

# Agile Processes Group Project - Gymflow MTU

[Github Repository](#)

**Olann Lally** - R00228730: Documentation

**Arnas Kavaliauskas** - R00226119: Minutes

**Liam Ó Dubhgáin** - R00230462: Visual Paradigm

**Maja Majstrzyk** - R00236514: Visual Paradigm

## Motivation

The MTU Arena is currently under construction, and to help it perform successfully, signing in and out of the gym, and viewing who is in the gym, should be as easy and accessible as possible for both members and staff.

## Objective

A Website will be designed, allowing students and staff quick and efficient access from anywhere to see how many people are currently in the gym, as well as let them sign in and out with ease

## Scope

Resources -> 4 team members working x amount of hours weekly

Deliverables -> Login, password updates feature (every 3 months), registration system, limited number of wrong password inputs, review system, booking/cancelling/searching feature, tracking BMR system

Out-of-scope -> members may not update the system on routine workout therefore BMR calculations may be inaccurate, user emotions may not be taken into account (moods may vary intensity of workout)

## Stakeholders

MTU Students

MTU Staff

Locals

Arena Members

## Cost Benefits

- Due to the limit of the budget, we cannot build any more advanced AI features into the system.
- Besides the money, time is another main cost of the project. If the amount of the users surge exponentially we may need to consider the utilisation of clusters, which demands additional staff with special skills; but again due to time and money constraints the utilisation of clusters will not be possible in this project.
- This project will minimise the time the workers in the arena will spend organising all the data and looking for it.
- Due to the time limit the functions of the website will not be as diverse as would be liked.

## Risk Assessment

- Assigning team members to parts of the project where the member may have insufficient knowledge.
- Time, it is vital time is distributed weekly in accordance with the project requirements in order to complete the project in the given time.
- Communication can vary from every team member, clear communication is essential between members in order to avoid any misunderstanding of parts of the project.

## Critical Success Factors

- Collaboration of team members is vital in completing a project.
- Communication is necessary between team members.
- Time management is essential for members to complete their part of the project weekly.
- Strong leadership → roles must be given to each team member in advance of the next sprint.

## Appendix

Project Summary		
Project Description	The CIT Arena is largely used by the students and staff at CIT. It was established in 2023 in order to replace the older, much smaller gym. The new up-to-date Arena becomes very quickly overcrowded during peak hours. The current existing system in the CIT Arena is unable to maintain the number of users at once. The system requires the staff of CIT Arena to manually search, process payments and allow access to students of CIT.	
	The new proposal would enhance the current system and allow for a much quicker processing of attendees. It would enable Arena goers to skip queues and avoid congestions in the hallway. The new system would also keep track of students BMR allowing them to keep updated on their progress in working out. If Arena goers wish to apply for any classes, searches would become far easier as they can check all the details online themselves rather than visiting the help desk.	
Statement of Need or Opportunity	The CIT Arena is a relatively new system which only released in 2023. Considering it's recent release, the system is bound to have several flaws. The current system focuses on very basic and simple administration in order to avoid any potential system faults while in use by faculty. There is no access to the CIT Arena system for the students, it's all processed by staff. Students cannot search for specific classes that they may register for, students must manually track their own progress in training (there is not support system), there are no booking reminders for classes that a student may have registered for in the CIT Arena, any cancellations must be processed in person at the help desk, any issues with access to the gym must be processed at the help desk of the CIT Arena. The prime focus of the system was simply to make it functional, there is little to no technological aspect to the existing system. The systems several issues deter CIT Arena's clientele because of the long wait times and awkward processing system.  The University has decided to make changes to the CIT Arena system to improve it and make it more accessible.	
Business Objective(s)	Objective	Alignment with Strategic Initiatives/Business Problems
	Create a search feature for students to be able to search for any classes at CIT Arena with the use of an instructors name.	Enables students to swiftly find and register for classes with the use of instructors name.
	Create a sign up system with specific constraints	Ensure efficient student enrollment.
	Display info of clubs along with image, duration of training, coach, average calories burned	Promote student engagement and well-being through transparent and accessible fitness club information.
	Trainers can book or cancel facilities by searching for facilities by ID/name or location	Allow facility management through streamlined booking and cancellation processes.
	Members can book or cancel training and search via booking date or name of club	Allow member an efficient booking and cancelling system for training sessions.
	Members can self manage fitness plan. Keep track of BMR.	Allow members access to personalized tools and health tracking
	Confirmation messages for bookings and appointments	Allow communication by providing confirmations for booking and appointments
	Make appointments with PTs before joining club	Provide personalized consultations with personal trainers for students

Project Initiator / Sponsor			
Project Initiator / Sponsors	Role	Names	Responsibilities
	Project Initiator	Jing Hua Ye	U/A
	Project Sponsor	Jing Hua Ye	-Resolve issues in a timely manner -Provide direction, senior-level support and guidance -Give feedback on project

Customers and Beneficiary			
Customers	Customers/Beneficiary	Needs and Concern	
	Students	A well-performing web application to promote health and fitness	
	Staff	A well-performing web application to facilitate the management of the arena	
	General Public	A well-performing web application to promote health and fitness	

Project Approach	
Phasing	<ul style="list-style-type: none"><li>● Phase One: Identification – Development of project proposal</li><li>● Phase Two: Initiation – Appointment of Project Manager who identifies stakeholders, defines project timeframe and establish measures of success.</li><li>● Phase Three: Planning – Develop a solid plan that helps ensure that the project will be successfully completed on-time.</li><li>● Phase Four: Execution and Control – The project team completes the tasks defined in project plan.</li><li>● Phase Five: Closeout – Documents lessons learned and archive project documentation for future use.</li></ul>
Outsourcing Plans	U/A
Interoperability	U/A

Resource Requirements		
Resource Requirements	Resource	Description
	Facilities	Meeting Facilities
	Equipment	Laptops and monitors

Project Success Criteria	
Project Success Criteria	Success for the CIT Smart Multifunctional Sports Arena Web app will be achieved when a fully tested <u>website</u> , and all documentation, are fully deployed on time. Success will be determined by the Project Sponsor, <u>Jing Hua Ye</u> , who will also authorize the completion of the project.

Critical Success Factors		
Critical Success Factors	Critical Success Factor (CSF)	Description
	Ability to develop frontend	A well designed <u>frontend</u> will be developed, which requires the knowledge of HTML, CSS <u>JavaScript</u> and more
	Ability to develop backend	A Restful <u>backend</u> will be developed, which will require knowledge of what a Restful <u>backend</u> is as well as the technologies associated with
	Testing talent	The software will need to be tested throughout the development cycle, therefore someone with experience with unit testing is needed
	Organizational	There will be heavy time constraints for this project, because of this work and meetings must be done regularly
	Collaboration	Collaboration of team members is vital in completing a project.
	Communication	Communication is necessary between team members.
	Time management	Time management is essential for members to complete their part of the project weekly.
	Strong leadership	Roles must be given to each team member in advance of the next sprint.