1 - Introduction

This document outlines the **Requirements Specification** for the Classroom Monitor project, organised into three sections. The **Introduction** provides a project overview, purpose, scope, and system description, including a comparative analysis of similar products. The **Solution Requirements** section details functional and non-functional requirements, along with potential risks. The closing section addresses **Project Development**, outlining the development approach and long-term project schedule.

1.1 - Overview and Justification

We are undertaking this project under the direction of **Mr. Michael Hunter**, who shall henceforth be referred to as ‘the client’. The client has tasked us with creating an **Online tracking system, the Classroom Monitor,** in which the system can generate gradebook for students by their academic performance and users can track the students’ gradebook online as their old version is gonna expire soon and they want to add some new elements to the system. There are several key project goals:

1. Create a safe platform to save the information of the students.
2. Analyse students’ data and generate gradebooks according to the behaviour of the students.
3. Only allow people who have access to log in to the website.

1.1.1 Purpose

**The website that we are planning to create would serve doubly as a way for students to track their academic progress in each different subject, and for the school to update grades and monitor the progress of each student over time and intervene when necessary.**

1.2 - Project Scope

1.2.1 - Problems

Michael, our client, urgently needs a replacement for their current academic system, set to be discontinued by July 2024. They seek an all-encompassing academic tracking and monitoring system, retaining familiarity for users at Elemore Hall while incorporating specific features missing in their previous tracker.

1.2.2 - Solutions

To meet Elemore Hall's academic tracking needs, we'll develop a user-friendly web interface with key features like student profiles, grading, attendance tracking, and progress reporting. Additional functions include extracurricular activity tracking, tutoring services, and a parent/guardian portal. Prioritising data security and scalability, we'll integrate with educational tools, offering training, support, testing, and user feedback. Deployment, maintenance, and evaluation will align with set timelines and budgets.

1.2.3 - Stakeholders and Users

Elemore Hall's academic tracking system caters to diverse stakeholders—students (elementary to higher education), parents, faculty, and administrators. Students and parents track performance and access resources, teachers and administrators manage academic tasks, and the IT department ensures system functionality and security. Elemore Hall defines requirements for this efficient academic tracking platform, benefiting all users.

1.2.4 - Future Features

Our academic tracking webpage offers secure authentication, a user-friendly interface with automated grades and real-time updates. It includes student portfolios, attendance tracking, and a communication platform for engagement. Analytics tools enable trend identification, mobile responsiveness, and Learning Management System integration. Customizable reporting, gamification, and feedback mechanisms ensure a user-centric approach. Integration with external data sources and accessibility features enhance functionality, guided by continuous stakeholder feedback for optimal satisfaction.