

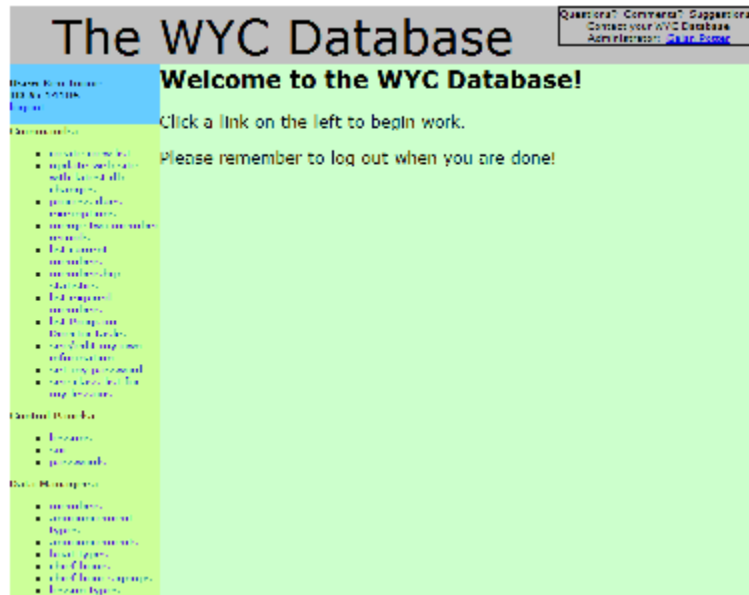
Ken Inoue CSE: ktinoue3 NetID: ktinoue3
Trinh Ho CSE: tho NetID: tho

403 Project Proposal

Client Background

The Washington Yacht Club is a non profit organization that teaches UW community members how to sail. We offer lessons, put on races, and hold a number of social events. The club works on a rating system that allows the user to take certain boats out under certain conditions. As you gain additional rating you are able to go out to different areas of Washington waterways, take out different boats, and go out in higher winds. If you don't have a rating for a certain condition or boats chiefs, people with our highest rating in the club, can check you out.

The club currently uses Google sites to provide information to prospective and current members. All information even that only meant for current members is currently visible by anyone. There is also a separate database system that we use to keep track of member information and ratings. Members can log in and edit their own data while admins can log in and create new and edit members, classes, and events. We currently check out boats with a pen and paper system. The only way to see who has gone out is to be at our dock and look at the paper left by members.



Picture of current database

The Product

The club would like to scrap its current system and replace it with something looks more professional and integrates the database and website. We would also like to add an electronic boat check out system will use the database by checking the members current ratings. Another trend that many sites and clubs are using is Twitter and social media integrating. To remain hip we would like to do the same if time permits. Below are some key features that the club would like to include.

Members site would allow current members to check out boats, sign up for classes and events, and edit their own data. Members would also be able to read the documents like sailing guide, club by-laws, and meeting minutes meant for members. If the members membership expires then they shouldn't be allowed to log in.

The boat checkout system should check to see if the members ratings allow them to

check out the boat and if the location they want to sail is within their rating. We do have a wind meter that reports to weather underground which provides data in XML format. Checking to see if the wind is within the users range would be a nice bonus. We would also like to be able to look up boat usage statics as it helps us plan on what type of boats to buy. The server should also email/text the person if they fail to check back in by their estimated return time. If they still fail to check it should broadcast a message to members in charge so that they can look for them member. There should be a mass checkout that an instructor can use to check out his class. This is needed as there is one computer in the office and it would require to much time for 10 people to login and check out a boat. Boats must also be able to be taken out of service so that they be repaired.

Certain positions in the club are allowed to do certain activities "admins" have access to all features, Chiefs may give members ratings and look up members current ratings and contact information. They may also post announcements to the web page.

Announcements and documents in the club library must be able to be updated by people with no or limited html knowledge. This was the reason we went with Google sites.

Possible Implementations

PHP can be used to query and database for member information. AJAXs request or even a PHP form post can be used to check login credentials and current membership of a user. PHP will also allows you to email users. PHP also allows you to load content from files for announcements or the club library. This information could also be stored in the database. Web pages will be built using HTML, JavaScript, and CSS. There are a number a JQuery plug-ins that would allow for unique designs of static pages.

Another possible solution is Ruby on Rails. Rails provides a number a helpers and frameworks that make creating dynamic websites easier. Twitter is a rails based application which has a number of similar features such as public and member only pages, members may edit their own data, and ability for users to post information with no knowledge of html. Rails also contains a number of different addons that will allow you to do everything from draw graphs and send emails.

Challenges

One of the challenges of this project will be the integrating a number of different technologies to get the site working as a whole. A number of the features will be pulling data from the database while other features will be using data provided from third parties like weather underground. We will have to look up API from Twitter and Facebook so that we can incorporate them into the site. We will research and try out different systems to make sure they will work before committing to using them for the final product. Doing this early should help avoid last minute issues with integrating all the parts There is also the possibility that we are asking for too many features in the given time. Though it would be nice to have all features done we will be willing to cutback if there is not enough time.

Why work with us

This project will allow you to create a product that will be used everyday by a large user base. It will expose you to a number of different technologies that are used in industry and you can feel good about helping a non-profit student organization on campus.