Who We Are

Gaming Laboratories International, LLC (GLI) is a privately-owned test laboratory. We have over 1000 employees spanning 20 offices across 6 continents. Our job is to provide world-class customer service and industry-leading testing and certification services for the regulators, suppliers (manufacturers), and operators in the gaming industry.

What We Do

For a new game to be used by the public, it needs to be approved for a list of jurisdictions. Suppliers create these games and contract GLI to determine if the game is ready for production. The engineering and math teams at GLI work together to develop and implement a plan to perform all required testing.

Project Overview

GLI receives a significant number of submissions on a yearly basis, spanning dozens of manufacturers. These submissions are all logged into a database that is used company wide, tracking progress and other unique information. However, due to the number of people from different departments across multiple continents, only high-level information is logged. Meaning there is useful information about the game not being logged, since it is only used by sub-departments.

The engineering and math departments work very closely together, analyzing functionality of every new game that is submitted to GLI. Throughout this analysis the functionality of the game is documented to help both the engineer and mathematician perform their testing. Currently this documentation is informal and usually ends up logged in an email or on our storage system which does not have look up capabilities, meaning the information is lost, or very difficult to find, for future use.

This project’s goal would be to develop a smaller, separate database for engineering and math to track the finer details and functionality of games. If built properly, this could provide huge quality and efficiency improvements to both departments by giving much easier access to helpful information.

Project Goals

A group of 3-4 students will be required to develop this standalone database.

- Develop a robust and flexible initial version of the standalone database
- Create a well-designed and easy-to-use GUI for users
- Implement permissions checks utilizing Windows login information to determine admin vs. user status
- Implement concise ways to allow admins to add information and fields to the database
- Implement an easy way for users to search for information using a number of fields and field types
- Provide documentation in the form of a mini-instruction manual to GLI including details such as the back-end design, and a brief “how to” for both admins and users
Stretch Goals
- Implement one or more fields that utilize enterprise searches, similar to how Google searches work
- Create a well designed and easy-to-use GUI for admins

Skills Required
- Moderate to advanced knowledge of HTML5, Javascript, or ASP
- Basic to intermediate knowledge of SQL
- Eagerness to learn new languages, techniques, and work in a unique industry
- Basic understandings of database and GUI design and interactions

Student Benefits
This project will provide students experience and knowledge with:
- Developing a user-friendly database from scratch for use in an industry environment
- Developing appropriate GUIs to interact with the back end of the database
- Use of code optimization techniques
- Developing proper version control implementation and documentation
- Providing a training on the back end design of the database, as well as how to use it
- Working with a client in a formal work environment under a deadline

Location, Contact, and Additional Details
Students will be expected to spend approximately 10-15 hours a week at the Wheat Ridge office of GLI, located at 4720 Independence St., Wheat Ridge, CO 80033. All additional time spent working on the project can be wherever the students would like.

GLI will provide a computer set up with the appropriate environment for database development. This is the computer we will expect to see the database initially run on and ultimately will act as the server for the database.

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