

**Software Engineering and Testing**

**Assessment 1: Project Proposal**

**Submitted by: Luke O’Brien, B00158917**

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**Declaration**

I herby certify that this material, which I now submit for assessment on the programme of study leading to the award of Ordinary Degree in Computing in the Institute of Technology Blanchardstown, is entirely my own work except where otherwise stated.

Author: Luke O’Brien Dated: 09/02/2025

Author: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Dated: \_\_\_\_\_\_\_\_\_\_\_\_\_

# Abstract

A simple system for managing entry and administration of bracket tournaments, particularly online video game tournaments. The system should tournament organizers to choose between single and double-elimination bracket formats, and match formats starting at best of one and going up to best of any arbitrarily large value. Players should be able to join tournaments with a unique identifying username, and report their scores in their matches, with a system for a tournament organizer to overwrite player-reported scores if it becomes necessary.

# Introduction

There are several websites that exist to provide a system for organizing bracket tournaments, with the two most notable being start.gg and challenge. However, complexity creep on both websites has rendered some of their functionality outdated and/or buggy. The goal of this website is to provide a more barebones, functional approach to tournament organization, which will hopefully be both easy to use and stable.

# Motivation

This software is aimed at anyone looking to organize or play in a bracket-style tournament. Most prominently this is for people looking to administrate online tournaments for fighting games such as street fighter but could theoretically be used for other games with bracket-style tournament scenes, such as chess.

# Client

Ideally, this website would be used by organizations looking to run online bracket tournaments. There are many of these organizations for fighting video games, which are generally arranged through a messaging app like discord, but use external software to manage the bracket itself. The app would of course also be used by participants in the tournament, who would use the website to register for tournaments, discover their opponents, and report scores.

# The Project

The project definition:

* What is the project?
* What will the end product do?
* What are the main components of the software system?
* How will it be used?

# Justification

This website would require frontend systems for displaying details about the tournament, including start times and match parings/results.

It will also require a basic account login system to associate users with usernames and tournament organizers with tournaments.

Finally, it will require a backend database system to record the setting, entrants and results of specific tournaments.

**Technical Requirements**

Frontend will be developed with HTML5, CSS and Javascript.

The account login system will be developed with a combination of Javascript and PHP, and saved to a MySQL database using SQL.

Details of tournaments and account logins will be saved to a MySQL database and be manipulated with a combination of Javascript, PHP and SQL.

During testing, the website will be hosted and tested using Lagadon.