

How We Work

A lot of thought goes into each project to make it a success. Over the years we have developed methods which are, if followed, very likely to lead to a successful conclusion of the project. Following this process results in a well-designed system that can be integrated with your existing systems, provide for future growth and provide the highest possible return on investment to your organization.

As such, we have a few steps that we consider required for most projects that will involve custom development. The goal is not to be overly constraining or to stifle creativity. The goal is to use the process to extract the goal and vision from your brain, communicate that vision to people who can make it happen and create your vision in the real world in a manner that makes you say: "Wow!, you did it. That is exactly what I imagined."

I like to use the analogy of turning books into movies. Why is it that many people will say that they hated a movie that was based on one of their favorite books? We typically hear comments like: It was not at all like the book or those characters were all wrong. This occurs because the filmmakers created the movie based on their vision of the book. Everyone read the same book yet the interpretation of that single book can be very different for each reader. Creating a website or a custom piece of software is exactly the same process as creating a movie from a book. We are trying to get a "vision on paper" where everyone can see it. Only our job is much more difficult. We are not trying to create a website or a program based upon our vision, we are trying to create it based upon your vision! To do that, we have to figure out a way to get your vision out of your head so the rest of us can see it, touch it, and hear it. Our job is to make your vision real for the world.

The initial reaction for some people who are not familiar with this process or who have not worked on similar projects is to say: "Why do we need all this? Can't you just build it and then I'll tell you if it is right? All this up-front work seems to just increase the cost of the project." Well, it might look that way, but would you consider building a house without creating a set of plans first? Of course you wouldn't. Why? Because if you decide you want the kitchen on the east side of the house after the kitchen has already been built on the west side, it will be *very expensive* to move the kitchen! Much more expensive than if you had decided to put the kitchen on the east side during the planning stage.

Our experience has been that every dollar spent on the planning stage of a project is likely to save (conservatively) two to three dollars on development. If you don't believe us, then we will be glad to skip the planning phase of the project and work for you on an hourly basis – and we will happily move the kitchen as many times as you want us to. However, that would not be a good use of our time or your money. We believe in this so strongly that we are more likely to walk away from a potential project rather than agree to take it on if it does not allow for proper planning.

Following is an outline of the process we follow. It is our hope that these descriptions help you to see the value and gain a deeper understanding for the importance in the planning process.

Requirements Planning and Documentation

The Requirements Document is our attempt to collect all of your ideas about how you want the system or site to operate and put it down on paper. For most small to mid-sized project this can be distilled into a very methodical process. For larger projects, we will provide an additional breakdown.

The Initial Meeting

The Initial Meeting is held with everyone from your organization who will have input into the final product, the project manager from our team who will be leading your project and the lead programmer assigned to your project. The initial meeting is typically two hours. During this meeting we attempt to extract all the ideas you have about the project and prioritize those ideas into potential phases.

The First Requirements Draft

After the initial meeting we will produce the first draft of the Requirements Document. The Requirements Document will attempt to describe or list all the required features that are important to you to be included in the system or site.

Internal Document Review

Prior to the Internal Review Meeting the participants will spend time reviewing the initial draft of the document in order to make better use of the meeting time during the Internal Review.

Internal Review Meeting

As part of this step in the process, we will hold at least one internal meeting with the project manager, lead programmer and at least one other programmer who was not present at the initial requirements meeting. The purpose of this is to generate a list of additional questions from an outside source that is seeing the project with new eyes. This list of questions will be attached to the initial draft of the Requirements Document for your review so that you can address each question. The content of each question and corresponding answer will be folded into the final draft of the Requirements Document.

Final Review Meeting

Typically we will submit the final draft of the document to your internal team for review 2-3 days prior to a final review meeting. The purpose of your review and the final meeting is to gather feedback, get questions answered, and collect information on any changes that your team notices need to be made prior to agreeing to finalize the Requirements Document.

The Final Document

We will ask that each member present at the initial meeting also be present at the final meeting in order to sign off on the final document. The "sign off" helps to indicate to all parties that all the requirements discussed at the meeting have been covered, or in the case of ideas slated for future work, have been intentionally left out of the requirements for the initial phase of the project. In many cases, we will list features for future phases so as not to lose track of those development ideas.

Most Requirements Documents for small to mid-sized projects are between 3 and 10 pages. The length is not as important as the content. The final copy of the Requirements Document will be provided in a manner that could be easily converted into a Request for Proposal in the event that your organization is interested in collecting competing bids for the project.

Following is a breakdown of the typical time and costs required to generate a Requirements Document for a small to mid-sized project:

	Estimated Hours	Estimated Cost
Initial Two Hour Meeting	4 hours	\$500.00
Produce Initial Draft Document	2 hours	\$250.00
Internal Document Review	2 hours	\$250.00
Internal Review Meeting	3 hours	\$375.00
Prepare Final Document	2 hours	\$250.00
Final Review Meeting	2 hour	\$250.00
Final Revisions	1 hour	<u>\$125.00</u>
		\$2000.00

- Hourly rate for Requirements and Specification Development is performed at \$125.00 per hour

The process of gathering requirements as described above outlines a very specific two step process – we submit a draft for your comments and we submit a final document. If additional iterations are required, we will bill hourly for the additional time.

If the actual time spent developing the requirements document is less than the amount estimated, then the balance will be applied as a credit on the Specification Phase.

The fee for the production of the requirements document is due prior to, or at the time of, the initial planning meeting.

Specification Development

Once the Requirements Document has been approved by all parties, we will begin the Specification Development phase. The purpose of this phase will be to involve each programmer who will participate in the project in developing the detailed specifications for their individual part of the project. The Specification Document will include:

- Database Schemas
- Hand Sketches of Screen “Mock Ups”
- Detailed description of Functionality
- Detailed lists of Tasks for Each Feature
- Time Estimates for Each Task
- Detailed Project Cost Estimate
- Proposed Development Schedule
- List of features for Future Phases

Following is a more detailed description each element required for the development of a complete specification for the project:

Programmers Requirement Review

Each programmer who will be involved in the development of the project will individually review the Requirements Document.

Initial Programmers Meeting

Typically this is a one to two hour meeting with between four and six people who will be working on the project. The initial programmers meeting will include the project manager, the lead programmer and the other programmers who will be working on the project. During this initial meeting the details of the project as described in the requirements document will be discussed in detail and initial database and platform decisions will be made. In addition, each programmer will be assigned to the part of the project that they will be responsible for creating. Part of the process is to begin to develop a series questions with will be presented to you at the Specification Review meeting.

Produce Draft Specifications

Each programmer will be responsible for producing the part of the specs that pertain to their part of the project. Each programmer will submit their task list, estimates, mockups and feature descriptions to the project manager. The project manager for the project will compile the input from each programmer into a single project specification document.

Produce Screen Mocks

The Screen Mocks will be hand drawn. It is our experience that hand-drawn mockups are quick, efficient, and convey the needed information. Most important, hand-drawn mockup are easy to change.

Initial Specification Review Meeting

The Specification Review meeting typically includes anyone from your team that you want to participate as well as the project manager and the lead programmer. The goal of this meeting is to review the specifications and make sure that all of the requirements as described in the requirements document are being addressed.

As with the requirements planning process, we ask that anyone who will be involved in the approval process also be involved in this meeting. Because changes introduced at the last minute can be expensive and will be billed on an hourly basis, we make this request to help protect you from additional unforeseen costs that could have been avoided if we had received everyone's input up front.

The Final Specification Document

The final document may be very brief with very little added on top of the requirements or it may be very lengthy. The length is not as important as the content and the fact that it reflects a review and consideration of the steps necessary to meet the requirements. The Final Specification Document will contain details about the programming, stored procedures, database schema and much more. There will be enough detail that it will enable us to produce a realistic budget estimate and production schedule for the project.

In fact, the biggest benefit to producing the specifications in this manner is that the budget estimate can be considered a not-to-exceed estimate. We are that confident in this process!

Following is a breakdown of the typical time and costs required to generate a Specification Document for a small to mid-sized project:

	Estimated Hours	Estimated Cost
Programmer Requirement Review	2 hours	\$250.00
Initial Programmers Meeting	6 hours	\$750.00
Produce Draft Specification	7 hours	\$875.00
Produce Screen Mocks (hand drawn)	2 hours	\$250.00
Spec Review Meeting	4 hours	\$500.00
Final Revisions	2 hours	<u>\$250.00</u>
		\$2875.00

The process of creating specifications as described above outlines a very specific two step process – we submit a draft for your comments and we submit a final document. If additional iterations are required, we will bill hourly for the additional time.

If it takes less than this amount of time, then the balance will be credited toward the development.

The fee for the production of the specification document is due prior to, or at the time of, the initial programmers' meeting.

The entire process of Requirement Planning and Specification Development can take as little as 1-2 weeks for a simple project to several weeks for more complicated projects. Variations in the schedule will depend upon current workload and resource availability. We will discuss specific project schedules on a case by case basis.