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# **Vision and Scope Document**

**for**

# **Online Registration Project**

**Version 1.0 approved**

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## Revision History

Name	Date	Reason For Changes	Version

# **1. Business Requirements**

The city of Columbo's Parks and Recreation Department is a non-profit city organization which has a growing need to improve and automate its youth football program's registration methods. The city is in need of a system which can handle registration processing, incorporate a secure online method of payment, provide an automatically updateable database, provide email confirmation, and produce Web reports for the parks and recreation department administrators. Cost, security, and the ability to be extremely user friendly are very important to the department heads to insure the application meets the needs of the parks and recreation department.

## **1.1. Background**

For over 30 years, the city of Columbo's Parks and Recreation Department has organized, managed and run the city's youth football program. All registrations have been done via pen and paper and all payments have been received as checks. Over the last 5 years, the city has experienced an enormous population growth and the city's youth football program has more than tripled in size during this time span. It is becoming increasingly apparent that a new more updated method of handling registrations, tracking payments, and managing the growing number of participants is necessary. During the past few years, there have been an increasing number of lost registration forms, bounced checks, poor payment and player tracking, and an inability to access records quickly. Improving this system and automating the registration process will help improve customer satisfaction, allow the organization's employees to better apply their time to improving and managing the sports program, and effectively track the registration process.

## **1.2. Business Opportunity**

The city of Columbo's Parks and Recreation Department is still using a primitive pen and paper registration process in addition to using filing cabinets to haphazardly store registration records for the city's sports programs. The city's growth explosion has caused havoc on this system and immediate attention to these problems is required. There is not a competitive market for the city in regards to an online registration and payment acceptance system because there is such a high demand for youth sports in the city; however, without the system, maintaining payment and registration records will become virtually impossible for the city's employees to manage. The other option would be to hire additional staffing for the Parks and Recreation Department, but the city refuses to add any additional workers and payroll during these trying economic times. When the city's budget is being challenged, the Parks and Recreation Department is one of the first areas the city generally looks to cut funds from.

## **1.3. Business Objectives and Success Criteria**

This Web site application's success will be measured by the following items: its ability to insure the Parks and Recreation Department is able to quickly and accurately retrieve all youth registration records; a guaranteed 99.99% Web service uptime; the site's ability to automatically process payments for registration; an easy to use customer interface with an FAQ page; and the capability for executives to be able to access instantly created reports based on registration and payment information. This system needs to be as cost effective as possible because the youth sports program will need to be able to absorb the cost of the entire project.

## 1.4. Customer or Market Needs

The current system the Parks and Recreation Department has in place is very old, ineffective, and not able to meet the needs of the Department. The new system, as planned, will address the following problem for the city of Columbo's Parks and Recreation Department:

- Poor file management system
- Outdated payment processing system
- Inability to quickly and accurately find appropriate registration records
- The department's inability to hire on more staff due to a limited budget.
- Lack of registration confirmation

At this time, the new proposed system will not provide additional services such as the ability to upload documents to the new Web site, additional Web pages beyond the scope of this project, and/or any further database management capabilities beyond registration and payment information.

## 1.5. Business Risks

With any IT project there are many inherent risks associated with the success of the project. This Web registration form and payment processing project is no different. There will be many risks which have a possibility of occurring. Thus, this chart below will explain most of the risks associated with the project, the potential solutions to minimize the risk, and the probability and severity of the risk.

Risk	Mitigation	Probability	Severity
Web site is not compatible with all Web browsers	Insure testing is done with Firefox and IE to make sure all features work as designed in both browsers.	Low	Low
Client changes/alters project design	Work closely with key stakeholders to insure their satisfaction is achieved during every phase of the Mitigation	Medium	Medium
Over-promise or not realistic goals	Consult with project team to make sure all goals and project features are realistic and attainable within allotted timeframe	Medium	Medium
Lack of contingency planning	Devise several contingency plans during project planning phase of project	Low	Medium
Project comes in over budget	Take all necessary steps to insure an accurate project estimate is obtained and accurate figures are used.	Medium	Med/High
Project does not meet deadline	Make the appropriate adjustments to the project plan and start each stage early when possible	Medium	High
Project comes in over	Take all necessary steps to insure an	Medium	High

budget	accurate project estimate is obtained and accurate figures are used.		
Project is unacceptable by client	Make sure there is a clear understanding of what is needed and desired by the client and obtain the key stakeholders approval during each step of the project	Low	High
Poor or ineffective communication	Ensure all communications are properly understood	Medium	High
Poor project planning	Have project plan reviewed by a mentor/business practitioner and project team numerous times at each phase of the project	Medium	High

## 2. Vision of the Solution

It is the goal of this project to be able to create a system which is easy to manage by the league administrators, easy to utilize by the city's consumers, and a cost effective way to increase youth sports participation.

### 2.1. Vision Statement

Our vision is to provide the city of Columbo's Parks and Recreation Department with an easy to manage Registration and Payment acceptance method. This method will help to generate great value for the city's inhabitants and help to overcome the city's budgetary constraints.

### 2.2. Major Features

- Online Youth Participant Registration Form
- Email Notifications and Confirmation Capabilities
- Instant Online Payment Processing
- Credit Card Payment Acceptance Method
- Quick Registration and Payment Information Retrieval
- Secure Web Service
- Simple Database to Store All Registration and Payment Information

## **2.3. Assumptions and Dependencies**

### **Assumptions:**

- The Parks and Recreation Department staffing resources will be available as they are needed.
- The Parks and Recreation Department will have the necessary technology needed to take over the Web site at the project's completion.
- Training on the new product will be limited to one session only
- The employees of the Parks and Recreation Department will be familiar with basic computing skills.
- The Parks and Recreation Department's key stakeholders will be highly involved in the approval and design of the Web site to insure 100 percent satisfaction.

### **Dependencies:**

- The site's uptime guarantee will be dependent upon the hosting company meeting their site up-time guarantee.
- The security of the payment processing contained within the Web site will be dependent upon a third party vendor.

## **3. Scope and Limitations**

The new system will incorporate an online registration form with email confirmation, a database on the backend to house the registration information, administrative access to view and query the data, and a secure payment processing system. The city recreational department's Web site is housed on the city's Web site; however, the current content only includes dates and times for activities. This project does not involve initial Web site development; however, database and payment processing will be newly added functionality.

### **3.1. Scope of Initial Release**

The initial release of the new system will provide an email confirmation of online registration, a database on the backend to house the registration information, administrative capabilities to view and query the data, and incorporation of Paypal as a secure payment processing system. This initial release will include installation, configuration, and configuration and support documentation. Upon completion of the initial release, members of the recreation office should be able to configure and manage the site and submitted information. Configuration and technical support documentation must be provided to the end users.

### 3.2. Scope of Subsequent Releases

**Future releases will include:**

- Additional registration options
- Additional youth activities
- Contact Us section
- Ability for site users to email the office with questions or concerns
- Online viewing of registration information
- Query of registration information by order confirmation number.
- Ability to store and change registered information including emergency contact information
- Online volunteer sign-up form for coaches, referees, etc.

### 3.3. Limitations and Exclusions

This application provides the parks and recreation office a method for accepting online registration and payment for youth football. This product uses Paypal as its secure method of payment; therefore, we are not responsible for any financial disputes. These disputes must be communicated and resolved with PayPal. At initial release, clients will be unable to cancel registration via the web forms. Any cancellations must be requested by phone, in writing, or in person. After receiving a cancellation, an employee of the recreation office must access the administrative section to cancel the registration.

## 4. Business Context

The major customers for this project are the park and recreation office's community members. The project team is responsible to meet project priorities and stakeholder profiles. The operation environment primarily needs to support the local community; however, local activities could help attract new community members.

### 4.1. Stakeholder Profiles

Table 4.1

Stakeholder	Major Value	Attitudes	Major Interests	Constraints
<b>Recreation Office Director</b>	Increased participation, revenue, community interests, simple payment method	Increase involvement of community members	Ease of registration and storage of information, ability to view registration	New responsibilities and training for associates



<b>Recreation Office Employees</b>	Decreased paper trail, easier sign-up, lighter workload	Improved communication and relations with community	Secure data and payments, ability to view and cancel registrations	Training, continuous maintenance and update required
<b>Community members</b>	Increased registration options; email confirmation; increased payment options	Assured of secure payment, increased community involvement	Ease of registration and payment	Unable to cancel online, impersonal sign-up
<b>Project team</b>	Provide the customer with a product that meets the organization's and customers' needs	Participation and collaboration from all team members, prompt completion of assigned components	An easy-to-use, easy-to-learn functional system that meets users' and organizational needs	Tight deadline, only teleconference available due to geographic limitations, limited meeting times due to differing schedules

## 4.2. Project Priorities

Table 4.2

<b>Dimension</b>	<b>Driver (state objective)</b>	<b>Constraint (state limits)</b>	<b>Degree of Freedom (state allowable range)</b>
Schedule	release 1.0 to be available by 11/16, release 1.1 by 11/23,	Lack of participation and team corroboration could cause delay	Application will be installed and useable in release 1.0
Features	<ul style="list-style-type: none"> <li>Secure online registration</li> <li>Administrators' search online</li> <li>Online secure payment</li> </ul>	Software bugs and time	Ability to sign up and received email confirmation must be available in 1.0
Quality	System will provide easy registration from any remote location	Any database or web server downtime will decrease registration options	90% uptime upon initial release; 99% following final release
Staff	Database developer Web developer Team leader Technical specialist / documenter	Team size is only 3 people	Staff must be able to provide knowledge in all areas
Cost	\$4,500.00	Price fluctuation in required equipment or software could affect the price	10% budget overrun allowed without office review

### **4.3. Operating Environment**

Community members, typically local, will be able to register their children for youth football via the internet. Allowing secure online transactions and email confirmations will decrease paperwork for the Recreation Office and allow employees to access registrant's information quickly and efficiently. Additionally, round-the-clock availability will allow registration at any time from virtually any location. Upon completion of registration, users will receive an email confirmation displaying their registration information. During system downtime, users will still be able to call or visit the office to complete registration. The registration and payment information will be secure.

## **5. Human Resources**

To facilitate the successful completion of the project, our team has developed a human resource strategy that will best utilize the strengths of each team member. The team charter summarizes the organization of our team, as well as the decision-making process we will be using for this project. It also establishes the ground rules of what is expected out of each team member. This strategy includes detailed information regarding the technical skills and attributes of each team member, along with the specific roles. A communication strategy has been developed so that team members can collaborate effectively.

### **5.1. Team Charter**

Each team member has been assigned various key roles for the planning, design, implementation, and execution of our project. As many of these team roles overlap, an additional system of checks and balances will exist to ensure that tasks are consistently being accomplished and reviewed by one another. The team leader will ensure that team members stay on task so that the project objectives are successfully met. The 2 developers and researchers will handle the majority of the technical aspects of the Web application while the third team member will collect and compile all of the project documentation. All team members will participate in the design of the Web application.

The team will communicate via Franklin email, phone, and Franklin Live sessions. Decisions will be made using consensus and if group consensus cannot be met, the team leader will be responsible for making the final decision. If team members are unable to meet their assigned deadlines, they must inform the remaining team members in a timely manner so that the team can make alternate arrangements to meet the project deadline. Each team member will provide performance evaluations for all other members of the team, so if a member underperforms, it will be reflected in this document.

The team leader is responsible for proof-reading and submitting each deliverable to the instructor. The team member that is responsible for compilation and formatting of this document will provide the document at least 24 hours prior to the delivery due date. If the team leader is unable to submit the document, the documentation team member will submit the deliverable to the instructor after it has been proofread by the remaining member.

## 5.2. Technical Skills and Attributes

Name	Skills	Attributes
David Zwierecki	Web Development, Project Management	Organized, Easygoing, Analytical
Michael Teague	Web Development, SQL Administration	Organized, Easygoing, Analytical
Diane Palmer	IBM AS/400 Programming Analysis	Analytical, Results Oriented

## 5.3. Roles and Responsibilities

Name	Role	Responsibilities
David Zwierecki	Team Lead, Web Developer	Sets deadlines and submits deliverables, assist with Web development
Michael Teague	Lead Web Developer	Lead development and design of Web solution
Diane Palmer	Technical Writer	Collect and format documentation from all team members into finalized document

## 5.4. Communication Strategies

The team will be meeting weekly on Franklin Live and additional sessions may be scheduled as needed. Team members will also communicate via Franklin email to provide status updates. If a team member is unable to attend one of the scheduled sessions, they must provide their teammates with their expected deliverable prior to the session so that the remaining team members can proceed accordingly.

# 6. Project Management

This next section regarding Project Management will provide details and summarize many of the project management issues around the project such as the following items: deliverables, milestones, schedules, and project dependencies. A more vivid picture of the project timeline will be demonstrated within this section. Team E's leader will be responsible for the synchronization of each deliverable and the project as a whole. The project events and/or dates may be revised with the approval of the project team only.

## 6.1. Deliverables

The following items will be delivered to the customer: status updates at the end of each week of the project; initial site plan design; completed fully operational site for customer testing; final presentation and training; and a final fully operational Web site with all updates and revisions completed.

The following items will need to be delivered to the Instructor: project proposal; project vision and scope; identify a business practitioner; project status report; project whitepaper; project write-up; peer evaluations; project presentation; and a Capstone debrief.

Quality will be measured by the project's ability to perform all required functions and tasks, in addition to being very user friendly easy for the city's staff to use and obtain reports. All artifacts will be shared via email and all revisions will be made through the utilization of Microsoft Word's ability to add 'Comments' to the original work. All revisions will be saved in a format which includes the reviewer's name and the date of the revision.

## 6.2. Dependencies

This project will contain several steps and deliverables which are dependent upon another step or deliverable. See the list below for a list of all such dependencies in their appropriate order:

- Project Plan
- Web Site Design
- Database Design
- Web Site Development
- Database Configuration
- Web Site Implementation
- Database Integration
- Testing
- Client Presentation
- Stakeholder Approval

### 6.3. Schedule

Below is a list of all of the projects scheduled events. These events round out the events which will take place in the lifecycle of this Web application project. The length of time each deliverable is allotted, in addition to the date the deliverable is to be completed are both provided.

[illegible]

## 7. Educational/Program Outcomes

The solution detailed in this document will provide a secure Web site which will automate functions that are performed manually today. The automation of this process will reduce or eliminate the number of errors that occur with existing system. The implementation of this project will simplify and expedite the current process, which will allow the employees more time to address their other responsibilities.

### 7.1. General Education

This project requires utilization of the SDLC to develop a solution for a typical issue that is addressed by businesses every day. As employee headcounts are reduced and the remaining employees are left with increasing workloads, new solutions must be developed to automate wherever possible. The success of this project can be measured by the reduction in errors that results from the implementation of this project, as well as a possible cost reduction if headcount can be reduced.

### 7.2. Information Technology

This project requires an understanding of what it takes to take a project full circle through the entire development cycle. This process begins with understanding the business requirements, researching possible solutions to determine the best option available, researching the technology that will be used, and designing and testing the final solution.

All of the areas above are broken down into manageable tasks and have been arranged and prioritized. Each team member is assigned the tasks that are best suited to their individual skill set. The successful completion of this project requires team members to function independently by completing their assigned tasks on time. It also requires everyone to come together as a team to provide insight and support for their team members so that the project will be a success.

## 8. Annotated Bibliography

Al-Rousan, T., Sulaiman, S. & Salam, R.A. (2009). Risk analysis and web project management. *Journal of Software*. 4(6), 614-621. Retrieved on October 1, 2009 from Computers and Applied Sciences Complete database.

This article details some of the specific risks that are associated with developing Web software applications. The authors surveyed companies that had developed Web applications and compiled their findings regarding the problems that they had encountered, as well as some of the best practices that had been established during these projects.

Godaddy. (2009). Godaddy.com: The web is your domain. Retrieved on October 2<sup>nd</sup>, 2009, from <http://www.godaddy.com/>

Godaddy is a domain registration and web hosting site. The site contains a great deal of information about how to register a domain and setup a website. They offer packages to purchase hosting space and allow multiple platforms to be selected. Linux and Apache or Windows and IIS are options that allow users to operate a website run with ASP.Net or PHP.

Kennedy, S. (2005). Common web application vulnerabilities. Retrieved on October 6, 2009 from [http://www.computerworld.com/s/article/print/99981/Common\\_Web\\_Application\\_Vulnerabilities](http://www.computerworld.com/s/article/print/99981/Common_Web_Application_Vulnerabilities)

This article summarizes the importance of implementing form validation and reducing the danger of the high level of security risks associated with Web applications. The article discusses preventative measures such as session security, authentication options, validating form fields, ensuring applications will not process SQL commands from the user, strict input validation, default error handling, specifying user roles and permissions, and restricting as much user content to alphanumeric content. Without the proper security measures in place databases can be hacked into and Web applications can be tampered with. Therefore, it is important with any Web application to make sure the application is tested for security vulnerabilities.

Kyrnin, J. (2009). Form validation: Make sure your forms are filled in. Retrieved on October 5, 2009 from <http://webdesign.about.com/od/forms/a/aa031599.htm>

This Web site was used to research specific information about validating Web forms using either CGI or JavaScript. The author, Jennifer Kyrnin, explains some of the advantages and disadvantages of using CGI and JavaScript for validation. For example, JavaScript generally appears faster, doesn't use any server processing time, and makes it easy for the user to fix his/her errors. However, JavaScript will only work with Web browsers that have JavaScript enabled. Validating a form using CGI will enable the validation to run every time. The drawbacks to using CGI are it is slower, it uses more resources from the server, and it is not nearly as user friendly. Therefore, it is the team's intention to use JavaScript for registration form validation needs to insure the accuracy of the data entered by the user.

Labrosse, M. (2009). Project management: getting your team onboard. *Baseline*. Retrieved on October 1, 2009, from Business Source Complete database.

This article offers some suggestions to project managers on how to ensure that all of their team members understand and support how a project will be managed.

Microsoft. (2008). Microsoft Visual Web Developer 2008 Express Edition. Retrieved on October 2<sup>nd</sup>, 2009, from <http://www.microsoft.com/express/vwd/>

This Web site provides access to a free web development tool from Microsoft called Visual Web Developer. The Express edition of the application is available as a free download. The site also contains some great video examples and tutorials that help teach how to program using the .Net framework and this package.

Nelson, B. (2009). Microsoft sql server 2008 express edition. Retrieved on October 6, 2009 from <http://www.brighthub.com/computing/windows-platform/articles/4724.aspx>

This article provides a non-biased review of Microsoft's free SQL Server 2008 Express Edition. This application is appropriate for a small to mid size company who are considering a free product. SQL Server Express only supports one processor and allows a database up to four gigabytes in size. While this may not seem very large, this will be more than enough for the needs of this project.

Robb, D. (2009). Perfecting project management. *HR Magazine*. Retrieved on October 1, 2009 from Business Source Complete database.

This article provides insight into the importance of using the correct tools when managing a project. The most useful management tools vary depending on the size and nature of the project.