**Requirements Document – Cyber Education Start-up**

**SAD Lads**

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**Attendance Record System**

1. **Purpose**

This is a requirements document for a new app-based attendance record system for the cyber education star-up. The system will encompass an attendance record system that helps teachers manage student and attendance and achievement records by storing details in an SQLite database. The system will enable attendance and achievement tracking through the implementation of badges earned for tests completed, each test is broken into topics and subsequently each topic is made up of parts. This document describes the scope, objectives and goal of the new system. In addition to describing non-functional requirements, this document models the functional requirements with use cases, interaction diagrams, and class models. This document is intended to direct the design and implementation of the target system in an object-oriented language.

1. **Background**

The cyber education start-up has undergone a preliminary analysis. This analysis determined that attendance and achievements recording is not automated and is conducted in a paper notebook. This current procedure is slow and inefficient. It is also often inaccurate as it quickly becomes out of date. Currently, no app-based record attendance system exists, therefore a new one must be created.

1. **Assumptions**
   * Funding for this project has not been define, therefore it is assumed it will not be an issue.
   * Parts, Topics and Tests are either completed or not, there is no pass/fail requirement implemented.
2. **Constraints** 
   * System must be presented with basic requirements met and functionality NLT 19OCT21.
   * System must be completed and ready NLT 01NOV21.
3. **Methodology**

Basic requirements were provided by the cyber education start-up. Additional requirements were developed in collaboration with the SAD Lads Team.

1. **Functional Requirements**

High Priority:

* Keep a record of Students / Create a Student.
  + First name, last name, DOB.
  + Search function by name.
  + Profile Page.
    - Details
    - Achievements.
* Record Student Attendance.
  + Weekly meetings.
  + Weekend activities.
  + Personal work.
    - Tests.
    - Topics.
    - Parts
  + Trimesters.
* Badges
  + Types.
    - A-level (Achievement).
    - S-level (Special interest or skill).
    - C-level (Core curriculum).
  + Tiers.
    - Diamond
    - Platinum
    - Lithium

Medium Priority:

* Badge Leader Board.
* Search for Student.
  + By name.
  + By other criteria.
* Notifications.
  + Badge competition.
  + Test competition.
  + Topic competition.
  + Part competition.
  + ‘At risk’ categories that have not been completed.

Low Priority

* Edit Details.
  + Students.
  + Tests.
  + Topics.
  + Parts.
* Edit and Access schedule.

1. **Non-function Requirements**

Useability:

* A Teacher should be able to use the system within 1 full day of training.
* Should have an intuitive navigation design.
* Colour theme of app should not place strain on the user.
* Should be easy to use.

Performance:

* The app should be able to support at least 1000 Students.
* Should be snappy.

Security:

* Teachers should not be able to edit already competed badges/tests/topics/parts.
* Details other than those displayed in the Leader board should not be able to be viewed.

Supportability:

* Students/Badges/Tests/Topics/Parts should be easily added and removed from system.

1. **Risk Considerations**

Risk of Proceeding;

* Infeasible requirements.
* Invalid assumptions.
* Scope creep.
* Fail to make timings.

Risk of Not Proceeding:

* Cyber Education start-up loses students or teachers due to lack of modernisation.

1. **Approval Sought**

This Statement of Approval seeks:

* Approval of the Statement of Requirements.