



ITERATION PLAN

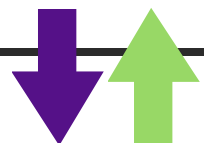
8/23/2013

Graduate Capstone



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1 Introduction

The purpose of this document is to provide explanation regarding the targeted processes used in the entire scope of the project from start to finish.

1.1 Intended Audience

This documented is intended for individuals with a very limited technical background and also individuals with a medium understanding of the project.

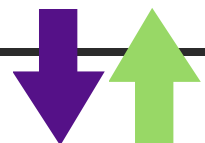
1.2 References

- http://www.isk.kth.se/~db99loer/IterationPlan1_0.doc
- http://sce.uhcl.edu/helm/rationalunifiedprocess/process/artifact/ovu_arts.htm
- http://cs.hbg.psu.edu/comp413/Iteration_Plan_Template.doc

1.3 Revision History

Managing the change history of this document will occur in this table.

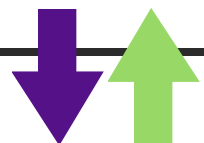
Name	Date	Reason For Change	Version
Andy Bottom	04/27/2013	Started creation of the iteration plan and transferring information into it.	0.1
Andy Bottom	05/07/2013	First finalized version of the iteration plan complete. Added the developer log into it.	1.0
Andy Bottom	08/26/2013	Finished Log and Iteration Milestone section.	2.0



2 Plan

2.1 Phase Plan

Phase	Start Date	End Date
Inception	01/26/2013	03/14/2013
Elaboration	02/16/2013	05/072013
Construction	02/26/2013	07/31/2013
Transition	07/16/2013	08/26/2013





2.2 Phase Purpose

2.2.1 Inception

The Inception Phase has a strong focus of the business side of the project. It determines research, background and marketplace purpose of the application. The goal for the Inception phase is to determine preliminary functionality of the system.

2.2.2 Elaboration

The Elaboration Phase begins more of the technical designing including analysis of specific requirements and use cases. Also, development of the system architectures and design patterns are created in this phase.

2.2.3 Construction

In the construction phase, the focus in this stage is simply the actual development of the product. It involves all the programming and testing.

2.2.4 Transition

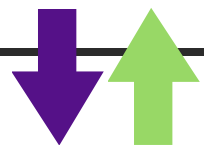
The goal for the Transition phase is to transition from the development of the project and gets it out to the users. It is the release of the product to the marketplace. Also, the future plans are determined, including updates and maintenance.



3 Iteration Activities

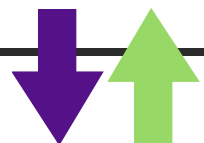
3.1 Iteration Schedule

Workflow	Phase
Research & Brainstorm	Inception;
Analysis and Design	Elaboration;
Web Services Development	Elaboration; Construction; Transition;
Web Admin Development	Elaboration; Construction; Transition;
Phone Development	Elaboration; Construction; Transition;
Testing	Construction; Transition;
Release	Transition;



3.2 Iteration Deliverables

Workflow	Deliverables
Research & Brainstorm	Vision and Scope Document;
Analysis and Design	Software Requirement Specification; Work Breakdown Structure; Use Case Documents; Risk Assessment;
Web Services Development	Web Services Source Code;
Web Admin Development	Web Admin Source Code;
Phone Development	Phone Source Code;
Testing	Test Plan;
Release	User Manual; Deployment Plan;



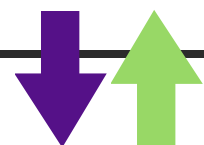
3.3 Detailed Iteration Information

The following table is the overall major development milestones that were performed of each iteration. Note that additional work, diagrams and documentation is also being done alongside the development and testing. Refer to the [Work Breakdown Structure](#) for more information on the iterations.

ID	Description
1	Brainstorm Ideas and Proposal for Project
2	Set Up Database and Tables
3	Research Web Services
4	Implement Web Services mapping. And test that they get hit.
5	Implement SQL for Web Services. Integration Test.
6	Design Structure and Implement Web Admin CMS
7	Hook up Web Admin binding to Web Services. Integration Test.
8	Create ERD of Database Objects and research Phone Structure.
9	Implement a PCL Library.
10	Implement Hello World Android App. Test with PCL. Integration Test.
11	Implement Async connection from PCL to Web Services. Integration Test.
12	Implement Windows Phone Application. Integration Test with PCL.
13	Implement Windows Phone UI Pages.
14	Implement UI Elements for Android Application
13	Implement Survey Information in PCL.
14	Create Pages for Survey. Test PCL.
15	Implement Submissions for Phone Application. Test Data into Database.
16	Performance Testing on Web Services and Phone Applications.
17	Configure Surveys. Implement Web Driver integration needed.
18	Test Complete Start to Finish of the Base Case Scenario.

4 Task Schedule

Please refer to the [Work Breakdown Structure](#) regarding task schedule.





5 Resources

5.1 People

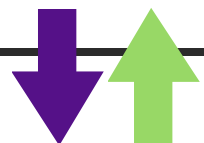
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5.2 Hardware

- Computers
- Web Server
- Database Server

5.3 Software

- Visual Studios 2012
- Office 2012
- NetBeans IDE
- SQL Server
- Windows 8
- Software Ideas Modeler 6.0





6 Scope

6.1 Basic Functionality

This is the first and largest scope aspect of the system. The basic functionality will include creating the basic ability of creating and filling out surveys.

6.2 Searchable Phone Features

Implement the ability to search for companies and their features

6.3 Users and Anonymous Users

The Next scope is to implement the User aspect of the phone so they can log in and have features

6.4 Extra Features Scope

This one simply adds additional features that would enhance the experience of the app, but was missed in the other previous scopes.

6.5 Custom Company Surveys

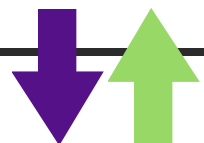
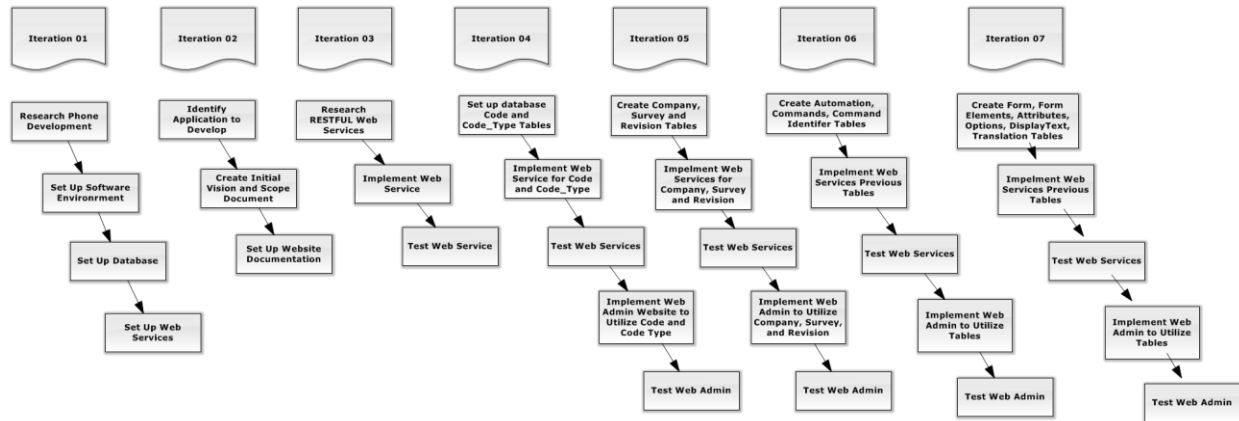
This is another large scope focusing on the ability to create custom surveys in our system designed so that small businesses can have a survey and use our system.



7 Iterations

7.1 Diagram

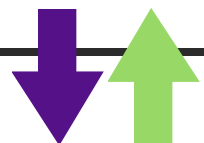
Below is a portion of a detailed work diagram for the first seven iterations.



8 Developer Log

The following is the log for the project and the time tracked for it.

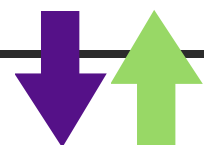
Date	Hours	Summary of Work
01/22/2013	4	First meeting with Dr. Hu. I accidentally went to the Carroll Campus instead of the Grad Center, so I was 15 minutes late. Discussed the game plan. He gave me the go ahead with my project but advice I make a small simple demo of some of the code that my project will depend on so that I can verify that it can actually be done. I'll be doing that next then.
01/24/2013	4	Created the web driver feature which will be in charge of getting kicked off and will do the automated process for the surveys. Create this little test one to ensure that it could be done, since the whole point of the app is for the automated process, so Dr. Hu suggested to test this out. I successfully made one and ensure I can continue on with the web services
01/25/2013	2.5	Created a very simple web service to ensure that it could be done. I used a SOAP web service, (which is where I had experience with before) and I set one up and kicked off the automated web driver within about 20 minutes. Super easy. Very happy with this and will continue to implement the full version of the web service.
01/30/2013	3.5	Started my attempt to create the RESTful web services. Whole time I got frustrated with them. Getting nowhere.
01/30/2013	3.5	Worked on the RESTful web services. Very frustrating, still don't understand the concept. Working with NetBeans ide. The auto-generated RESTful web services are a bunch of mumbo-jumbo. Not very helpful in making customized services.



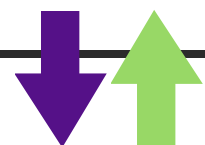
01/31/2013	4	Worked on the RESTful web services. Basically did a lot of researching and YouTubing on how to properly set up the web services. Also spent time finding examples. Kinda found a few that were helpful. No breakthrough though.
02/01/2013	4 + 3	Worked on the web services on my local machine so that it would implement the RESTful set up and also be able to hit the database. Successfully made it hit the database and accept JSON. At this point, I'm satisfied and will use this implementation of the web service.
02/05/2013	4.25	Worked on Vision and Scope document and also migrated initial web service code that was on my local box to the web server and configured it so I could hit the web service on a separate computer.
02/06/2013	3	Started on making the web admin website. Using Visual Studios 2012. I haven't programmed in .Net for about 2 years, so I'm just getting used to the IDE. Spend a lot of time at looking at the my Undergraduate Capstone project, which I may use a similar structure for the admin website. Also talked with Dr. Hu, and told him my game plan of what I've been up to. I'll have to send him the link to this website document.
02/08/2013	3	Continued to work more on the Web Admin site. I am getting used to .Net and Visual Studios again. I decided to use a similar structure to my undergrad capstone as it was a very logical approach to take and I felt it was very organized well. Will be coding the classes and everything from scratch, but the basic layout may remain the same as before. Decided on using a MVC approach, by creating my objects, and implementations. Also, I will not be using direct SQL to interact with the database, but instead be sending JSON REST requests, to perform the functionality.



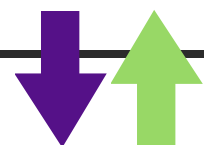
02/09/2013	3	Coded more of the admin site. I will be working on implementing one of the simpler functionalities of the system, so I am implementing the code_type and code manager pages. I managed to make the “create” and “delete” functionality to work, but didn't get update to work yet.
02/12/2013	3	Continued working on the admin web site. Was successful in getting the update functionality to work. So now I was happy that I could do each of the basic database calls. I then cleaned up some of the code.
02/14/2013	2	Decided at this point to check my database ERD diagram and determine that it logically makes sense and that I am happy with it. Made some changes to it, so I will need to update the code and code_type codes to update the fixes. I will be implementing the very basic functionality regarding the surveys.
02/16/2013	5	Worked on my documentation. Figured that the weekends will work well to work on the documentation because it's easier when I'm at home, and I'll work on the coding and implementation / initial prototype at Carroll, where I can easily boot off my hard drive and code away. Right now, I worked on the research category and posted my initial findings of the research on the companies.
02/17/2013	2+3	Worked on documenting my mobile phone research I did to the web document.
02/19/2013	4	Continued to work on the web services and implementing the database logic for the simple CRUD functionality.



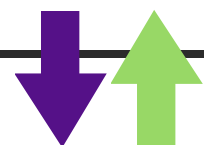
02/20/2013	4	Again I continued to work on the web services on the webserver and implementing the CRUD functionality on the Survey process table objects. As I came to creating the form_elements, I made note to rethink the interactions to possible create a more functional relation between the elements and the element types and the attributes of each of them. Decided to make note, and will contemplate them next time.
02/22/2013	2 + 4.75	Decided to look at ERD diagram from an implementation standpoint and think through the process of how to have the most flexible database for implementation, as I have realized that some of the key form elements and attributes may be hard to identify the importance of them at this time, until I get to the implementation. I thus have removed all the original form_element_(type) tables, and will store all attributes of the form_elements in an attribute table for the form_elements. I also reworked the interaction of how a user may complete a survey and how the data will interact. After a long time of thinking of the logic, I needed a break and decided to start implementing some of the high-level objects of the web admin site (because companies and surveys aren't going to be changing all that much.) Felt good to see some results on the web admin. I implemented the company and survey manager pages on the web admin.
02/24/2013	4 + 1	Took the time on the weekend to document my database efforts that I did the previous work sessions. Decided to put the information into a Database Design Document at this time. Went through and identified each element and attribute and the purpose of the attribute and also explained the relations between tables for having concrete requirements.



02/26/2013	4.5	Worked on the Admin Website and implemented the logic of Companies Manager, Survey Manager, and Revision Manager so that all CRUD functionality would work. The next area to tackle will be the Form and Automation Managers to work, which is a very important part of this project and pretty much the sole purpose of the admin website (which is to manage the surveys (which hinges on Forms and Automation.))
02/27/2013	2.5	Worked on the Admin Website and fixed bugs that I may have overlooked from the implementations that I made previously. All the admin website functionality is solid, so next part to code is the Automation Manager on the Web Admin.
03/04/2013	2	Took a little break to recuperate my burnout meter. Worked on documentation and preparing for Tuesday's Inception Phase Report Presentation for CSC650.
03/12/2013	4	Continued to work on the Admin website, worked on the automation manger and the commands.
03/13/2013	4	Finished implementation of the Automation Manager and the commands manager.
03/19/2013	4	Worked on the ERD diagram again to ensure that all correlations for the Form are intact. May be something to attach something so that the forms will be able to be used for reporting.
03/20/2013	4	Talked to Dr. Hu and confirmed my suspicions of needing to implement a Form Question object to attach the quantitative data of "First Name" for example that that is what is in Textbox X. Worked then on coding the Form Manger.



03/22/2013	2	Worked on implementing the Form Manager including the Options and Attributes fields. Came into an error with handling my JSON from my web services into parsing it into an object, because what I had been doing has just been two deep, and this was nested inside objects three deep. Couldn't figure it out so I had to stop and ponder.
03/30/2013	4	Spring break, not foreseeing me get much done this week, but I did work on some documentation. I think next presentation is April 9th, so working at documenting ideas that have been floating around my head onto paper so I can present about it.
04/02/2013	4	Completed implementation of the form manger on the admin site. I think this is the last piece that I had needed so now I can manage everything about the surveys to a basic level. I next decided to research how to go about designing my cross-platform mobile application. Looking for some sort of design pattern that is best to use.
04/05/2013	6	Basically just working on documenting lots of the information that I have already figured out, but haven't had a chance to implement. I will need to present my designs, so creating my diagrams and documentation so that I can have it written down to reference for later.
04/06/2013	4	Worked today on researching the architecture and implementation information regarding the phone application. I added my findings under the research --> phone on this web guide. Very useful information that I know have a much better understanding about the benefits and tools to use to create a successful and effective Cross-Platform Mobile Application.



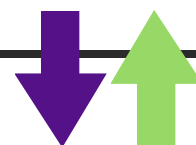
04/09/2013	4	Worked on my presentation for the elaboration presentation I had tonight. Showed off what I've done at this point. People were still skeptical that it may work, but I'm still convinced it will be fine. Otherwise, I got very positive feedback from the others.
04/11/2013	4	Worked on creating use cases and functional requirements of the system.
04/27/2013	6	Spent the day working on creating documentation to turn in for my binder. Basically I focused on creating the Use Case Document. Felt like a lot of copying and pasting because they seemed to be very closely related after a while. I also made the diagrams of the use cases.
04/29/2013	4	Spent the entire day researching and creating the documentation that I will be using in my binder. I found many great sources of which I liked how people formatted and organized the documentation.
04/30/2013	4+3	Worked again on the documentation for the binder. Basically created a lot of the technical documents. I found the hardest part was finding a nice way to organize the documentation, but even harder was determining what information to put where. Also, implemented my test web driver automation which is fully hooked up to the database.
4/31/2013	7	Spent the day finalizing for the most part all of the documentation. I feel at this point everything is relatively in good condition. I need to keep in mind that the documentation is not perfect and that I am not a professional technical writer, but I feel that it looks relatively professional.



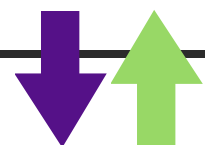
05/01/2013	7	Worked on creating my presentation for the CSC650 class. I will be using a new type of web based presentation style. It uses a jQuery file called Impress.js which is very impressive and is a great way to make presentations outside the box. However it takes a lot of skill to have an eye for everything and also I have to code it, but I think it will be worthwhile.
05/02/2013	8	Pretty much spent working on the presentation
05/03/2014	8	More coding of the presentation
05/04/2013	6	Spent the day coding the presentation
05/05/2013	9	Worked on the Presentation
05/06/2013	10	Worked on the presentation. Starting to get to crunch time, so starting to feel the pressure. The presentation is 95% done with just little tweaks that could be done.
05/07/2013	7	Crunch time, finalizing my documentation that I will turn in to my binder today. Also preparing for the presentation. Wish me luck!
05/13/2013	6	Did very intensive research on MVVM Cross framework. I think it is a very promising, but the technology I need for my dynamic surveys isn't supported yet in MVVX Cross. So I decided that Xamarin is 100% going to be the framework to develop in.
05/14/2013	3	Basically just updated and configured my IDEs so I can start working in them.
05/21/2013	3	Did some documentation.
05/23/2013	6	Worked on researching and implementing a reverse proxy for the webserver. The proxy will be a buffer between the clients and the server so that it can limit the total load on the database.



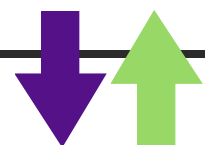
05/28/2013	6+3	<p>Started off the day had to call ITS because the Web Server was down thanks to storms this morning that cause Carroll to lose power for a couple of seconds. They got it back up though. I Completed implementation of Reverse Proxy today. And then worked on creating a Acknowledgement document where I will put credits and license info that is used in the project.</p> <p>Later, worked on attempting to get a PCL to work. Ran into problems and kept getting errors. Arg! I'll have to research the error and take another stab at it.</p>
05/29/2013	4	<p>Did research this afternoon and made a game plan as to what was causing the errors. Got the PCL to successfully load correctly. Next I coded and put logic into the PCL, (basically using the Helper Files from the Admin CMS site as a starting point for the logic. Everything seemed to work, except for the Web Service Calls. Arg! Apparently the way that I coded to use the web services, the .Net library is not available in the "portable" version of the .Net that I will need. I'll do some research on other implementations that I can try to get it to work.</p>



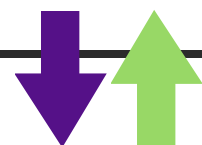
06/01/2013	6	Got out to the Graduate Center only to find that it was apparently closed. Arg! Kept my cool and headed over to Carroll University to work at the tech lab there. Worked on implementing the Portable Class Library, along with making the Web Service call work from in there, (basically made a small test.) I managed to get the Web Services to work by utilizing some the Web Service logic of the MVX platform, (pretty much looked like it was the only option at the time when using PCLs.) Then I tested the PCL by hooking it up to a very simple android application, and it successfully worked. I was very happy that the PCL works. This will be great for separating and getting a lot of reuse by using the PCL. I will next work on making the basic Windows Phone interface and try hooking that up with the PCL.
06/06/13	4	Started creating the very basic Windows Phone UI application of how I think the flow may go. Basically was learning how to work with the Windows Phone UI. Got the hang of it and how I may be organizing my windows app. And hooking up a PCL went great without problems.
06/07/13	6	Continued working on the Windows Phone App, it is going very well. I got stuck a little bit with how I will hookup the Windows Phone to the Web Services. But I figured out a way and it worked out. I actually think that I am following a form of MVVM, as I originally had wanted to. I actually deployed the application to my phone and it worked well and also hits the Web Services.



06/10/13	3	Worked a little more on the Windows Phone. Then started to work on the Android version. Basically I feel it would be a good idea to keep both versions of the app relatively close to each other to ensure that the PCL library will always be compatible. I'm a little clumsy working on the Android. Rest of the night was just spent trying to understand the ideology of the droid device, as I am not too familiar with much of the principals.
06/12/13	4	I did research and understand the main ideology and components of the Android system. I'll explain more of what I found in the UI Documentation. But basically I figured I need to get some of these navigational tools that the system will use to be built first before I start coding the individual Activities (Views). It was going ok, still stumbling through issues of how to implement drawers and the action bar.
06/13/13	5	Did research this afternoon and have some examples. I again tackled understanding the code for the drawer and the action bars. I managed to successfully implement a drawer which I am happy with, and the action bar is very good off as well. I tried to dynamically add a picture and was having problems, and implementing a viewpager wasn't showing up either. But relatively happy that I understand the android code a little bit better.
06/20/13	5	Worked more on the Android interface and functions of things. Just spent time learning and getting the drawer to work a little better. Also learning how debugging works in android.



06/21/13	8	<p>Worked more on the Android interface of things. Realized that the action bar and drawer elements that I had added is only compatible with Android versions of Ice Cream Sandwich or higher. I realize that it would be a bad decision to abandon the users of the Gingerbread release so I worked again and figuring out a different approach to implement the Action Bar and Drawer implementations so it can work on all these versions. Finally figured out that the Action bar isn't compatible. Thus I'm using a open sourced widget called LegacyBar which does work. It's a little more fiddling, but I think it will work great. Got it to work on the Gingerbread emulator now.</p>
06/23/13	8	<p>Worked on hooking up the Android interface with the PCL library to see that it can get data from the server. Unfortunately, the test code that I used to make the call the first time, I had accidentally written over, and so I couldn't remember how on earth I got that to work Arg!! Spent a lot of time figuring out what I did, which I eventually figured out. I also spent time learning how to use the ListView UI element of Android, which I successfully worked. A lot of time was spent looking at error messages, Googling error messages and searching what is causing the problem. But good new it works on Gingerbread and up versions. Yeah! Finally got to the point where my android UI is hooked up to the server and my PCL. I am very happy with this. I will now move back to WP and start working on the Surveys, which will be the core use case of the application. Also, I have my first summer meeting with Dr. Hu, so I'll need to put together my PowerPoint to present.</p>
06/24/13	4	<p>Worked on creating the surveys for the windows phone. Went very well, gonna keep on working on it.</p>



06/25/13	4	Continued to work on the surveys to display on the Windows Phone and I got all the questions on the Culvers survey to display correctly. Yeah! This is where I wanted to be to display to Dr. Hu. I'll work on my presentation and documentation next.
06/26/13	4	Worked on creating my presentation and also updated some of the documentation. Made some realistic goals for myself to be able to mark the milestone/iterations for the rest of the project. Felt it was good. The scope of the project seems very manageable. Presented to Dr. Hu tonight and they seemed to like where I am at. I brought up the Iron Triangle which I should also present for my final presentation.
06/27/13	4	Next I worked on hooking up the surveys and save the answers from the user into a submission answer and save it. Ran into some bugs. Needs more work.
06/30/13	6	Continued to work on the ability to save the submissions answers from the user to the database. And I got it implemented and working properly and all the answers were saved to the database. Yeah. Next will be to create the have the submission kick-off the automation and then send reward to the phone. I'm getting pretty close.
07/02/13	2	Made a list of possible names for the application. Then I showed the list to my friends to get their input. Turns out that the temporary name of "Receipt Rewards" was the winner, so I will continue using that.



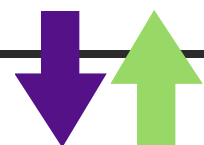
07/07/13	7	<p>Figured out a new database design and strategy to enable the ability to use a dynamic flow for the Surveys. I will update the database document and design specification at a later day, to explain what happened. So today, I essentially had to spend refactoring the code to use the new logic. I am also using the opportunity of refactoring to clean up some things that I had wanted to change, such as adding question groupings, pass in more objects as opposed to ids to the references and also additional error checking for null values on the web services. I also wanted to preserve the work I did previously as a just in case type of fallback if this new approach ends up not working, (which I am sure it will not.) So to do that I implemented a copy of all the new tables with the ending of legacy to identify the new tables I will be hitting. That way my old code will hit the old tables. So today I implemented the database tables and the web services. Next I will update the PCL and get the Web CMS and Phone to work. This may still be a 2-3 day process.</p>
07/08/2013	4	<p>Worked today on getting the Web CMS to follow the improved database design. But while trying to test, I had tried to create a new Company, but it kept returning an 404 error. But I checked the database and it does create the company. So in the server logs it shows that I am trying to the URI (/company/company/create) instead of (/company/create). So I have no idea where the other company tag is being directed. Arg! I will have to Google and figure out what is happening.</p>



07/09/2013	4.5	After Searching I found the reason of my bug from yesterday. In the new company create web service I decided to return a company object. So I would be return the object in the body, however I was missing the tag @ResponseBody, thus it was causing unexpected behavior and was forwarding to another URL instead of return the object. Made the fix and continued to work on the Web CMS, testing was going much better and things were working as they should.
07/10/2013	4.5	Worked today on the Web CMS and was able to test and created a new Culvers survey to follow the new logic. Worked then on the PCL to work with the new logic. No roadblocks; Next will work on the Windows Phone App
07/11/2013	5	Worked on the Windows Phone app today with hooking up the PCL correctly today. I changed the display of the survey to display only one question at a time. Then I had to test and it was the moment of truth. Success. The two-different work flows that I set up in the survey worked so that if I chose drive-thru it asked if the drive thru was clean, otherwise it continued on. Next week I will complete the rest of the survey and hook up the Windows Phone to correctly save the answers and then by the end of the week to be able to fill out a survey and have the automation run on submit and I can attain the reward.
07/16/2013	4	Basically wasted a complete evening because I was working on the project and I was getting a database error. I logged into the SQL Server Manager application and I could connect because of some TCP/IP error or whatever. Of course the ITS helpdesk is closed at this time. So I called the campus safety line (because the ITS message said to call Campus Safety for urgent issues.) I talked to the person and they said the will see what they could do. Took a little while



07/17/2013	4	Decided that the culvers survey may have been too much to chew to start, so I will work on the taco bell survey. So spent the evening making the Taco Bell Survey with the Admin CMS
07/18/2013	4	Realized that Taco Bell has a way to track your ip address and blocks it for 2 weeks so that you can't submit more than twice from the same computer. Worked on a way around this, but unfortunately won't be able to test until 2 weeks.
07/19/2013	8	I decided to switch to a different survey, so I switched to dunkin' donuts survey. Basically spent time creating the dunkin donuts survey in the Admin CMS.
07/22/2013	8	Spent time fixing bugs and documentation. Also worked on performance stuff a little bit and configuration of stuff.
07/24/2013	3	Found out that the Get Revision Web Service call was Timing out Past 15minutes to return from the database due to the extensive recursive attributes of it. So then I worked on creating a method to optimize the Get Revision so that would comeback faster. Tested it and it came back successfully and faster.
07/25/2013	5	After testing the new optimized revision web service, I wanted to test it with the phone. However I found out that the phone was causing a memory leak error while trying to retrieve the JSON. It turns out that the JSON file is just too big for the phone to handle. I then decided that I could solve this problem by creating alias objects with short names that would pass the actual data in. So I started with the web service to create all the alias objects and the AliasHelper Converter. I didn't complete all of it so will continue tomorrow.
07/26/2013	4	Worked on miscellaneous stuff. Fixing some bugs and documentation.
07/28/2013	3	Worked on coding the Alias code in the PCL. That was pretty much it. Didn't get a chance to test the PCL code. That will be for tomorrow.

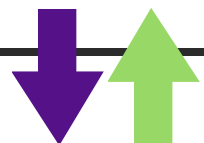


07/29/2013 5 Continued to work on the aliases of testing the PCL Alias with the phone. I booted up the phone and got a connection error. I then went to the SQL Server Manager application to see what the problem was and I wasn't able to connect to it. I got the same error that I did a month ago. I called campus safety to call a ITS person to restart the server and an hour and a half later, it was reset and functioning. So after that roadblock, I tested and found out that the response is still slightly too large for the phone to make and there was a memory leak still. So then I decided to adjust the Web Server so that it won't send the Automation stuff to the phone (since that stuff isn't needed,) and it worked very well and very fast. Success! So next is to finish setting up the dunkin donuts survey and tests. Let's hope I can finally get a survey to work soon! I also fixed up a couple bugs in the Admin CMS.

@TODO

@TODO

08/05/2013 3.5 Worked on configuring the Dunkin Donuts survey question by question and performing testing on the phone side to fix any bugs that came up during the automation side of things. The goal is to get from start to finish. Getting extremely close. Hopefully tomorrow will be the day.



08/06/2013	6.5	<p>Finally finished up configuring the Dunkin Donuts survey so that the automation automatically went from start to finish to the rewards page which it did. Yes! Finally onto the retrieval and storage of the code. I had to update the database and web services to add the reward objects. Took some time to implement that and then performed integration tests for the rewards objects into the system.</p> <p>Worked very diligently on to complete the base success criteria of filling out a form from the phone, submit the answers and then the automation successfully iterate and retrieve and store the Reward Code.</p>
08/07/2013	2	<p>Worked on updating documents and diagrams from over that past few weeks to present to Dr. Hu.</p> <p>Had the meeting with Dr. Hu and my application worked from start to finish with perfection. Very good feeling. I felt that Dr. Hu was impressed. Considered my base success scenario to pass and now I need to focus on updating and finalizing my documentation. Dr. Hu mentioned that I should make a detailed document about all my research and findings and knowledge about the Satisfaction surveys. That was a great point, and I will get going on that.</p>
08/08/2013	4	Started working on finalization of documentation.
08/10/2013	5	Continued working on documentation. Started the survey analysis document which will contain all the business logic involved with the surveys.
08/11/2013	6	Continued documenting the surveys. Started User manual for the Web Admin CMS.
08/12/2013	3.5	Continued documenting. Updated some diagrams and fixed a couple little bugs in the Admin CMS.
08/13/2013	4	Worked more on the Survey Analysis Document on the elements of the surveys. Also started the Phone User Manual



08/15/2013	4	Moved on to the Test Plan document. Worked on getting more details on testing and forms to fill out for my integration testing.
08/19/2013	8	Documentation, working hard to get everything cleaned up and ready to go.
08/20/2013	4	Documentation, including User Manuals.
08/21/2013	8	More Documentation, mostly spend on Formatting the documentation so that everything is consistent.
08/22/2013	16	Last full day to work on the Capstone Project. Figured it be appropriate to pull an all-nighter and finish off strong.
08/23/2013	8	Finally complete. Today is the day. I am finally turning in my Capstone Project. I am truly proud of all the work I have put into it and for everything that I have learned.

