

AS Capstone Project Proposal

Winter 2023

Project Name: Game Lab Monitoring

Student Name: Ryan Plante, Spencer Roucoulet, Farid Hasanov

January 11, 2023

Project Description

This site will be used internally by lab monitors and their manager(s) to monitor who comes into and utilizes the equipment available in the different open labs available at NEIT. Being lab monitors (and tutors), Ryan and Spencer are expected to log these things, but aren't given any standard or direction for doing so. To that end, we thought it would be a good idea to create a website to solve this problem. Since this website is intended to only be used by certain people, most pages will be locked behind a login system. However, there will be a landing page that doesn't require a login that shows the tutoring schedule for the week. Monitors will be able to add log entries for students that use the lab's services, edit them later when the student leaves or they find a mistake in their entry, or delete them entirely. Managers, or admins/teachers, will be able to modify the tutoring schedule and add, update info such as passwords, or remove tutors from the log in system. They can also see reports/visualizations of the data gathered from the logs, and export said data to .csv or .xlsx files for their own reporting needs. The website will be able to be used by multiple different departments and will adapt forms and lists for their own needs.

Functionality

Functionality of this site will include the following:

- This site will be used internally but for demo purposes uses a login system for teachers and game lab monitors
- For non-logged in users, it will display a schedule showing the availability of the lab
- Teacher login will have the ability to:
 - View report in a bar graph to see activity
 - Ability to download the full report as .CSV or .XLSX (Excel Spreadsheet)
 - Ability to add/edit lab monitors based on their Student ID + Name
 - For demo purposes, student login will be managed via Teacher login, but if this site was connected to TechNet, then it would connect with the student's technet login.
 - Ability to add/edit lab monitors' schedule for the week
- Lab monitor login will have the ability to:
 - Landing page will show logged students that haven't left yet (for example a student shows up in between shifts, the 2nd lab monitor that comes in will be able to time them out)
 - View/edit logged entries for the week - edit options will only be available during the day... just in case the lab monitor makes a mistake.
- Each lab will have departments so there will be a department for IT Game Lab, Media lab and any other departments. Lab Monitors will have an attribute to which department they're in so that each department is differentiated and adds for more usage.
- Lab monitors will be logging the following:
 - Student ID
 - Student name
 - Time in/out
 - Equipment borrowed
 - Notes to add comments about their visit so that disruptive students can be reported
 - An email button to auto send emails to students that borrow any items.

Development Platform

The site will be coded in ASP.NET with Microsoft SQL Server Manager as the DBMS. We will also use CSS to change the visual aspect of the page, and JavaScript for additional functionality. NEIT's existing website uses ASP.NET, and we heard that they won't even consider hosting a project that doesn't use ASP.NET. The site will initially be hosted as a separate entity, but once testing is complete we will consider pursuing an integration with Technet.