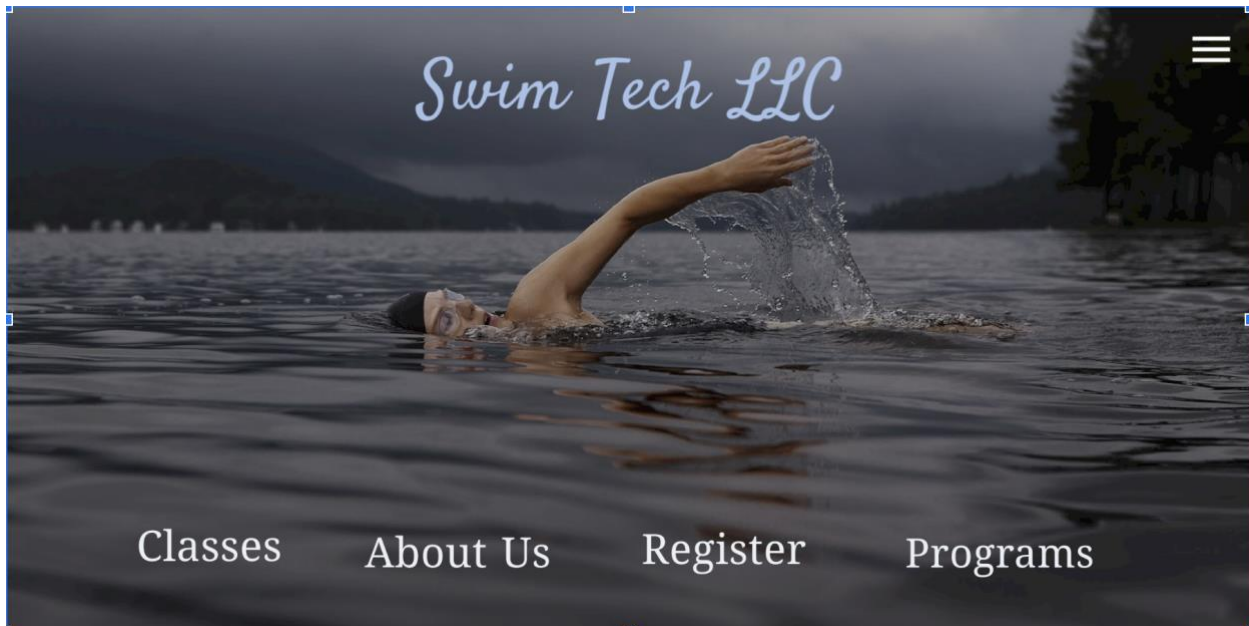


Web Portal and Access Control/Penetration Testing

Swim Tech LLC

About US

Swim Tech LLC is a water sports company that is working to provide education, and accessibility by creating a community around water sports and exercise. Our company is designed to provide swim education classes and programs to all ages and skill levels. Our classes range from beginner to advanced, and our programs range from Intro to Water Polo to Competitive Swim Teams. Our goal is to fill the growing need and interest in water safety and water sports.



The Project

Swim Tech is looking to develop new software to organize, register, and provide feedback to our members and students. This work will be directed toward building a website portal and database that implements an access control structure.

We recommend using React/React Native for the front end and Django for the back end. We will provide an initial access control diagram, website flow mock-up, and other design specifications for the team to evaluate and use as a starting point. A successful project includes the following:

- Build working web app and database
- Use good coding standards and commenting
- Conduct penetration testing and UI testing and patch security concerns.
- Provide documentation of testing and patches
- Provide database ERD and code documentation (a screen capture video explaining the code would be welcome as documentation.)

- Be creative! Stylize and design the webpage graphically.

Skill Sets

This project will be a great learning experience for web development. Some basic knowledge in website design, and website security would be helpful. Skills that will be learned or improved on include:

- Web Application Design
- Database (SQL)
- User experience/interface
- Cybersecurity/Web-Security

Team Size and Location

We will need a team of 4-5. You decide on location! No travel necessary. We will come to Mines to meet with you for weekly meetings. For this project, you will be asked to sign IP rights over to Swim Tech LLC.

Access Control

