/1440	2022-03-28	100	778	
8	Long Brisbane	2022-04-02	100	625	
12	Hobart	2022-04-03	100	511	
1	WA90/1440	2022-04-10	100	816	
19	WA70/1440	2022-04-15	100	781	

Show the score of archer in all the round and the shoot date

```

1   -- show the score of archer by competition is part of yearly club competition --
2 • SELECT
3     RS.CompetitionID,
4     CP.RoundDefinitionID,
5     RS.Shoot_date,
6     RS.Archer_ID,
7     SUM(E.Arrow1 + E.Arrow2 + E.Arrow3 + E.Arrow4 + E.Arrow5 + E.Arrow6) AS TotalScore
8   FROM roundshoot RS
9   INNER JOIN EndScoreTable E ON RS.EndID = E.EndID
10  INNER JOIN Competition CP ON RS.CompetitionID = CP.CompetitionID
11  WHERE CP.IsYearlyChampionship = True
12  GROUP BY RS.CompetitionID, CP.RoundDefinitionID, RS.Archer_ID;
13
14
15
16

```

Result Grid Filter Rows: Export: Wrap Cell Content: FA					
	CompetitionID	RoundDefinitionID	Shoot_date	Archer_ID	TotalScore
▶	18	WA60/1440	2022-03-30	101	783
18	WA60/1440	2022-03-30	106	803	
19	WA70/1440	2022-03-28	100	1559	
23	AA50/1440	2022-03-19	100	675	
23	AA50/1440	2022-03-19	102	803	

Show the score of archer by competition of yearly club

```

1      -- restrict the score by date and type of round
2 •  SELECT RS.*, RR.RoundDefinitionID
3   FROM roundshoot RS
4     INNER JOIN EndScoreTable E
5       ON RS.EndID = E.EndID
6     INNER JOIN RoundRange RR
7       ON E.RoundRangeID = RR.RoundRangeID
8 WHERE (RS.shoot_date BETWEEN '2022-03-15' and '2022-03-19')
9   AND (RR.RoundDefinitionID = 'WA90/1440');
10
11
12
13

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	RoundShootID	EquipmentID	CompetitionID	Shoot_Date	Shoot_Time	EndID	Archer_ID	RoundDefinitionID
▶	1	1	1	2022-03-15	14:30:00	1	100	WA90/1440
	2	1	1	2022-03-15	14:40:00	2	100	WA90/1440
	3	1	1	2022-03-15	14:49:00	3	100	WA90/1440
	4	1	1	2022-03-15	14:58:00	4	100	WA90/1440
	5	1	1	2022-03-15	15:07:00	5	100	WA90/1440
	6	1	1	2022-03-15	15:16:00	6	100	WA90/1440
	7	1	1	2022-03-15	15:25:00	7	100	WA90/1440
	8	1	1	2022-03-15	15:34:00	8	100	WA90/1440

Show the score by date and type of round

```

1      -- show the score restric by date range --S
2 •  SELECT * FROM roundshoot
3 WHERE (shoot_date BETWEEN '2022-03-15' and '2022-03-19');
4
5
6
7

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

	RoundShootID	EquipmentID	CompetitionID	Shoot_Date	Shoot_Time	EndID	Archer_ID
▶	1	1	1	2022-03-15	14:30:00	1	100
	2	1	1	2022-03-15	14:40:00	2	100
	3	1	1	2022-03-15	14:49:00	3	100
	4	1	1	2022-03-15	14:58:00	4	100
	5	1	1	2022-03-15	15:07:00	5	100
	6	1	1	2022-03-15	15:16:00	6	100
	7	1	1	2022-03-15	15:25:00	7	100
	8	1	1	2022-03-15	15:34:00	8	100

Show the score by date range

Performance: Indexes

Let's examine each table using SQL statements to determine and identify which columns can be more efficient from indexing:

1. Class table: No columns are efficient from indexing. By default, the primary key column (ClassID) is currently indexed.
2. Category table: No columns are efficient for indexing. By default, the primary key column (CategoryID) is currently indexed.
3. Equipment table: No columns are efficient from indexing. By default, the primary key column (EquipmentID) is currently indexed.
4. Archer table: No columns are efficient for indexing. By default, the primary key column (ArcherID) is currently indexed.
5. RoundDefinition table: No columns are efficient for indexing. By default, the primary key column (RoundDefinitionID) is currently indexed.
6. RangeNumber table: No columns are efficient for indexing. By default, the primary key column (RangeNumberID) is currently indexed.
7. RoundRange table: No columns are efficient for indexing. By default, the primary key column (RoundRangeID) is currently indexed.
8. EndScore table: No columns are efficient for indexing. By default, the primary key column (EndID) is currently indexed.
9. TargetFaceSize table: No columns efficient for indexing. By default, the primary key column (TargetFaceID) is currently indexed.
10. Roundshoot table: Based on the database and the potential to expand data for tonnes of rounds being shot in the future, the Foreign Key (EndID) and Foreign Key (ArcherID) in the Roundshoot table might be efficient run-time from indexing these.
11. Competition table: Based on the database and the potential to expand data for tonnes of rounds being shot in the future, the Foreign Key (CategoryID) in the Competition table might be an efficient way of indexing these.

Run SQL query/queries on table archery.competition: [?](#)

```

1 CREATE INDEX idx_categoryID ON competition (CategoryID);
2

```

Create INDEX

I can double check in the structure of the table. The higher the cardinality, the more efficient the index works.

Indexes ?										
Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment	
Edit Rename Drop	PRIMARY	BTREE	Yes	No	CompetitionID	95	A	No		
Edit Rename Drop	competition_ibfk_2	BTREE	No	No	RoundDefinitionID	31	A	No		
Edit Rename Drop	idx_categoryID	BTREE	No	No	CategoryID	95	A	Yes		

Indexes of the competition table

Your SQL query has been executed successfully.

```
EXPLAIN SELECT * FROM competition;
```

[Edit inline] [Edit] [Skip Explain SQL] [Create PHP code]

Extra options

ID	Select Type	Table	Type	Possible Keys	Key	Key Len	Ref	Rows	Extra
1	SIMPLE	competition	ALL	NULL	NULL	NULL	NULL	95	

EXPLAIN from the competition table

Major Specific (Software Development)

Nhat Minh Tran (104082552)

My major is software development, so I chose to create a website interface about archery score recording. The website lets the archers to lookup for their score and selecting the rounds. In this application, I use Vue CLI, JSON, and deployed with local IP address. For the Frontend, I mainly coded in VueJS with components and computed methods, design grid with Bootstrap 5, and for Backend, I created some JSON files to store the rounds and archers' information based on the provided archery database. For future development, I have recorded the data in SQL, stored in phpMyAdmin. So instead of using JSON, I will connect the Frontend to phpMyAdmin using PHP and import axios to fetch the API. The data then, will be easier to view and retrieve. Also, the website is currently deployed in local address, which will restrict the archers from lookup the score from another places, this could be improved by adjust the settings and setup everything https instead of http.

Archery Score Recording Application

Choose Round

Choose Archer

First Name	Last Name	defaultEquipment	Selected
Jamie	King	Compound Barebow	<input checked="" type="checkbox"/>

[Done](#)

Archery Home Page to choose rounds and archers

Archery Score Recording Application

[Home](#)

Riley Carter, Longbow

Previous 1 / 4 Next

Range 1

Distance: 90m - Face Type: 122cm

[Reset Range](#) [Submit Range](#)

End 1

X	9	8	6	5	Edit End
---	---	---	---	---	----------

Total: 38

X	10	9	8
7	6	5	4
3	2	1	M

1 / 5 [Next End](#)

Recording Application for archers

Archery Score Recording Application

[Home](#)

Riley Carter, Longbow

Previous 1 / 4 Next

Range 1

Distance: 90m - Face Type: 122cm

[Reset Range](#) [Submit Range](#)

End	Arrow 1	Arrow 2	Arrow 3	Arrow 4	Arrow 5	Arrow 6
1	X	X	X	X	X	X
2	10	9	8	7	6	4
3	6	5	4	3	3	2
4	9	8	6	4	3	3
5	10	9	5	4	1	1

Result for Range 1

Submitted Range and Show results

```

<script>
export default {
  data() {
    return {
      selectedEndId: 1,
      msg: '',
      isSubmitted: false
    }
  },
  methods: {
    incrementEndRecord() {
      if (this.rangeRecord.endRecords[this.selectedEndId - 1] === undefined) {
        this.selectedEndId++;
      } else {
        this.msg = "You must submit the current End Record before proceeding to the next one";
      }
    },
    handleScoresSubmitted(endRecord) {
      this.rangeRecord.endRecords[parseInt(endRecord.endNumber) - 1] = endRecord;
      this.rangeRecord.endNumber += 1;
      // Handle the submitted scores data here
      console.log(this.rangeRecord);
    },
    handleScoresReset(endNumber) {
      this.rangeRecord.endRecords[parseInt(endNumber) - 1] = undefined;
      this.msg = '';
      // Handle the reset scores data here
      console.log(this.rangeRecord);
    },
    resetRange() {
      this.selectedEndId = 1;
      this.msg = '';
      this.isSubmitted = false;
      this.rangeRecord.endRecords = Array(parseInt(this.range.numberOfEnds));
      // Reset the scores in each EndComponent
      this.$el.querySelectorAll('input').forEach((endComponent) => {
        if (endComponent.isSubmitted) {
          endComponent.resetScore();
        }
      });
    }
  }
}

```

Range Component

Files from NodeJS

```

<template>
<div class="card container text-center">
  <h1 class="card-header">Archery Score Recording Application</h1>
  <div class="card-body">
    <div v-if="!isSet">
      <component ref="main" @dataSelected="handleDataSelected"></component>
    </div>
    <div v-else>
      <button @click="backToMain" type="button" class="btn btn-outline-primary">Back</button>
      <h3 class="m-2" v-for="submittedArcher in submittedArchers" :key="submittedArcher.id">{{ submittedArcher.firstName }} {{ submittedArcher.lastName }} Equipment: {{ submittedArcher.equipment }}</h3>
      <div class="range-navigation m-2">
        <button class="btn btn-outline-primary" @click="decrementRangeCount">Previous</button>
        <span class="range-count">{{ selectedRange + 1 }} / {{ submittedArchers.length }}</span>
        <button class="btn btn-outline-primary" @click="incrementRangeCount">Next</button>
        <button class="disabled" :disabled="selectedRange === 0" @click="incrementRangeCount">Previous</button>
      </div>
      <div class="card p-2 m-2">
        <rangeComponent ref="rangeComponents" v-for="(range, index) in ranges" :key="index" :range="range" v-show="index === selectedRange"></rangeComponent>
      </div>
      <div class="alert alert-warning" v-if="msg !== ''">
        {{ msg }}
      </div>
    </div>
  </div>
</template>

```

```

for (let i = 1; i < scores.length; i++) {
  if (scores[i] > scores[i - 1]) {
    return false;
  }
}
return true;
},
endRecord() {
  return {
    endNumber: this.endNumber,
    scores: this.scores
  }
},
totalScore() {
  let totalscore = 0;
  if (this.scores[0] !== '') {
    const scores = this.scores.map(score => {
      if (score === 'X') {
        return 10;
      } else if (score === 'M') {
        return 0;
      } else if (score === '') {
        return 0;
      } else {
        return parseInt(score);
      }
    });
    for (let i = 0; i < scores.length; i++) {
      totalscore += scores[i];
    }
  }
  return totalscore;
}

```

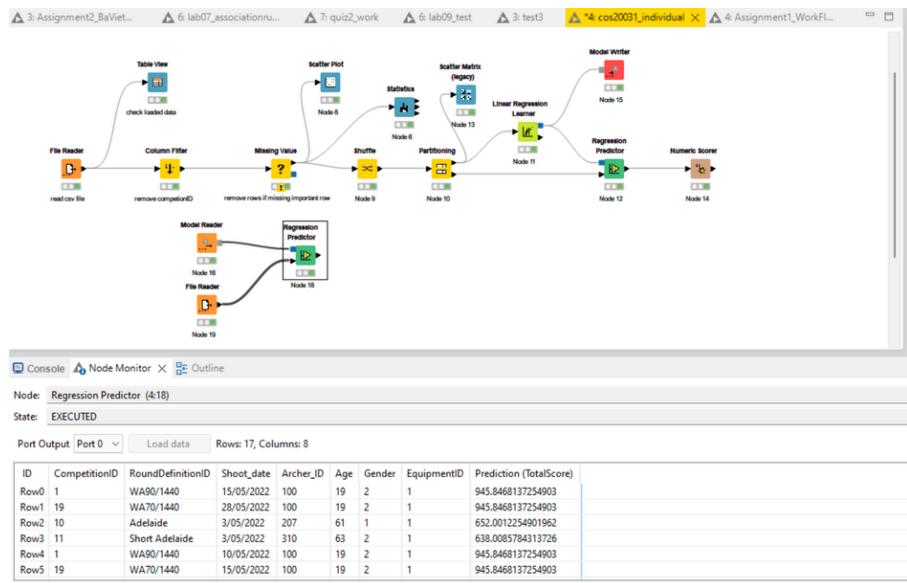
Main App View

End User Component Count

Major Specific (Data Science)

Ba Viet Anh (Henry) Nguyen (103807246)

As my major is data science, I decided to create one machine learning model to predict the total score of the archers based on their historical scores, age, shoot_date, shoot_time, round, equipment. This will be extremely helpful for archers to gain valuable insights and aiding in decision-making for training, competition preparation, and overall performance improvement. To create the machine learning model, I use KNIME to perform this task. And I also use TABLEAU to create a dashboard to analysis the previous scores, age, competitions, ...etc.. to gain insights and valuable information to better organize and run the archery club.



ID	CompetitionID	RoundDefinitionID	Shoot_date	Archer_ID	Age	Gender	EquipmentID	Prediction (TotalScore)
Row0	1	WA90/1440	15/05/2022	100	19	2	1	945.8468137254903
Row1	19	WA70/1440	28/05/2022	100	19	2	1	945.8468137254903
Row2	10	Adelaide	3/05/2022	207	61	1	1	652.0012254901962
Row3	11	Short Adelaide	3/05/2022	310	63	2	1	638.0085784313726
Row4	1	WA90/1440	10/05/2022	100	19	2	1	945.8468137254903
Row5	19	WA70/1440	15/05/2022	100	19	2	1	945.8468137254903

predict scores of archers in MAY 2022

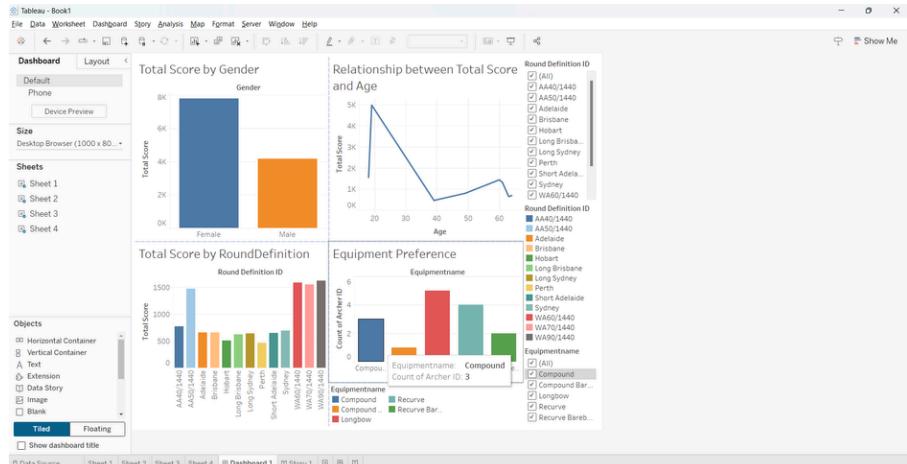


Tableau Dashboard to see the

Firstly, I used query to have the result of the table then I exported the result as csv file

Limit to 50000 rows

```

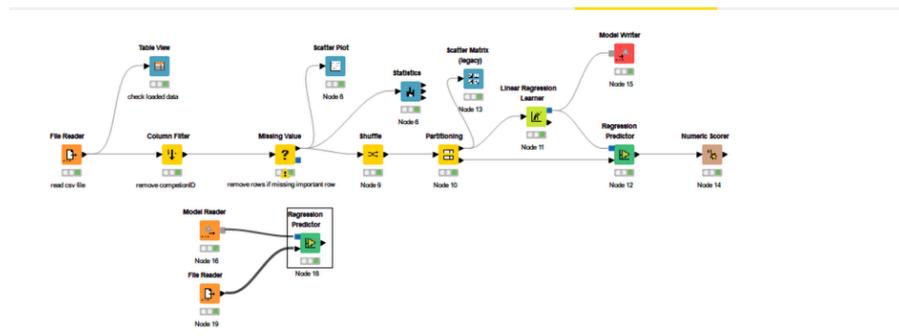
1 • SELECT
2     RS.CompetitionID,
3     CP.RoundDefinitionID,
4     RS.Shoot_date,
5     RS.Archer_ID,
6     A.Age,
7     A.Gender,
8     EQ.EquipmentID,
9     SUM(E.Arrow1 + E.Arrow2 + E.Arrow3 + E.Arrow4 + E.Arrow5 + E.Arrow6) AS TotalScore
10    FROM roundshoot RS
11   INNER JOIN EndScoreTable E ON RS.EndID = E.EndID
12   INNER JOIN Competition CP ON RS.CompetitionID = CP.CompetitionID
13   INNER JOIN Archer A ON RS.Archer_ID = A.Archer_ID
14   INNER JOIN Equipment EQ ON RS.equipmentid = EQ.equipmentid

```

Result Grid | Filter Rows: Export: Wrap Cell Content:

CompetitionID	RoundDefinitionID	Shoot_date	Archer_ID	Age	Gender	EquipmentID	TotalScore
1	WA90/1440	2022-03-15	100	19	Female	1	806
19	WA70/1440	2022-03-28	100	19	Female	1	778
10	Adelaide	2022-04-03	207	61	Male	1	660
11	Short Adelaide	2022-04-03	310	63	Female	1	650
1	WA90/1440	2022-04-10	100	19	Female	1	816
19	WA70/1440	2022-04-15	100	19	Female	1	781
6	Long Sydney	2022-03-29	102	60	Female	2	642
8	Long Brisbane	2022-04-02	100	19	Female	2	625

Then, I built the machine learning model using KNIME to predict the total scores in the future based on the historical scores.

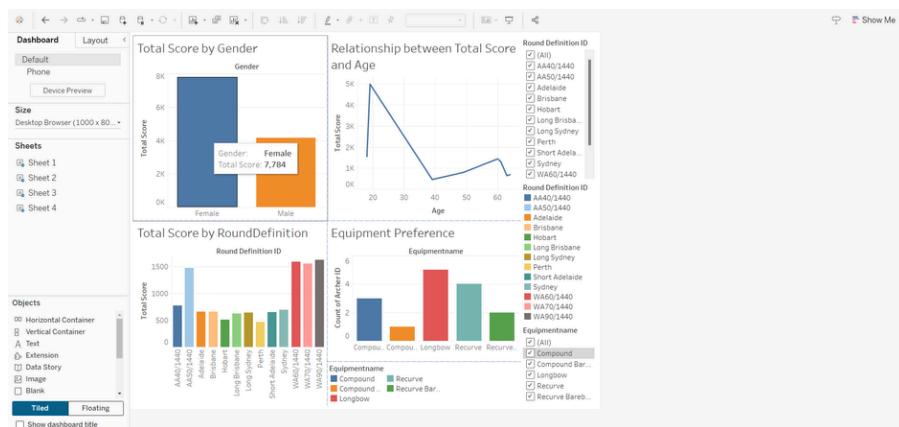


machine learning model to predict scores (using KNIME)

ID	CompetitionID	RoundDefinitionID	Shoot_date	Archer_ID	Age	Gender	EquipmentID	Prediction (TotalScore)
Row0	1	WA90/1440	15/05/2022	100	19	2	1	945.8468137254903
Row1	19	WA70/1440	28/05/2022	100	19	2	1	945.8468137254903
Row2	10	Adelaide	3/05/2022	207	61	1	1	652.0012254901962
Row3	11	Short Adelaide	3/05/2022	310	63	2	1	638.0085784313726
Row4	1	WA90/1440	10/05/2022	100	19	2	1	945.8468137254903
Row5	19	WA70/1440	15/05/2022	100	19	2	1	945.8468137254903

result of the predict

For better run and organize archery club, i also used TABLEAU to analyze the historical results base one all attributes.



dashboard to analyze the results

4Ls Retrospective Overview

Reflect back on what you and your team learned and what motivates the group to succeed by following the instructions for the [4Ls Retrospective Play](#).

Team	Team 2 - COS20031
Team members	@Anlee Nguyen @Minh Tran @BA VIET ANH NGUYEN @Rohit Raj Saha
Date	25/05/2024
Retrospective period	3/03/2024 - 25/05/2024

4Ls retrospective

Milestones	Loved	Longed for	Loathed	Learned
Anlee	Loved collaborating with the team to solve complex issues.	Wished for more robust testing of the database.	Frustrated by limitations in SQL syntax for certain tasks.	Gained a deeper understanding of database architecture.
Minh	Enjoyed optimizing SQL queries for faster performance.	I wish the project ,project requirements and tasks were more specific and clear.	Struggled with initial slow query performance.	Learned the importance of indexing and query optimization.
Henry	Found it rewarding to work with this great teammates who were really helpful and talented.	Longed for a more collaborative work environment and more regular team meetings to discuss challenges and solution.	Loathed repetitive debugging sessions.	Learned how to use SQL statements and queries effectively.
Rohit	Loved to learn new SQL functions and procedures.	Wished for more comprehensive documentation.	Disliked the initial setup and configuration of the database environment.	Learned the critical role of thorough documentation.