

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

Algorithm

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Design

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Usability

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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

[Login](#)

Home

Stats

Schedule

Summary

Deadlines

Teams

Help

F.A.Q.

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

Game	Date and Time	Rink	Status	Score
 [Squirts Gold] Ice Dogs #1 v. [Mite Gold] Jets #1	Sep 30, 2009 09:20 PM	Glacier Ice Arena	Completed	2:1

Quick Links

- [Enter home rink schedule](#)
- [View match ups and schedule games](#)
- [View team statistics](#)
- [Browse upcoming games](#)
- [Browse recent games](#)
- [Read help pages](#)

Proposed Design

Logged in as **League Admin** [leagueadmin], Logout 

Northern Illinois Hockey League
"The Largest Youth Hockey League in Illinois!"

Home | Standings | Schedule | Seasons | Teams | Clubs | Divisions | Rinks | **Accounts**

Accounts
Create Account

NIHL Season Scheduling and Statistics

Quick Links

- View match ups and schedule games
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- Read help pages

Season Information

- 2009 Season** is currently in **Preparation** phase.
- 233** teams registered.
- 1** game played.
- Your team is: **[Mite Elite] Falcons #1**
- Your club is: **Falcons Hockey Club**

Reminders

- Enter game statistics
- Enter home rink schedule

Recent Games

Game	Date and Time	Rink	Status	Score
 [Squirts Gold] Ice Dogs #1 v. [Mite Gold] Jets #1	Sep 30, 2009 09:20 PM	Glacier Ice Arena	Completed	2:1

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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?