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[Zechariahis Amaya](mailto:zamaya@mymail.tstc.edu)**, Michael Averitt, Cory Smith**

Software Design Documentation

**4th September 2023**

# INTRODUCTION

The Design Document will provide an overview of the goals of the program and design considerations.

# SYSTEM OVERVIEW

The program will act as a management system for school classrooms of various sizes using a user interface in order to manage the class grade book, attendance, and seating chart. The program will also produce various printed reports of the managed areas.

# DESIGN CONSIDERATIONS

The program will address and be designed around the following considerations.

Database

The program will utilize MSSQL to store data on students, grades, attendance, and seating as input by the user. The database will be normalized to the Third Normal Form.

Security

The program will utilize a consistent username format for each individual user. Each user will enter a password adhering to the set guidelines. Passwords will be able to be recovered and reset via email.

There are three levels of security permissions which are Instructor, Academic Officer, and Administrator.

Distribution

The program will be distributed with a standalone installer.

Reporting

The program will produce multiple printable reports that are HTML based.

Gradebook

The program gradebook will track each student's grades and produce a final grade based on the instructors assigned percentages.

Classes

Classes of any subject and as many classes as needed can be input into the system. Class sizes will be restricted to 5, 10, or 20 students.

Attendance

The program will allow the user to manually input or randomly assign seats. The program will also allow the user to input and keep track of student attendance.