IPRO 308

Developing Web-based Applications for Northern Illinois Hockey League
PROBLEM STATEMENT

- Yearly NIHL scheduling is done by hand
  - Expensive
  - Chaotic
  - Time-consuming
  - Inefficient

- Statistic Management
  - Low-tech
  - Outsourced
  - Performed by hand
Last Semester

• Developed a web based application
  - Statistics entry and display
  - Scheduling and matchmaking
  - Visual interface design
GOALS

1. Streamline League/Club/Team managers’ annual operations.
2. Complete algorithm
3. Design/Develop/Execute Usability Test
4. Redesign Interface
5. Implementation
# THE TEAM - anNIHLators

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Design</th>
<th>Usability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rick Matusiewicz</td>
<td>Anthony Lademan</td>
<td>Luke Blakely</td>
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<tr>
<td>Kevin Mutyaba</td>
<td>Hyemin Choi</td>
<td>Jake Carmichael</td>
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<tr>
<td>Mantas Vidutis</td>
<td>Ryan O’Connor</td>
<td>Shashank Gopal</td>
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<td></td>
<td>Nirali Patel</td>
<td>Christopher Najarian</td>
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<td></td>
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<td>Jaime Sahagun</td>
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<td>Christopher Savage</td>
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<td>Jared Svaldi</td>
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PROCESS

- Design
  - Site consistency
  - Site mock-up
  - Redesign

- Usability
  - Analysis
  - Develop usability test plan
  - Conduct usability test
  - Recommendations

- Algorithm
  - Matchmaking
  - Test cases
Current Design

Northern Illinois Hockey League

NIHL Season Scheduling and Statistics

Season Information

- 2009 Season is currently in Preparation phase.
- 233 teams registered.
- 1 game played.

Reminders

You are not logged in.

Recent Games

<table>
<thead>
<tr>
<th>Game</th>
<th>Date and Time</th>
<th>Rink</th>
<th>Status</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Squirrts Gold] Ice Dogs #1 v. [Mite Gold] Jets #1</td>
<td>Sep 30, 2009 09:20 PM</td>
<td>Glacier Ice Arena</td>
<td>Completed</td>
<td>2:1</td>
</tr>
</tbody>
</table>

Quick Links

- Enter home rink schedule
- View match ups and schedule games
- View team statistics
- Browse upcoming games
- Browse recent games
- Read help pages

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Proposed Design
PROCESS: Algorithm

- Algorithm function

- Code priority based on home/away ratio and playing unique teams

- Time complexity
OBSTACLES/ANTICIPATED/CHALLENGES

- Development for backend system
- Getting volunteers for usability testing
- Obtaining pertinent information from usability testing debugging
ETHICS

- Usability Testing
- Copyright infringement
- Sharing any users personal information
Questions?