

# Life Cycle Plan (LCP)

## Women At Work Website Redesign

### Team 14

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11/29/14

# Version History

Date	Author	Version	Changes made	Rationale
09/29/14	Nishanth Jani / Phaneendra	1.0	- Original for CSCI577a; Tailored from ICSM OCD Template - Add section 3.3	- To fit CSCI577a course content - To identify team members' skills and specify their role in this project
10/13/14	Phaneendra	1.1	- Update section 3.3, and add section 1,2,3.1,3.2,4,5	- To make an introduction to life cycle planning - Define the milestones and products deliverable in the whole project, specify team members' responsibilities by phase, as well as correct some errors in section 3.3
10/20/14	Phaneendra	1.2	-Update section 5 and added section 6,6.1	To correct some errors found in the peer review. To make CCD preparation plans and iteration assessment.
10/28/14	Phaneendra	2.0	Some modifications According to the changed personnel and status of the project	To make this document consistent with real situations.
02/17/14	Phaneendra	2.1	Update the section 6	To make this package more consistent
03/30/14	Phaneendra	2.2	Add section 6.2	To record the results of CCD into this documents and some comments
04/04/14	Phaneendra	2.3	Add section 6.3	To record adherence between practice and plan. Close out the report.
04/28/14	Phaneendra	3.0	To improve the consistency.	Deliver the complete package.

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# **1. Introduction**

## **1.1 Purpose of the LCP**

The LCP helps in mapping the list of tasks and corresponding timelines. Moreover it helps in determining the available resources. At any point of time, the current status of the project can be matched against the LCP to check if the project is adhering to the schedule or not.

The LCP keeps a clear understanding between the development team and the client with respect to the deliverable and their corresponding dates.

The LCP also helps in understanding the skill-set of the entire team, both in terms of current skills and required skills.

## **1.2 Status of the LCP**

The status of the LCP is currently at the Draft TRR Package version number 3.0  
This is the version that will be submitted to the project website for later updates.

## **1.3 Assumptions**

- The duration of the project is 12 weeks in Fall 2014.
- There are seven on-campus members in the project team.
- Incremental commitment spiral model is used as a development guideline for this project.

## 2. Milestones and Products

### 2.1 Overall Strategy

The Women at Work is following NDI-Intensive process because there are many Non-Development items, which can be used to deliver the core capabilities of the system.

#### Exploration phase

**Duration:** 09/14/14 – 09/29/14

**Concept:** Explores the current system, software requirements and life-cycle plan. In this phase the team will prioritize the capabilities, conduct investments and feasibility analysis and implement the software prototype.

**Deliverables:** Valuation Commitment Package, Project Reports and Plans, Weekly Effort Report and Client Interaction Report.

**Milestone:** Valuation Commitment Review

**Strategy:** One Incremental Commitment Cycle

#### Valuation phase

**Duration:** 09/29/14 – 10/14/14

**Concept:** Emphasize the prioritized features, study and analyze the risks. Valuate the project further to get ready for foundations package

**Deliverables:** Draft Foundations Commitment Package

**Milestone:** Draft Foundations Commitment Review

**Strategy:** One Incremental Commitment Cycle

## 2.2 Project Deliverable

### 2.2.1 Exploration Phase

Table 1: Artifacts Deliverables in Exploration Phase

Artifact	Due date	Format	Medium
Client Interaction Report	9/19/2014	.doc,	Soft copy
Valuation Commitment Package	09/29/2014	.doc, .pdf	Soft copy
• Life Cycle Plan (LCP) Early Section			
• Feasibility Evidence Description (FED) Early Section			
Bugzilla report	Every Monday	Text	Bugzilla Website
Project Plan	Alternate Wednesday	.mpp,	Soft copy
Progress Report	Alternate Wednesday	.xls	Soft copy

## 2.2.2 Valuation Phase

**Table 2:Artifacts deliverables in Valuation Phase**

<b>Artifact</b>	<b>Due date</b>	<b>Format</b>	<b>Medium</b>
Draft Foundations Commitment Package: <ul style="list-style-type: none"> <li>Operational Concept Description (OCD)</li> <li>Feasibility Evidence Description (FED)</li> <li>Life Cycle Plan (LCP)</li> <li>System and Software Architecture Description (SSAD)</li> <li>Prototype report (PRO)</li> </ul>	10/13/2014	.doc, .pdf	Soft copy
Evaluation of Draft Foundations Commitment Package	10/15/2014	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Response to Evaluation of Draft Foundations Commitment Package	10/17/2014	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Foundations Commitment Package: <ul style="list-style-type: none"> <li>Operational Concept Description (OCD)</li> <li>Feasibility Evidence Description (FED)</li> <li>Life Cycle Plan (LCP)</li> <li>System and Software Architecture Description (SSAD)</li> <li>Prototype report (PRO)</li> <li>System and Software Requirements Definition</li> </ul>	10/20/2014	.doc, .pdf	Soft copy
Evaluation of Foundations Commitment Package	10/22/2013	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Response to Evaluation of Foundations Commitment Package	10/22/2013	.doc, .pdf, Bugzilla	Soft copy, Bugzilla
Bugzilla report	Every Monday	Text	Bugzilla Website
Project Plan	Every Wednesday	.mpp	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy





## 3. Responsibilities

### 3.1 Responsibilities by Phase

Table 3: Stakeholders Responsibilities in each phase

Name/	Exploration	Valuation	Foundations	Development- Construction Iteration	Development- Transition Iteration
<b>Name:</b> Women At Work  <b>Role:</b> Client	<b>Primary Responsibility</b> - Participate in Win-win negotiations - Briefly define scope and describe primary requirements	<b>Primary Responsibility</b> - Clarify ambiguous requirements and provide feedback - Identify shared vision, goal and concepts	<b>Primary Responsibility</b> - Provide feedback for prototypes	<b>Primary Responsibility</b> - Feedback regarding modules developed - Test System Usability	<b>Primary Responsibility</b> - Provide training for transition to new system.
<b>Name:</b> Srikanth Madhava  <b>Role:</b> Project Manager / Operational Concept Engineer	<b>Primary Responsibility</b> - Explore the System - Plan the project and schedule - Manage Client interaction. <b>Secondary Responsibility</b> - Provide evaluation of work products.	<b>Primary Responsibility</b> - Assign work for each team member - Create detail project plan <b>Secondary Responsibility</b> - Define organizational and operational implications	<b>Primary Responsibility</b> - Record Project progress - Track efforts of individual team members <b>Secondary Responsibility</b> - Refine organizational and operational implications.	<b>Primary Responsibility</b> - Record Project progress - Modify and improve project plan - Distribute the workload <b>Secondary Responsibility</b> - Implement the main functions of system.	<b>Primary Responsibility</b> - Manage Client interaction and deliver final project artifacts - Distribute workload, give specific task to each team member. <b>Secondary Responsibility</b> - Deploy the system onto server.
<b>Name:</b> Phaneend	<b>Primary Responsibility</b>	<b>Primary Responsibility</b>	<b>Primary Responsibility</b>	<b>Primary Responsibility</b>	<b>Primary Responsibility</b>

<b>Name:</b> Maryala <b>Role:</b> Life Cycle Planner / System Architect	<b>Primary Responsibility</b> - Plan Lifecycle <b>Secondary Responsibility</b> - Work with prototype to design and model the system	- Plan Lifecycle Assess Quality Management - Create and follow action items. - Setup the schedule for the project. <b>Secondary Responsibility</b> - Setup basic infrastructure	<b>Primary Responsibility</b> - Plan Lifecycle <b>Secondary Responsibility</b> - Elaborate System Architecture.	- Plan Lifecycle <b>Secondary Responsibility</b> - Elaborate System Architecture	- Plan Lifecycle <b>Secondary Responsibility</b> - Define and modify the system architecture.
<b>Name:</b> Nishant Jani <b>Role:</b> Prototyper / Requirement Engineer	<b>Primary Responsibility</b> - Develop the initial prototype <b>Secondary Responsibility</b> - Search and collect the data to develop the system	<b>Primary Responsibility</b> - Build the prototype <b>Secondary Responsibility</b> - Prioritize the requirements	<b>Primary Responsibility</b> - Improve prototype based on client feedback - Add features to existing system <b>Secondary Responsibility</b> - Assess project progress	<b>Primary Responsibility</b> - Develop system - Fix Bugs <b>Secondary Responsibility</b> - Assess project progress	<b>Primary Responsibility</b> - Develop System - Fix defects and modify if needed as per the requirements. <b>Secondary Responsibility</b> - Fix defects and develop system
<b>Name:</b> Dinesh Yeduguru <b>Role:</b> System Architect / Prototyper	<b>Primary Responsibility</b> - Identify NDI's <b>Secondary Responsibility</b> - Co-work with	<b>Primary Responsibility</b> Define technology independent architecture	<b>Primary Responsibility</b> Define technology independent architecture	<b>Primary Responsibility</b> Advise how to develop the system <b>Secondary Responsibility</b> - Develop system	<b>Primary Responsibility</b> Advise how to develop the system <b>Secondary Responsibility</b> - Develop system - Fix defects.
<b>Name:</b> Sanath Bhandary <b>Role:</b>	<b>Primary Responsibility</b> - Conceptualize	<b>Primary Responsibility</b> - Analyze the existing system <b>Secondary</b>	<b>Primary Responsibility</b> Add Features to prototype.	<b>Primary Responsibility</b> - Develop System - Provide the	<b>Primary Responsibility</b> - Develop the system

Operational Concept Engineer / Requirement Engineer	the system <b>Secondary Responsibility</b> - Interact with the clients.	<b>Responsibility</b> - Develop operational concept	<b>Secondary Responsibility</b> - Interact with client	evaluation of work products <b>Secondary Responsibility</b> - Identify the test plan.	
<b>Name:</b> Rohit Kudva  <b>Role:</b> Feasibility Analyst / Project Manager	<b>Primary Responsibility</b> - Assess Project Risk - Plan Risk Mitigation technique <b>Secondary Responsibility</b> - Manage Client interaction	<b>Primary Responsibility</b> - Provide Project Feasibility Evidence - Assess NCS components <b>Secondary Responsibility</b> - Modify project plans	<b>Primary Responsibility</b> - Assess Project Progress <b>Secondary Responsibility</b> - Modify and improve project plan	<b>Primary Responsibility</b> - Identify test plan and procedures. - Test system <b>Secondary Responsibility</b> - Modify the detailed project plan - Manage client interaction	<b>Primary Responsibility</b> - Test System <b>Secondary Responsibility</b> - Manage client interaction - Deliver final artifacts
<b>Name:</b> Praneet Surana <b>Role:</b> Requirement Engineer / Life Cycle Planner	<b>Primary Responsibility</b> - Assess user requirements - Search and collect data to develop system - Negotiate with the client to meet win-win condition <b>Secondary Responsibility</b> - Plan schedule for project.	<b>Primary Responsibility</b> - Prioritize Requirements - Define Operational Concept - Define Project goals <b>Secondary Responsibility</b> - Create and follow action items.	<b>Primary Responsibility</b> - Assess Project Progress - Identify the system and software requirements definition. <b>Secondary Responsibility</b> - Modify Lifecycle plan	<b>Primary Responsibility</b> - Develop system <b>Secondary Responsibility</b> - Interact with client	<b>Primary Responsibility</b> - Develop system - Fix defects. <b>Secondary Responsibility</b> - Manage client interaction - Deliver final artifacts.
<b>Name:</b> Bryan Bousman <b>Role:</b>	Verify and validate the work products	Verify and validate the work products	Verify and validate the work products	Verify and validate the work products	Verify and validate the work products

IIV&V / Tester					
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## 3.2 Skills

Table 4: Development team member's skills

Team members	Role	Skills
Srikant Madhava	Project Manager, Operational Concept Engineer	<b>Current Skills:</b> + Interpersonal skills + Client interaction + Java/PHP programming experience.  <b>Required Skills:</b> + Project planning + COCOMO II + Neon CRM + Schedule management + Project management tools like Mantis or JIRA
Sanath Bhandary	Operational Concept Engineer/ Requirement Engineer	<b>Current Skills:</b> +Communication and interpersonal skills + Java/ PHP programming skill.  <b>Required skills:</b> + System analysis skills + COCOMO II + Neon CRM + UML Modelling
Rohit Kudva	Feasibility Analyst / Project Management	<b>Current skills:</b> + Java/PHP/ JavaScript, HTML5 programming skill. + Web Server management  <b>Required Skills:</b> + UML Modeling + System analysis + Feasibility and risk analysis
Phaneendra Maryala	Life Cycle Planner/ Software Architect	<b>Current Skills:</b> + PHP/ Java/ JavaScript

		<p>programming.</p> <p><b>Required Skills</b></p> <ul style="list-style-type: none"> <li>+ Life Cycle plan delivery</li> <li>+ Risk analysis and mitigation</li> <li>+ Quality Management</li> <li>+ UML Modeling</li> </ul>
Praneet Surana	Requirement Engineer/ Life Cycle Planner	<p><b>Current skills:</b></p> <ul style="list-style-type: none"> <li>+ Communication and interpersonal skills</li> <li>+ Client interaction</li> <li>+ HTML5 and CSS3 programming.</li> </ul> <p><b>Required Skills:</b></p> <ul style="list-style-type: none"> <li>+ Familiarity with tools like WINBOOK and Bugzilla</li> <li>+ Feasibility analysis</li> <li>+ Requirement Negotiation.</li> </ul>
Dinesh Yeduguru	Software Architect	<p><b>Current skills:</b></p> <ul style="list-style-type: none"> <li>+ PHP, JavaScript programming experience.</li> <li>+ Experience with WordPress CMS</li> <li>+ Communication and interpersonal skills.</li> </ul> <p><b>Required skills:</b></p> <ul style="list-style-type: none"> <li>+ Project Scoping</li> <li>+ Neon CRM</li> <li>+ REST/SOAP API</li> <li>+ UML Modeling</li> </ul>
Nishant Jani	Prototyper/ Requirement Engineer	<p><b>Current skills:</b></p> <ul style="list-style-type: none"> <li>+ PHP, JavaScript, HTML5, CSS3 programming experience.</li> <li>+ Experience with prototyping tools like pencil project, google drawing.</li> <li>+ Client interaction</li> </ul> <p><b>Required Skill:</b></p> <ul style="list-style-type: none"> <li>+ WordPress CMS</li> <li>+ Neon CRM</li> <li>+ UML Modeling</li> </ul>
Brian Bousman	IIV&V / Tester	<b>Current Skills:</b>

		<ul style="list-style-type: none"><li>+ Excellent communication</li><li>+ Good project scoping</li><li>+ Client Interaction</li><li>+ Unit Testing and Quality Control</li></ul> <p><b>Required Skills:</b></p> <ul style="list-style-type: none"><li>+ Familiarity with WinBook and Bugzilla</li><li>+ Value based document review</li></ul>
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## **4. Approach**

### **4.1 Monitoring and Control**

We conduct short meetings and rely on Bugzilla apart from weekly team meetings for the project monitoring. The elements by which we are monitoring are Bi-weekly Progress Report, Weekly meeting with Clients (through Winbook, Emails, Phone calls and in-person meetings when required) Commitment Review, Biweekly Project plan and Effort Report for individual contribution. We plan internally through phone calls and emails between the team members. All these are updated regularly on Bugzilla.

#### **4.1.1 Closed Loop Feedback Control**

For the purpose of effective communication between the team members we employed four effective communication tools i.e Email, Skype, Telephonic conversations and Bugzilla. As for Email, it's a asynchronous message exchange tool. As for Skype, it's a real time audio / video conferencing. As for Bugzilla, it's a bug tracking system which helps team members to keep informed with their duties in fixing bugs and shortly coming events.

#### **4.1.2 Reviews**

The reviews for the project are usually done in three steps, which are peer reviews whenever an issue or feature is completed, two or more team members review the code. Then IIV&V reviews for correctness and completeness. If he finds any defects or errors he would issue a ticket in Bugzilla to notify the team members for the responsible parts for correction of bugs. Then finally reviewed by teaching staff.



## 4.2 Methods, Tools and Facilities

**Table 5: Tools to be used in the project**

Tools	Usage	Provider
ICSM EPG	Better understanding of our roles as software engineers; help with documentation and other submissions	CSCI 577
Google Drawing	Provides examples for user interface and system functionality, is helpful in the development of prototype	Google
Bugzilla	Track project progress	TA
Winbook	Keep track of the information resulting from negotiations with client, win conditions and issues raised	TA
Microsoft Office	Document editing, sheets, presentations etc.	Microsoft
Visual Paradigm	Capture UML and auto generate SSAD	Visual Paradigm International
COINCOMO	Estimate the software developing cost	USC CSSE
Effort Report	Record the total weekly working hours on the project	USC CSSE
MPP	Make the project planning	Microsoft

## 5. Resources

In this section, we present the project effort and schedule estimation of the project using COCOMO II.

**Table 6: Module lists and SLOC of each module**

No.	Module Name	Brief Description	SLOC	REVL
1	Registration	Providing online form for registering for WAW services	300	10%
2	Feedback	Providing a platform to give a feedback to WAW for the services taken	600	60%
3	On-site Check-in	Keeps track of the users of WAW visiting along with the intend of visiting (services).	300	30%
4	Blogs	It allows the WAW staff to post recent events and info regarding WAW.	300	30%
5	Report Generation	Eliminate the manual process of generating reports and automatically generate reports.	1k	10%

The following is COCOMOII Scale Drivers and rationales of choosing the values.

**Table 7: COCOMOII Scale Drivers**

Scale Driver	Value	Rationale
PREC	Low	This is not very similar to the projects that our team had developed before
FLEX	High	The client briefly defines how the system would be; however, they are open to discussions with the development team
RESL	High	The thoroughness of the architecture and its freedom from

		risk is quite high because of the reliability of the existing COTS products and measures taken to avoid the future risks
TEAM	High	All stakeholders are very collaborative and have strong commitments to achieve the goals of the project
PMAT	Low	The team follows just the basic practices of the incremental model

The following is COCOMOII Cost Drivers of each module and rationales of choosing the values.

**a) Registration:**

**Table 8: COCOMOII cost drivers of Module-1 Registration**

Cost Driver	Value	Rationale
RELY	Nom	This module is important, however in the vent of failure we can resort to manual measures for data entry
DATA	Low	This module is pretty much the database for the website, high data cost drive
DOCU	Nominal	Because the development process follows ICSM, the document for life-cycle needs is normal.
CPLX	Low	Involves basic transfer of data from online form to the neon database, and complexity of this module should be low.
RUSE	Low	It won't be reused for future products
TIME	Nominal	The percentage of available execution time expected to be used by the system and subsystem consuming the execution time resource is less than 50% because this module is utilized only during the process of registration
STOR	High	It will take up about 70% of the storage place we have for the entire system
PVOL	Low	Stable platform, will stay the same with major changes just once a month
ACAP	High	The analysts have the ability to analyze, design, communicate, and cooperate well.
PCAP	High	Programmers are capable, efficient and thorough. They are

		able to communicate and cooperate very well.
PCON	Very High	We have 7 team members in CSCI577a that is suitable for our project sizing.
APEX	Nominal	The average experience of the team members for this online web-based application is about one year.
LTEX	Nominal	Most of the tools are new to our team, but it should not be too hard to pick up
PLEX	Nominal	The platform is somewhat new to our team, but it is not too hard to pick up
TOOL	High	Use of strong, mature, moderately integrated tools
SITE	Extra High	All the team members are all on-campus students and can arrange meetings easily. Additionally, we use wideband electronic communication and occasional video conference.
SCED	Nominal	The schedule is fixed for 12 weeks in Fall

## b) Feedback

**Table 9: COCOMOII cost drivers of Module-2: Feedback**

Cost Driver	Value	Rationale
RELY	Low	This module is only to collect feedback. One can resort to the originally used telephonic call method in the event of failure. There are no major data losses
DATA	Low	This module needs a small chunk of data as a test data set
DOCU	Nominal	Because the development process follows ICSM, the document for life-cycle needs is normal.
CPLX	Low	Involves basic transfer of data from online form to the neon database, and complexity of this module should be low.
RUSE	Low	It is not going to be reused for future projects.
TIME	Nominal	The percentage of available execution time expected to be used by the system and subsystem consuming the execution time resource is less than 50% as this module is utilized seldom.
STOR	Nominal	It will take up about 10% of the storage place we have for the

		website
PVOL	Low	Stable enough, since the reliability of the NeonCRM is high
ACAP	High	The analysts have the ability to analyze, design, communicate, and cooperate well.
PCAP	High	Programmers are capable, efficient and thorough. They are able to communicate and cooperate very well.
PCON	Very High	We have 8 team members in CSCI577a that is suitable for our project sizing.
APEX	Nominal	The average experience of the team members for this online web-based application is about one year.
LTEX	Nominal	Some of the tools are new to our team, but it should not be too hard to pick up
PLEX	Nominal	The platform is somewhat new to our team, but it is not too hard to pick up
TOOL	High	Use of strong, mature, moderately integrated tools
SITE	Extra High	All the team members are all on-campus students and can arrange meetings easily. Additionally, we use wideband electronic communication and occasional video conference.
SCED	Nominal	The schedule is fixed for 12 weeks in Fall

**c) Onsite Checkin system:**

**Table 10: COCOMOII tool cost drivers of Module-3: Onsite Checkin system**

<b>Cost Driver</b>	<b>Value</b>	<b>Rationale</b>
RELY	High	This module should be available during their entire office hours
DATA	Low	This module needs a small chunk of data as a test data set
DOCU	Low	Because the development process follows ICSM, the document for life-cycle needs is normal.
CPLX	Low	For the reason that this module will not concern complex control, computational, and device dependent operations, and just moderately complex SQL, so complexity of this module should be low.

RUSE	Low	It is not going to be reused for the future projects.
TIME	High	This module stays there all the time, execution time depends on the amount of website visitors
STOR	Nominal	The percentage of available storage expected to be used by the system and subsystem is less than 50% because this module doesn't generate data or retrieve data from memory (it is just used to process data provided).
PVOL	Low	Stable platform, will stay the same
ACAP	High	The analysts have the ability to analyze, design, communicate, and cooperate well.
PCAP	High	Programmers are capable, efficient and thorough. They are able to communicate and cooperate very well.
PCON	Very High	We have 8 team members in CSCI577a that is suitable for our project sizing.
APEX	Nominal	The average experience of the team members for this onsite application is about one year.
LTEX	High	Most of the tools are known to our team
PLEX	High	The platform is somewhat known to our team
TOOL	High	Use of strong, mature, moderately integrated tools
SITE	Extra High	All the team members are all on-campus students and can arrange meetings easily. Additionally, we use wideband electronic communication and occasional video conference.
SCED	Nominal	The schedule is fixed for 12 weeks in Fall

**d) Blogs:**

**Table 11: COCOMOII tool cost drivers of Module-3: Blogs**

Cost Driver	Value	Rationale
RELY	Low	This module doesn't involve crucial data. Mail blasting can be used as an alternative
DATA	Low	This module doesn't need a heavy test data set
DOCU	Low	Because the development process follows ICSM, the

		document for life-cycle needs is normal.
CPLX	Low	For the reason that this module will not concern complex control, computational, and device dependent operations. We will be using existing plugins provided by Wordpress and complexity of this module should be low.
RUSE	Nominal	It might be reused on their future website if they decide to modify it
TIME	High	This modules time consumption will depend on the influx of users and the time they spend on blogging. So on an average this process should consume not more than 70% of the available time
STOR	Nominal	The percentage of available storage expected to be used by the system and subsystem is less than 50% because this module doesn't generate data or retrieve data from memory (it is just used to process data provided).
PVOL	Low	Stable platform since we are using existing plugins
ACAP	High	The analysts have the ability to analyze, design, communicate, and cooperate well.
PCAP	High	Programmers are capable, efficient and thorough. They are able to communicate and cooperate very well.
PCON	Very High	We have 8 team members in CSCI577a that is suitable for our project sizing.
APEX	Low	Experience with developing blogging applications is relatively low.
LTEX	Low	The development team plans to develop this web-based application with Wordpress, PHP and use SQL language to query information from the database. Eclipse will be used as integrated development environment to facilitate its development. Even though all team members have at least one year of web development, most of us are not very familiar with Wordpress.
PLEX	Low	The platform is somewhat new to our team, but it is not too hard to pick up
TOOL	High	Use of strong, mature, moderately integrated tools
SITE	Extra High	All the team members are all on-campus students and can

		arrange meetings easily. Additionally, we use wideband electronic communication and occasional video conference.
SCED	Nominal	The schedule is fixed for 12 weeks in Fall

### e) Report Generation:

**Table 12: COCOMOII tool cost drivers of Module-5 Report Generation**

Cost Driver	Value	Rationale
RELY	Nominal	This module is fairly important, Failure of this module will result time consuming process of report generation
DATA	Nominal	The test data is significant in size since we will be using statistics from past reports.
DOCU	Low	Because the development process follows ICSM, the document for life-cycle needs is normal.
CPLX	Low	Involves writing queries to the onsite database to generate reports
RUSE	Nominal	It is might be reused for the future projects.
TIME	Nominal	The percentage of available execution time expected to be used by the system and subsystem consuming the execution time resource is less than 50% because this module is utilize only for the purpose of generating monthly and annual reports
STOR	Nominal	The percentage of available storage expected to be used by the system and subsystem is less than 50% because this module doesn't generate data or retrieve data from memory (it is just used to process data provided).
PVOL	Low	Sufficiently stable.
ACAP	High	The analysts have the ability to analyze, design, communicate,



		and cooperate well.
PCAP	High	Programmers are capable, efficient and thorough. They are able to communicate and cooperate very well.
PCON	Very High	We have 8 team members in CSCI577a that is suitable for our project sizing.
APEX	Nominal	The average experience of the team members for this application is about one year.
LTEX	High	Most of the tools are known to our team
PLEX	Nominal	The platform is somewhat known to our team
TOOL	High	Use of strong, mature, moderately integrated tools
SITE	Extra High	All the team members are all on-campus students and can arrange meetings easily. Additionally, we use wideband electronic communication and occasional video conference.
SCED	Nominal	The schedule is fixed for 12 weeks in Fall

The following is the estimation result of effort and schedule from COINCOMOII based on Scale Drivers and Cost Drivers discussed above.

Figure 1 COCOMO Estimation Result-1

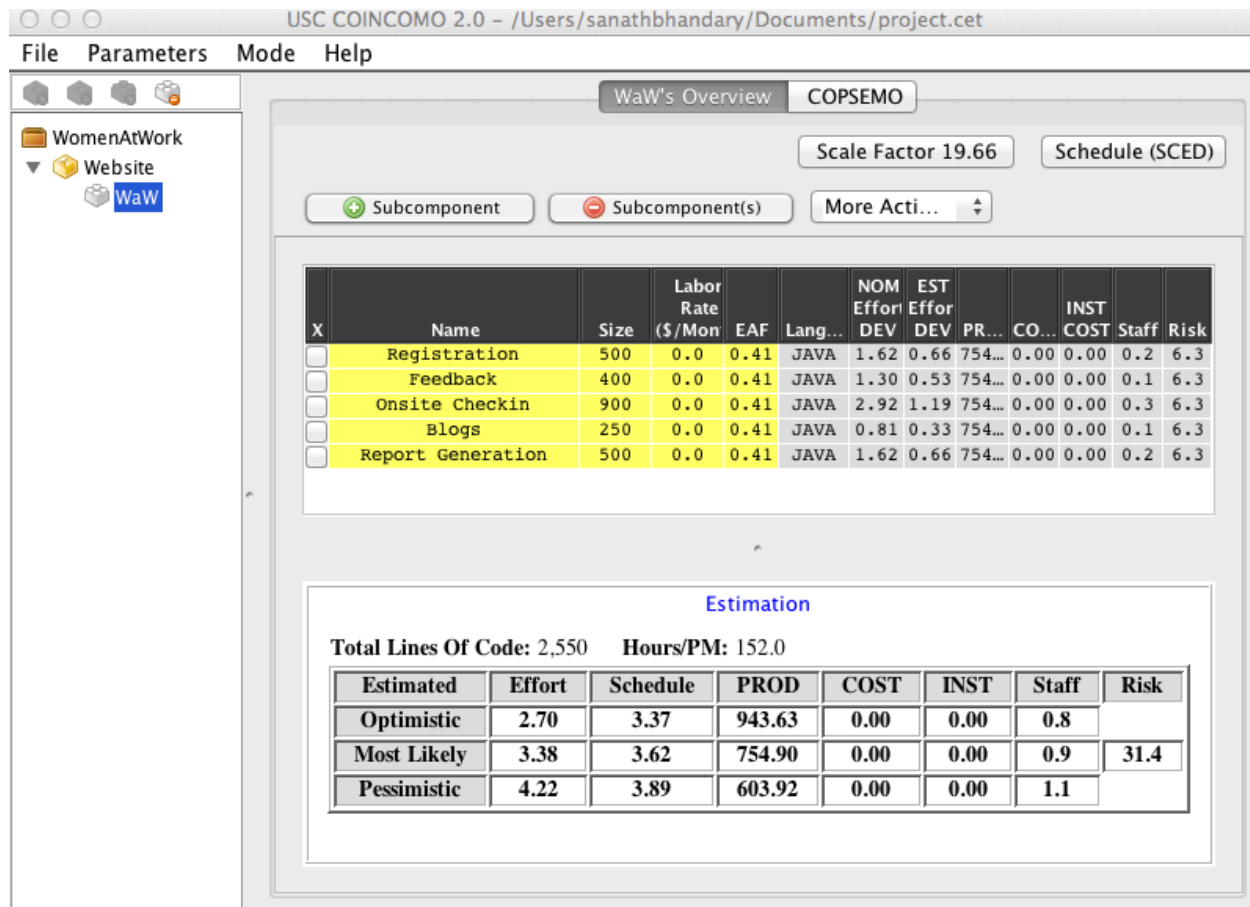
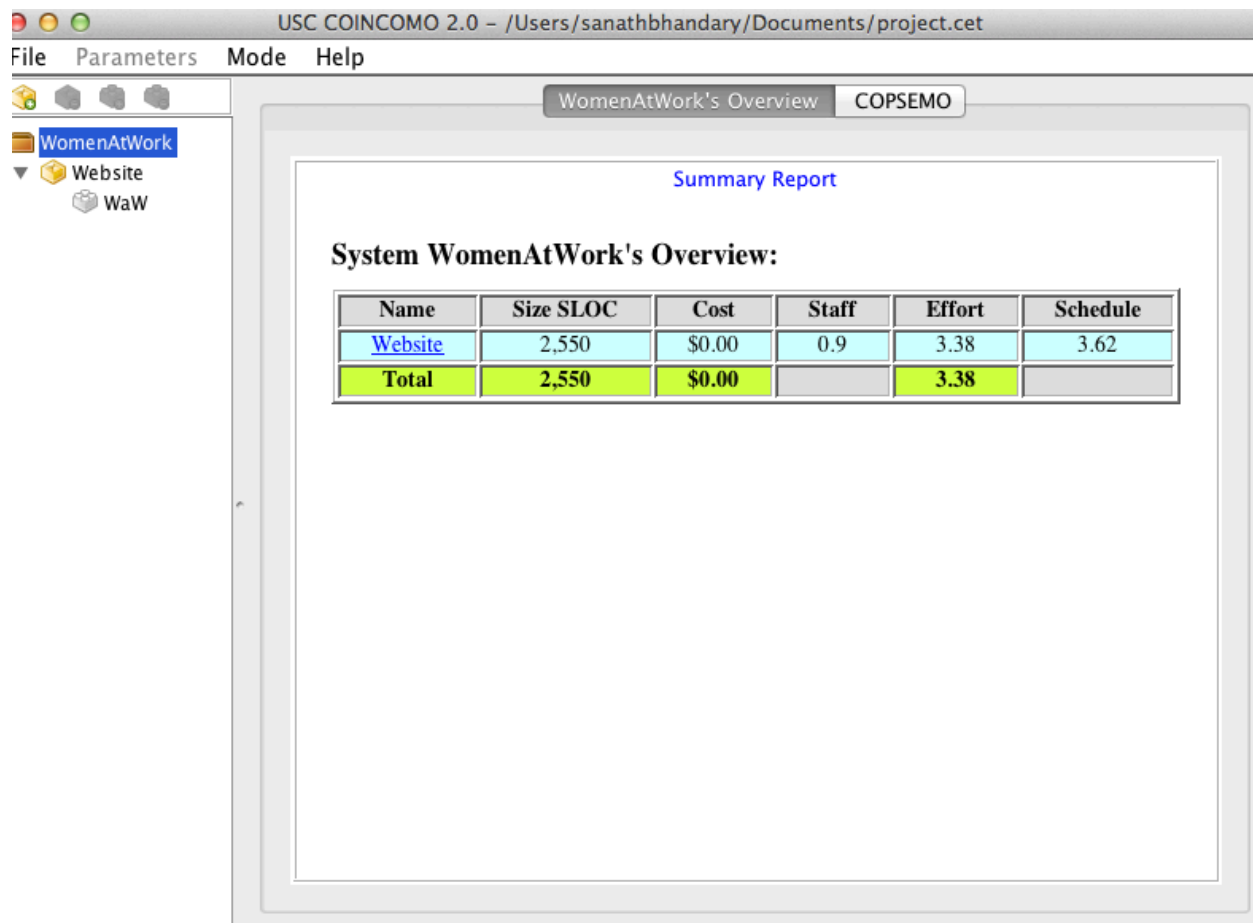


Figure 2: COCOMO Estimation Result- 2



## 6. Iteration Plan

### 6.1 Plan

The current iteration is the first iteration, which is mainly focus on core capabilities of the system, including providing Online registration, Onsite check-in, Feedback, Private management portal, Social media integration, Blogs. Test cases designed for each capability will also be implemented in the first iteration and each capability will be tested at least one time.

During this iteration, the team would proceed with setting up Wordpress environment using GoDaddy server. Team members are assigned the modules to implement. The modules are assigned to all members individually or in pairs.

## 6.1.1 Capabilities to be implemented

**Table 13: Construction iteration capabilities to be implemented**

ID	Capability	Description	Priority	Iteration
OC-1	Provide online registration	Creating an online interface of registration for Women at work services.	1	2
OC-2	Onsite check in	When users comes to Women at Work center, they have to do an online Check-in which is used to track the user purpose for visiting WaW and aids in generating reports. As a user of WaW check-in online, (must be validated by neon crm - phone nos and event registered for) for multiple services.	1	1
OC-3	Feedback	An interface for the users to give a feedback to the Women at work for the service they have taken.	2	2
OC-4	Private Management portal	Ability for Women at work staff members to store and manage the privileges for the private documents.	3	1
OC-5	Automated Report Generation	Generating automated reports to track number of first time users, track number of people who came for counseling session. Etc.	4	1
OC-6	Social Media Integration	As a member of WaW, can integrate social media on the website so that we can keep the users up-to date about latest events. Whenever a major update is published on the website, there should be a button to confirm the IT personnel if he/she wants to post it onto social media	5	1
OC-7	Blogs	WaW members can publish blogs on the website so that we to keep the users up-to date about latest events and increase interactivity	5	1

## 6.1.2 Capabilities to be tested

**Table 14: Construction iteration capabilities to be tested**

ID	Capability	Description	Priority	Iteration
OC-1	Provide online registration	Creating an online interface of registration for Women at work services.	1	2
OC-2	Onsite check in	When users comes to Women at Work, they have to do an online Check-in which is used to track the user purpose for visiting WaW and generating reports. As a user of WaW check-in online, (must be validated by neon crm - phone nos and event registered for) for multiple services. Online pertains to the intranet at WaW center.	1	1
OC-3	Feedback	An interface for the users to give a feedback to the Women at work for the service they have taken.	2	2
OC-4	Private Management portal	Ability for Women at work staff members to store and manage the privileges for the private documents.	3	1
OC-5	Automated Report Generation	Generating automated reports to track number of first time users, track number of people who came for counseling session. Etc.	2	1
OC-6	Social Media Integration	As a member of WaW, can integrate social media on the website so that we can keep the users up-to date about latest events. Whenever a major update is published on the website, there should be a button to confirm the IT personnel if he/she wants to post it onto social media	4	1
OC-7	Blogs	WaW members can publish blogs on the website so that we to keep the users up-to date about latest events and increase interactivity	4	1

### 6.1.3 Capabilities not to be tested

In the first and second iteration, all the capabilities will be tested at least one time and the order of testing on each capability will depend on their priority. The requirements for max down time and system deployment mentioned in winbook will not be tested, because we are just going to demonstrate those features to our clients.

### 6.1.4 CCD Preparation Plans

\* People involved in the **CCD**: Clients and Team 14.

\* People provided in the **CCD**: Team members and clients go through website and check whether they can utilize the website as required. After checking website, a survey for feedbacks will be released, and clients and team members will be asked to fill out the form as follows:

Feedback form between Clients and Team members:

**Table 15: Feedback form**

ID	Capability	Description	Comments	Satisfaction(scale:1-5)
1	Usability	How easy it was to use the system	Excellent	5
2	Appearance	How did you like the appearance and feel of the website	Good	4
3	Overall Effort	How is the complete new system developed	Excellent, met all the requirements	5

- Risk management Plan:  
Capabilities which received lower score and the features that are related to the capabilities need to be handled as high-level risks in the next iteration.

**Table 16: Risk Mitigation Plan for CCD**

ID	Risk	Mitigation Plan	Priorit y
1	Clients and team members cannot attend CCD	Complete attendance before CCD	1
2	No internet connection	Establish how to connect to local server	2
3	Disabled laptop during CCD	Arrange for extra laptops for CCD	3

## 6.2 Iteration Assessment

### 6.2.1 Capabilities Implemented, Tested, and Results

**Table 17: Capabilities implemented, tested, and results**

ID	Capability	Test Case	Test Results	Fail, why?
CR-1	Online Registration: Users registering for WAW services.	TC – 01	Pass	-
CR-2	Online Check-in and users Check-in for multiple services	TC-02-01 TC-02-02	Pass	-
CR-3	Feedback: WAW users giving feedback	TC – 03	Pass	-
CR-5	Report Generation: Different kinds of reports to be generated like Number of users visited per month, took WAW services etc.	TC – 04	Pass	-
CR-6	Social Media Integration	TC – 05	Pass	-
CR-7	Blogging	TC – 06	Pass	-
CR-4	Private Management Portal	TC - 07	Pass	

## 1. 6.2.2 Core Capabilities Drive-Through Results

**Table 18: Core capabilities drive-through results**

ID	Capability	Method
CR-1	Online Registration: Users registering for WAW services.	Drive-through
CR-2	Online Check-in and users Check-in for multiple services	Drive-through
CR-3	Feedback: WAW users giving feedback	Drive -through
CR-5	Report Generation: Different kinds of reports to be generated like Number of users visited per month, took WAW services etc.	Drive-through
CR-6	Social Media Integration	Drive-through
CR-7	Blogging	Drive-through
CR-4	Private Management Portal	Drive-through



**Table 19: Core capabilities drive-through results**

<b>Positive feedbacks</b>	<ul style="list-style-type: none"> <li>- Website is easy to use.</li> <li>- Website is easy to navigate.</li> <li>- Ability to use the website on the mobile was quite appreciated.</li> <li>- Very happy with the overall system.</li> </ul>
<b>Improvements needed/suggested</b>	<ul style="list-style-type: none"> <li>- Add more color to the website.</li> <li>- Minor text changes to website GUI.</li> <li>- Minor GUI issue with report generation module.</li> <li>- Adding more images to the photo gallery section of the website.</li> <li>- Improve the home page to add essence of WaW.</li> <li>- Add donate button to the sidebar</li> </ul>
<b>Changes to-be considered (Reprioritized capabilities, requirements, GUI, etc.)</b>	<ul style="list-style-type: none"> <li>- Improve the home page.</li> <li>- Adding donate button to sidebar.</li> <li>- Fix all GUI issues on the website and report generation module.</li> </ul>
<b>Risks (Possible risks, New risks introduced, risks mitigated, etc.)</b>	<ul style="list-style-type: none"> <li>- Risks of client not liking the overall GUI and various GUI components were <b>mitigated</b>.</li> <li>- Risks of uncertainty of using NeonCRM REST API were <b>mitigated</b>.</li> <li>- <b>New Risks</b> Behavior of the website after transitioning from development domain to production domain.</li> </ul>

## 6.3 Adherence to Plan

**Table 20: Adherence to plan**

Issues	Results	Adherence to Plan <1:Good, 2:Nominal, 3:Bad>
Budget	We reuse all the resources we already had to build the system without any funding. So it is clear that we don't exceed budget	1
Uncertainty	Implemented all the core capabilities specified in win conditions. However, as we know Women At Work is using a third party service to develop their functionalities, the major risk left is at the phase of transition	2
Time	The due date of Project is on 08/12, we have finished all the required features and documents at this point. We need more time to examine and improve the artifacts.	1

**\*Provide some insight to avoid mistakes for future iterations:**

Now to avoid the mistakes and defects after testing reported by clients through emails, meetings and make the updates to the system.