Project Contract

This is your project contract form. The deadline is **10/3/2025 12:00 noon**. Remember to tick "Send me an email receipt of my responses" at the end of this page to receive a confirmation email. Please note that you need to forward the "confirmation email" to your supervisor to validate this submission.

**1.Student Name:** ![A black background with a black square

AI-generated content may be incorrect.]()Cameron Ford

**2.P-number:** P2727075

**3.Programme:** Computer Science

**4.Email address:** P2727075@my365.dmu.ac.uk

**5.Project Title:** MartialManager: A Comprehensive Martial Arts Management System

**6.Project Proposer:** Cameron Ford

**7.Supervisor:** Youcef Gheraibia

**8.Introduction (max. 100 words):** This Project is about creating a tool which can be used by martial arts club owners / teachers to effectively manage their students and their progress. It intends to show belt progress, current katas, as well as including possible tournaments and their rankings.

**9.Project Background (max. 300 words):** As a former karate student of a local club, I experienced firsthand the challenges of managing a dojo without a dedicated system. The club relied on manual inputs on software like ‘Microsoft Excel’ for tracking attendance, payments, grading progress and organising tournaments, which often led to lost records and administrative burdens on instructors when they should be focused on teaching. Maintaining student progress reports and membership renewals limited the club’s ability to focus on training and development.

**10.Aims (max. 100 words):** I aim to develop a management system that digitalises key administrative tasks and provides a centralised platform for managing records, attendance, class schedules and other needs of the club. This should be done through an intuitive, secure and user-friendly interface.

**11.Objectives (max. 200 words):**

- Investigate system requirements and produce a requirements specification

- Literature review on club management

- design an intuitive user interface based on HCI Principles (wireframes and prototypes)

- develop a student and membership management module

- create a tournament management system

- develop a login system for both students and instructors

- develop instructor and student pages that has their specified tools

- integrate a notification system

- implement database design and data security features

- design and execute a test plan

- produce a final project report

**12.Deliverables (max. 100 words):**

- Requirements Specification

- Literature Review Report

- System Design Documentation

- UI Wireframes and Prototypes

- Developed System

- Testing Documentation and reports

- Final project report

**13.Resources and Constraints (max. 100 words):**

*Resources:*

*Hardware – Personal Computer for development and testing*

*Software:*

*IDE/Text Editor – Visual Studio Code*

*Development Tools – Programming Language – JavaScript*

*Version Control – GitHub*

*Testing Tools – Junit*

*Database – MySQL*

*Constraints:*

*Time – must be completed during project timeframe, limiting scope of additional features*

*Technical limitation – Advanced features may require more time and expertise*

*Resource Availability – Dependence on free or open source tools to minimise costs*

**14.Sources of Information (max. 100 words):** *Google Scholar, StackOverflow, Github Repositories, Local Karate Club instructors and other online developer communities*

**15. Risk Analysis (max. 100 words):**

*Risk: Technical Challenges*

*Mitigation: Break down into manageable tasks, consult forums or documentation and academic resources*

*Risk: Resource Availability*

*Mitigation: Make sure development tools are accessible through university resources*

*Risk: Unexpected Bugs or System Failures*

*Mitigation: frequent version control through GitHub, perform unit testing as features are developed*

**16.Schedule of Activities (max. 300 words):**

*Task 1 – Investigate System Requirements*

*Task 2 – Literature Review on Karate Club Management*

*Task 3 – Produce a Requirements Specification Report*

*Task 4 – Design Wireframes for UI and documentation*

*Task 5 – Database Design*

*Task 6 – Design Membership management module*

*Task 7 – Develop Membership management module*

*Task 8 – Develop Tournament management module*

*Task 9 – Develop login system*

*Task 10 – Develop Notification system*

*Task 11 – Unit Testing*

*Task 12 – Integration Testing*

*Task 13 – Write Documentations*

*Task 14 – Final Project Report*

**17.Student Signature:** Cameron Ford

**18.Supervisor Signature: Youcef Gheraibia**

**19.Date: 10/03/25**