

North American Amateur Dota League

91.462 GUI Programming 2
Project Proposal

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Project Goal

The goal of this project is to implement a web site so that Dota2 teams can organize leagues and tournaments, while including basic features such as a profile system for each member, including the players match history and league standings.

Features

The North American Amateur Dota League (NAADL) is a site that handles league play for the video game Dota2. Players are allowed to create accounts, create teams, and compete in site sponsored leagues and tournaments. Players will be able to link their account with their Steam account, to allow other users to see their played matches, and match results.

The site will also have a fully functional messaging system, so that teams and their members can communicate and schedule when the matches will occur.

Required Components

NAADL will be written for the most part in HTML/CSS, JQuery and PHP with some emphasis on a Database. The Steam Web API will be the core of this project as it gives us user information in the form of JSON structures. The project will also incorporate Steam's OpenID system for some of the account handling.

The Database will handle both user accounts, teams, and the messaging system and will coordinate with the PHP backend.

Target Audience

The NAADL is designed with a specific audience in mind: Dota players and Dota tournament coordinators within North America. Very specifically, we are designing this website for video gaming clients who partake in the online game Dota2. Our users will be very accustomed to the gaming environment, but possibly not as experienced with running tournaments for other Dota players. With this in mind, we are aiming for a very niche group of people who need assistance in building a tournament structure with more simplicity. We want to take the effort out of scheduling brackets for competitions and give coordinators a chance to relax in one part of their stressful league coordinating.

Issues

One of the issues with the project we're undertaking would be working with Steam's OpenID API. We want our users to be able to have their Steam User Accounts attached directly to the accounts we provide through the NAADL. This requires implementing not only Steam OpenID access, but keeping the OpenID associated with their account within our databases. Neither of us are very familiar with account authentication in PHP, and this will probably be the most difficult task for us to tackle.

Another issue would be with the scheduling system we're designing. We want tournament organizers to be able to input competing teams and click a single button to have their brackets displayed for them, bye weeks and all, on a custom bracket page. The process of giving teams bye weeks as they compete in a tournament isn't entirely trivial. We want to ensure that the user interface of the brackets is simplistic and powerful, but we also want the user to experience the

simplest means necessary to access this information. A one button “Generate Brackets” feature is very important to us.

Schedule

Week Of Goals	Phase
<i>2-Feb</i> Project Proposal is due on 02/04	Alpha
<i>9-Feb</i> Finish Design Stage + Work on Implementation	Alpha
<i>16-Feb</i> Basic Site structure done by the end of this week.	Alpha
<i>23-Feb</i> Alpha Test Preparation	Alpha
<i>2-Mar</i> Pre-Alpha Test Bug Fixes	Beta
<i>9-Mar</i> Improvements on Alpha Test and	Beta
<i>16-Mar</i> implementing missing features.	Beta
<i>23-Mar</i> Usability Testing Preparation	Beta
<i>30-Mar</i> Usability Testing Preparation	Beta
<i>6-Apr</i> Fix any bugs found via the Usability Testing	Beta
<i>13-Apr</i> Fix any last minute bugs	Beta
<i>20-Apr</i> Project Presentations Preparation	Release
<i>27-Apr</i> Project Presentations done by May 1st.	Release

These days signify important dates in development

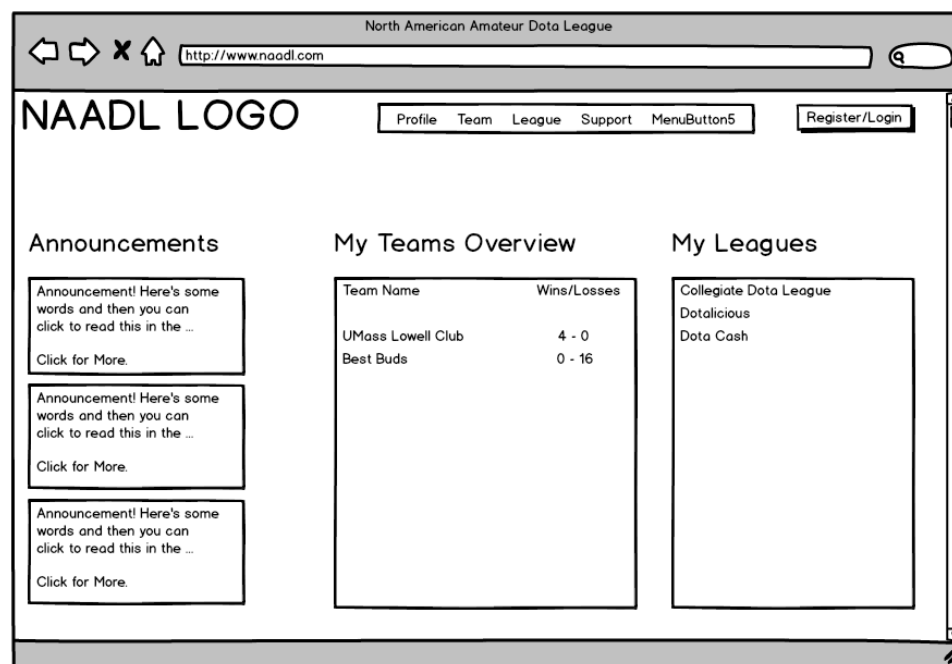
Project Roles	Steve Crowe	Robert Dupuis
Project Proposal	○	○
Site Design	○	○
Database Management (Including User Accounts and messaging)		○
Integration with Steam (Using Steam API)		○
Tournament / League pages	○	
Team handling and features	○	

Acceptability

Core Features:

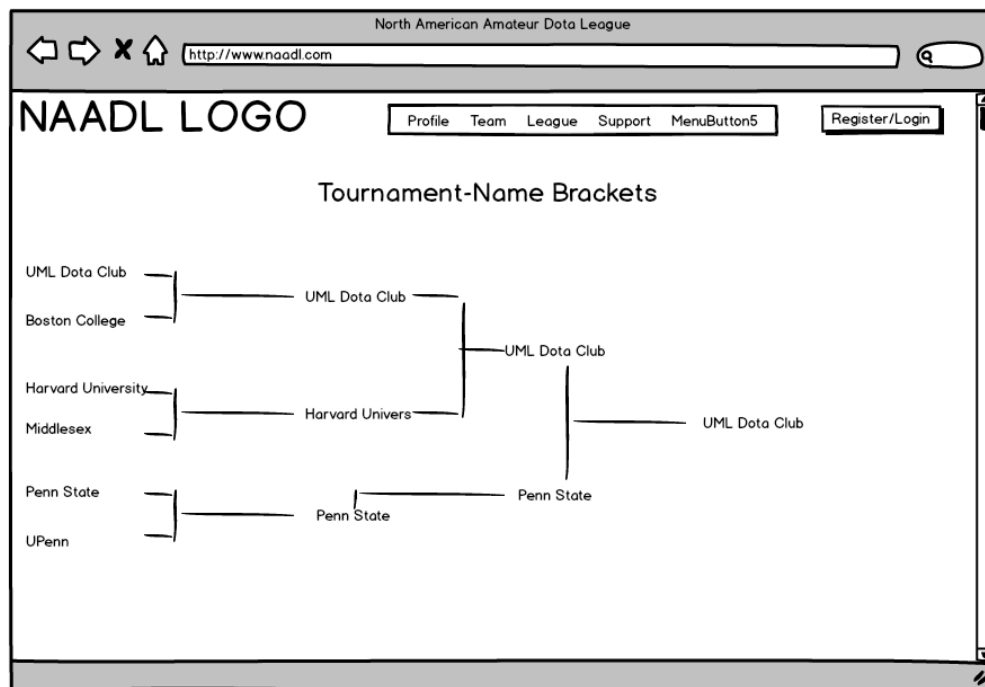
- User Integration with Steam OpenID
- Site hosted team system that allows coaches to set up, and invite players to their teams.
- Front page overview. This overview page serves as a quick overview for announcements, leagues, and teams for our users. Each subsection can be clicked which will open up the intended page for the user. Clicking a team or league opens the team/league profile.

Clicking on an announcement brings up the expanded article.



- In-Depth Player Profile system. This allows users to see basic information about themselves, specifically linking them to their Steam Profile, Dota match history, and any matches they've played in the NAADL league. Avatars for each user will be provided if they link their account to their Steam OpenID.

- **Player Messaging System.** This allows users to send messages to other team coordinators as well as administrators. It's exactly what you'd expect from a user inbox, with features to both receive and send messages to other accounts on the site. It will notify users via email when they receive a new message in their inbox.
- **Team Profile System.** It allows a more in depth analysis of their team's performance in each league they're enrolled in. Wins, losses, and ties are all categorized by match date and are neatly organized for viewing. The option to view replays and team lineups from matches played is an essential feature, as well as the ability to submit and view a stream link for a live internet feed of the game.
- **Tournament Scheduling System.**



This allows any player to create and manage their own tournament/league. They can invite teams who have registered all of their players with the NAADL, or teams can request access into their league/tournament. The administrator for a tournament has the power to create

scheduling brackets for players as well as edit match results and view all statistics for each tournament match.

- League/Tournament Page. These pages will display a list of all teams within the tournament/league and their prospective records. A link will be provided to see the brackets for the current tournament.
- A more advanced user account system using email activation that doesn't require logging in through Steam's API. (It will still offer you the choice to add a Steam Account to your NAADL profile as a bonus feature).

Nice to Have Features:

- More advanced system to display user information using HTML 5 Canvas (via graphs). Our idea is to have wins and losses mapped with the canvas either over a set time interval (e.g. 1 month) or a number of matches.
- A support and off-topic discussion PHP forum. This is provided to have immediate access to site administrators as well as other members if necessary.

Libraries Used

- Steam Web API: <http://steamcommunity.com/dev/>
- Dota2 Web API: <http://dev.dota2.com/forumdisplay.php?f=411>
- liteopenid: <http://code.google.com/p/liteopenid/>
- jQuery: <http://jquery.com/>