Email Solution for Infusionsoft
Version 1.1

Postmortem

April 28, 2007

SB2
### Revisions

<table>
<thead>
<tr>
<th>Revision</th>
<th>Author</th>
<th>Description</th>
<th>Date</th>
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<tr>
<td>1.0</td>
<td>Bryan Fetterolf</td>
<td>--Initial draft.</td>
<td>04/16/08</td>
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<tr>
<td>1.1</td>
<td>Bryan Fetterolf</td>
<td>--Final draft</td>
<td>04/28/08</td>
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Introduction

Purpose

The purpose of this document is to review the project as a whole and examine what were its greatest successes and shortcomings, determine both the strong and weak points of the team, and formulate what lessons were learned and what could be improved. These decisions will be based on a number of metrics throughout the project's life-cycle including number of risks, budgeted and scheduled work values, and surveys. Discussions concerning the meaning of these metrics will be held among all team members.

Scope

The document will be divided up into two major sections, one displaying the tabulated data and the other outlining the lessons learned and how things could be improved. The metrics have been pulled from data ranging from the first iteration of the project through the forth. Each piece of gathered data will be explained in a coarse granularity, pointing out where the project was strong and where it was weak. Lessons learned and areas of improvement along with places where things went well will be gathered from a team postmortem meeting using the metrics as guide from which decisions will be made.
Figure 2.1 Team Survey Results

The survey results were used as a starting point for the team debriefing. We went over each of the items in the debriefing and used this as a guide for further discussion. The following is the minutes of the debriefing. Further discussion will be in the lessons learned section for improvement on future projects.
Team Debriefing

Date: 4-19-2008
Start Time: 1:20pm

The comments made below are in order but only the main points or conclusions have been captured.

316-1: More help with cm plan instead of just telling them it's needed
416-2: Members can't find documents as needed
416-2: No value seen in test scripts
416-2: CVS was not well organized or maintained
416-3: Wasted a lot of time in meetings, suggested predefined goals for each meeting
416-2: Disagrees with wasting time in meetings because he likes the instant/personal help
316-2: He likes that he feels like he's part of the project
316-3: Agrees
316-1: Likes managers politeness and helpfulness
316-2: Liked pair programming during team meetings
316-1: Agrees
316-3: Agrees
416-3: Meetings should not be required but there was never an issue with being absent
416-3: Everyone pulled their weight
416-2: Agrees
416-1: Would like to have been involved with documentation
316-All: Really liked architecture/UML diagrams
Risk Analysis

The table above shows the status of various facets of the project throughout its lifetime. The time and cost are flat because we had no control over our set iterations and cost was not a factor in this project.

- The risk for this project was Yellow almost all the way through the project. This was due in part of the team not familiar with some of the technology such as ajax. It then became Green until we got ready for deployment and some bugs were discovered.
- The quality was Green until the last week when we discovered that we could not provide all the unit test that the customer wanted.
- The scope of the project was Yellow the first two weeks of the project until we had the requirements meeting with the customer to ensure the changes made at the end of last semester were adequate for this project. The scope never changed after this meeting.
- The expectations were Yellow the first two weeks for the same reason as the scope. This was changed to Green after the clarification meeting with the customer.
Earned Value Analysis

**Weekly Task Costs and Variances**

- Actual Cost of Work Performed
- Budgeted Cost of Work Scheduled
- Budgeted Cost of Work Performed
- Business Value Created
- Targeted Business Value

*Weekly Task Costs and Variances*
## Requirements Analysis

<table>
<thead>
<tr>
<th>REQ-ID</th>
<th>Description</th>
<th>Priority</th>
<th>BV</th>
<th>Iteration</th>
</tr>
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<tbody>
<tr>
<td>REQ-01190 8-TEM-067</td>
<td>Template creator shall be able to explicitly mark a &quot;Value Group&quot;</td>
<td>Hig</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>REQ-01190 8-TEM-068</td>
<td>Template creator shall be able to provide different values/options for the &quot;Value Group&quot;</td>
<td>Hig</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>REQ-01190 8-TEM-069</td>
<td>Template creator shall be able to affiliate an &quot;Value Group&quot; to a theme group &quot;Theme Group&quot;</td>
<td>Hig</td>
<td>30</td>
<td>1</td>
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<tr>
<td>REQ-01190 8-TEM-070</td>
<td>Template creator shall be able to provide different values/option for the &quot;Theme Group&quot; that controls all &quot;Value Groups&quot; controls within</td>
<td>Hig</td>
<td>30</td>
<td>1</td>
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<tr>
<td>REQ-01190 8-TEM-071</td>
<td>Template creator shall be able to choose options for the user interface (i.e. display option values in drop down or color picker...)</td>
<td>Hig</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>REQ-10200 7-TEM-002</td>
<td>System shall have ability to search and replace current values in template with user selected values</td>
<td>Hig</td>
<td>30</td>
<td>1</td>
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<tr>
<td>REQ-10200 7-TEM-017</td>
<td>System shall make output available for the CRM systems wysiwyg editor</td>
<td>Hig</td>
<td>30</td>
<td>1</td>
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<tr>
<td>REQ-01190 8-TEM-072</td>
<td>User shall be presented controls that manipulate &quot;Theme Groups&quot;</td>
<td>Hig</td>
<td>30</td>
<td>2</td>
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<tr>
<td>REQ-01190 8-TEM-073</td>
<td>User shall be presented controls that manipulate &quot;Value Groups&quot;</td>
<td>Hig</td>
<td>30</td>
<td>2</td>
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<tr>
<td>REQ-01190 8-TEM-074</td>
<td>User shall be able to envoke an &quot;Value Group&quot; control to change the look of that &quot;Value Group&quot;</td>
<td>Hig</td>
<td>30</td>
<td>2</td>
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<tr>
<td>REQ-01190 8-TEM-075</td>
<td>User shall be presented a view of the current state of the template</td>
<td>Hig</td>
<td>30</td>
<td>2</td>
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<tr>
<td>REQ-10280 7-NF-001</td>
<td>Solution must fully integrate within Infusion Software's CRM system.</td>
<td>Hig</td>
<td>30</td>
<td>2</td>
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<tr>
<td>REQ-10280 7-NF-0014</td>
<td>The system will be constrained to the current hosting capabilities of Infusion.</td>
<td>Hig</td>
<td>30</td>
<td>2</td>
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<tr>
<td>REQ-01190 8-TEM-076</td>
<td>User shall be provided info/tips on &quot;Theme Group&quot; controls</td>
<td>Low</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>REQ-01190 8-TEM-077</td>
<td>User shall be provided info/tips on &quot;Value Group&quot; controls</td>
<td>Low</td>
<td>15</td>
<td>2</td>
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<tr>
<td>REQ-11020 7-TEM-059</td>
<td>User shall be able to view help information on each separate section</td>
<td>Low</td>
<td>15</td>
<td>2</td>
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<tr>
<td>Requirement ID</td>
<td>Requirement Text</td>
<td>Priority</td>
<td>Score</td>
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<tr>
<td>----------------</td>
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<tr>
<td>REQ-01190</td>
<td>User shall be able to envoke an &quot;Theme Group&quot; control to change the look of the &quot;Value Group&quot; controls that are affiliated with that &quot;Theme Group&quot;</td>
<td>Med</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>REQ-01190</td>
<td>User shall be presented well organized interactive controls</td>
<td>Med</td>
<td>20</td>
<td></td>
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<tr>
<td>REQ-11020</td>
<td>System shall allow for loading of external html templates</td>
<td>High</td>
<td>30</td>
<td></td>
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<tr>
<td>REQ-01190</td>
<td>Page should not refresh during normal user activity (ex. Postback)</td>
<td>Low</td>
<td>15</td>
<td></td>
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<tr>
<td>REQ-01190</td>
<td>User cannot customize templates beyond what is provided by the Theme and Value group controls (To alleviate deleting a tag with MOID Attribute)</td>
<td>High</td>
<td>30</td>
<td></td>
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<tr>
<td>REQ-10280</td>
<td>The core library will use Java, based on Infusions Software's current architect.</td>
<td>High</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>REQ-01190</td>
<td>Solution must be a reusable web base component</td>
<td>Low</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>REQ-01190</td>
<td>Solution must be an independent of surrounding environment (ie. Not tied to Infusion's current CM system)</td>
<td>Low</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>REQ-10200</td>
<td>System shall allow support of full CSS templates</td>
<td>Med</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>REQ-10280</td>
<td>The system will use common web browsers (ex. IE6 and Firefox).</td>
<td>Med</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

**Requirements Analysis**
A total of 26 requirements were selected for completion. All but one requirement was completed. The only requirement that was not implemented was the template color wheel chooser. This was due to time constraints on the project. The greatest number of requirements were implemented in iteration 2. This was due largely to the fact that this team had the architect designed early with skeleton code ready early on the project. We were able to start implementing code early in the project because the team had been formed prior to the semester and we were able to forego the learning curve that seems to be a problem with prior projects.
Pert and Gantt Chart Analysis

The pert and gantt chart did not match up as we would have liked when we did our iteration plan for iteration 4. As the 416 members found out, it is very difficult to keep to a plan with so many moving pieces of the project are coming into play at the end of a project. There seemed to be many activities we encountered that were not part of our plan. However, this did provide us with a strong framework to see what we needed to do in order to meet the project deadline. It really guided us toward the end goal of delivering the product to the customer.

Gantt Chart for the end of Iteration 4

The pert and gantt chart did not match up as we would have liked when we did our iteration plan for iteration 4. As the 416 members found out, it is very difficult to keep to a plan with so many moving pieces of the project are coming into play at the end of a project. There seemed to be many activities we encountered that were not part of our plan. However, this did provide us with a strong framework to see what we needed to do in order to meet the project deadline. It really guided us toward the end goal of delivering the product to the customer.
Lessons Learned

Project Strengths

Greatest Successes

The greatest success in this project was the project itself. The team really felt proud and confident about handing off the product to the customer. Being that the project itself was the greatest success, it shows that the team worked well together and keep good lines of communications open. Everyone on the team really seemed to take ownership in the project which contributed to the very success of the project. All team members really pulled their weight and contributed to the project.

“I really feel like I’m part of the project.”
This comes from a 316 team member which reflects the whole team’s attitude.

Strategies to Keep

Key points of the debriefing meeting showed that the pair programming during the Saturday team meetings were one of the high values that should be taken from this project. It really helped the 316 team members to get involved in all parts of the system and to really take ownership in the project. Before the meetings would wrap up, the developers would assign parts of the project to each other for individual work outside of the meetings. This really keep the project moving forward from the very beginning.

Another key strategy to keep is the early architecture and UML diagrams provided by the Chief Architect at the onset of this project. This really set our project in motion from the start with a defined map. Early design would be crucial in future projects. This was discussed in the debriefing and is a valuable lesson that the 316 will take forward into their next project.

Project Weaknesses

Greatest Shortcomings

Use of CVS other then just a way to “easily share code”. We found this out the hard way at the last minute of our project. We had a good working copy and put a freeze on code. At this point we should have tagged the project in CVS as a final copy. We then started making some changes which ended up breaking the project. We did not have a “good” copy to roll back to because of not using tags/branches in CVS. Luckily some team members hadn’t updated and still had the “good” working copy on their local system. This is what we ended up giving the customer. Looking back we really should have tag/branched at the end of every iteration along with any major milestones.

Project defect tracking was a major shortcoming. We started off by trying to use Jira but found that this was not successful. So the tracking ending up being by email. If a bug was found, emails were sent to address the issue. This was not the best way be any means. A tracking device needed to be in place, along with an email would have been a much more effective way to track our defects.

Suggested Improvements

Documentation organization in Sakai always seemed to be an issue. A defined structure should have been designed before anything was checked into Sakai that way documents could be found easily.
CVS should be used as tool to facilitate the project rather then just a nice place to “share code”.

Use of a defect tracking tool.