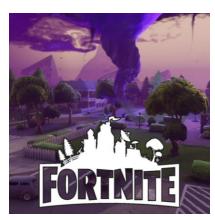# Tournament Manager 2.0

By: Amber Li, AbdulHamid Lokhandwala, Shiva Kanta Ranam

Advisor: Sandeep Vankadari   Client: Robert Sutcliffe

INTRODUCTION

Tournament Manager 2.0 is an e-sport organiser and is an open source web application, developed to run several online tournaments, complete with online registrations in order to use this in conjunction with e-sports club at WelTec. The main goal of developing this web application is to associate the developed product with Weltec Sports club which allows the Weltec students to join and participate in esports/ tournaments organised by the admin. This web application has been designed in such a way that allows admin with distinct features who can organise and manage tournaments whereas users can register and participate in the tournaments.

However, the current version of the web application is developed using open source tools which allows it to be modified further with additional and adaptable features as per the business requirements.

DEVELOPMENT

The methodology we used in this project was Agile Software Development Life Cycle Model which is an adaptive methodology that combined iterative and incremental processes. The reason we chose Agile is that it is designed to accommodate change and the need for faster development. In this methodology, there are six stages such as proposal, planning, requirement analysis, designing and developing, testing, final handover.

Our project initialized with system requirements gathering, we spent a good amount of time researching and discussing the concepts of this project as well as the suitable tools that should be used to develop the website. With a completed understanding of client's requirements, we began the design phase working on wireframe design and prototype design.

At the development phase, technologies involved were MERN (MongoDB, Express, React and Node) Stack and GraphQL. This phase is divided into two major part:

- Front-end Development: Using HTML, CSS and React.js to represent the user interface and functionalities of the application that the end-user interacts with.
- Back-end Development: Using Express, Node.js and MongoDB to setup server and database. Using GraphQL for simple data fetching.

At the testing phase, user acceptance testing was successfully conducted. Users were asked to fill a survey form with critical application functionalities.

CONCLUSION

Tournament Manager 2.0 is developed and completed on time by meeting all of the project client's requirements and the final product has been approved by the client. The project documentation provides the detailed information of the system design, development details and testing survey. The team trio has learnt many possible things during the development of this project and is able to understand the team work and the challenges that are faced in real corporate organisation.