

Project Description:

Managing **hockey** teams requires a very high level of organization and communication. This is true for youth and community teams all the way up through college and professional levels. There are currently many free and paid tools available which allows sports team managers to cover almost all aspects of their duties. However, finding an application that includes all the required hockey-specific functionality in one platform is very difficult.

The ideal application would be both web- and mobile-based (both iOS and Android). It would need to include functionality such as scheduling & calendars with RSVP and appointment booking, user database & management, direct & group messaging, app notifications, survey/polling, information request and file upload. Additional desired functionality would include more hockey-specific tools such as a white board drawing tool, practice planning and sharing tool, video sharing tools, a drill database, hockey newsfeeds and a hockey-specific statistics database.

A CS project team got started on building this application last semester. The team made some very interesting early progress! They did a solid job with initial requirements analysis. They also created a prototype app that includes some useful scheduling/calendar and messaging functionality.

This semester we're going to take a big leap ahead towards creating a complete MVP that can be deployed for use by the client and her collegiate hockey team. The project will start with a review and re-thinking of the app requirements (taking into account what was learned last semester), as well as a review of the components of the initial prototype and whether or not it includes technical debt which should be addressed. Then the team will work with the client to scope, develop, and test a "first generation" complete app for deployment.

The client for this project is Amanda Long, Director of Hockey Operations for the Minnesota State Women's Hockey team and a former youth hockey coach and team manager.

Deliverables	Type of work	Activities	Resources	Tech Skills	Priority
Revised/updated requirements analysis document	Requirements analysis review and revision	Review and re-think the app requirements, taking into account what was learned last semester	Client meetings, handover materials from previous team	Requirements analysis, technical writing	High
Technical debt analysis and refactor planning document	System review, refactor planning	Review the components of the initial prototype; determine what technical debt needs to be addressed, plan for refactoring	Handover materials from previous team, faculty coach, SMEs	Code review and analysis, technical writing	High
Scope and timeline/plan for this semester's project	Agree on development/testing/delivery scope for this semester	Discussion with client, planning, documentation and approval of decisions. Choose scope of implementation and development methodology.	Client meetings, coach support	Analysis and documentation	High
User Stories describing the functionality to be implemented this semester	Research, technical writing	Discussions with client and client's identified users, review of existing online and app tools of a similar nature, creation of user stories, reference to one-semester scope	Online tools, publicly available information about competing solutions, client support	User Experience, Technical Writing	High
Test plan for this semester's scope along with corresponding test results	Test planning, test reporting and execution	Create simple and easily executed functional test plan to keep app development on track	Tools to be chosen by team – can be as simple as Word and Excel	Test planning, test execution, test documentation	Medium
Working prototype of app with thorough documentation of software design and implementation	Software development and documentation	Implement phase one app. Document design and implementation decisions for future teams' reference.	Development tools selected by team and approved by client, SME support	Software development, software documentation	High
Final presentation to client including handover of digital assets and artifacts	Presentation, digital delivery	Present semester's work, hand over results	Client meeting, coach support	Presentation, documentation	High
Suggested plan for next phase of development approach	Future project suggestions	Analyze next best steps and document	Client meetings, coach support	Analysis and documentation	Low