Life Cycle Plan (LCP)

NICE

TEAM 7

Deborah Baker – Assistant PM, QFP (Team & Web Req), IIV & V, Team Website Admin Antonis Papantoniou – Project Manager (PM), Prototyper, Software Architect, Feasibility Analyst

Runxuan Wei – Prototyper, Life Cycle Planner

Weijiang Dang – Developer, Operational Concept Engineer

King Lun Au – Developer, Life Cycle Planner

Dhananjay Nakrani – Prototyper, Operational Concept Engineer, Team Website Admin

Version History

Date	Author	Version	Changes made	Rationale
10/15/15	WRX	1.0	•	Created SSAD and added section 1,2,3
12/03/15	WRX	2.0	 Updated the artifact of developmental phrase Updated a new Gantt chart Modified the methods, tools, and facilities Added Iteration plan 	Added section 6

Table of Contents

	e Plan (LCP) History	
	Contents	
	Tables	
	Figures	
1.	Introduction	
1.1	Purpose of the LCP	1
1.2	Status of the LCP	1
1.3	Assumptions	1
2.	Milestones and Products	2
2.1	Overall Strategy	2
2.2	Project Deliverables	3
3.	Responsibilities	8
3.1	Project-specific stakeholder's responsibilities	8
3.2	Responsibilities by Phase	8
3.3	Skills	10
4.	Approach	12
4.1	Monitoring and Control	12
4.2	Methods, Tools and Facilities	12
5.	Resources	13
6. Iteration	on Plan	
6.1 Pla	ın	16
6.1.1 C	apabilities to be implemented	16
6.1.2 C	apabilities to be tested	18
6.1.3 C	apabilities not to be tested	20
	CD Preparation Plans	
	ration Assessment	
	apabilities Implemented, Tested, and Results	
	ore Capabilities Drive-Through Results	21

Table of Tables

Table 1: Artifact deliverable in Development Phase	
Table 2: Stakeholder's Responsibilities in each phase	
Table 3: COCOMOII Scale Driver	
Table 4: COCOMOII Cost Driver for modules "e-commerce" and "multi-vendor"	. 1.

Table of Figures

No table of figures entries found.

1. Introduction

1.1 Purpose of the LCP

The purpose of the life cycle plan (LCP) is the program's primary management tool to satisfy this E-commerce project requirement. The development of a life-cycle product strategy and plan are critical steps in the developmental process. The LCP remains an active management tool throughout the operations and sustainment of the system, and the program must continually update the LCP to ensure sustainment performance satisfies the product's needs.

The LCP documents the plan for how the life cycle planner will implement the development strategies. It includes varies of aspects such as development phrase, stakeholders' responsibilities, resource estimation and others.

1.2 Status of the LCP

The status of the LCP is currently at the end of the developmental phrase and entering the transition phase, the team is currently finalizing the prototype and documenting the manual so that it can provide instructions to the clients. This is the version that will be delivered to the clients. The major change is the change of tools, which WordPress has replaced X-Cart as the development tools. The focus has also been changed that the project has been narrowed down. No forums and some capabilities were put on stand by for core capabilities to be completed first. In addition, one of the member, Larry Stratton, was no longer in the project. Hence, the team has adjusted and split the works respectively. Furthermore, iteration plan was added to this version. It provides what life cycle milestones are addressed, including capabilities that will be tested and implemented.

1.3 Assumptions

- The duration of the project is 12 weeks, which is the entire 2015 Fall semester.
- After the project complete, the client is expected to manage the operation of the website.
- The guidelines of this project are followed by the USC CS577 class manual.
- The standard of the website is based on the client's demand.
- Since the client is a non-profit organization, the development cost will have to be minimized.

2. Milestones and Products

2.1 Overall Strategy

The team uses some form of schedule as Independent Variable (SAIV) strategy, in which the 12 weeks schedule drives development of a set of core capabilities. In the architect agile process, there is a lot of NDIs (Non-Developmental Items) involved. The team has developed by taking account the future updates of this COTs and trying to configure them/alter them but at the same time keeping them updatable. In WordPress, several plugins and themes were edited in order to meet the requirements of clients.

The NDI's have been carefully selected and used in prototypes in order to identify the configuration and development required that guarantees the functionality of the core capabilities requested by the client. Development is focused on automating some of the functions and facilitating interaction between the different plugins to make the process more intuitive. Finally a lot of front-end development has been performed to meet client UI requirements.

The life cycle phases and its dates, deliverables, milestone and strategy of each phase are as following:

Exploration phase

Duration: 08/17/2015- 9/23/2015

Concept: The team tried to identify the key elements of the project. Including having interview with the stakeholders, field observations, the initial user interface prototypes and the system scoping.

Deliverables: Exploration Commitment Package **Milestone**: Exploration Commitment Review **Strategy**: One Incremental Commitment Cycle

Valuation phase

Duration: 09/24/2015- 10/02/2015

Concept: The team performed a deeper analysis for the project. Including feature analysis, and prioritization. The prototyping was displayed to the vendor so that we had the feedback of the operational concept, system and software requirement, system and software architecture, and life-cycle plan. A business case analysis and business risk assessment were also created.

Deliverables: Valuation Commitment Package **Milestone**: Valuation Commitment Review **Strategy**: One Incremental Commitment Cycle

Foundation phase

Duration: 10/03/2015- 10/19/2015

Concept: The team was created a safety feature and alarms prototyping and iteration. Also,

programmable therapy types and touchscreen analysis

Deliverables: Foundation Commitment Package

Milestone: Foundation Commitment Review **Strategy**: One Incremental Commitment Cycle

Development phase

Duration: 10/20/2015- 12/03/2015

Concept: The team will perform extensive usability criteria and testing, all the necessary features will be added and tested in the e-commercial website in order to evaluate if they work

properly.

Deliverables: Development Commitment Package **Milestone**: Development Commitment Review **Strategy**: One Incremental Commitment Cycle

2.2 Project Deliverables

2.2.1 Exploration Phase

Table 1: Artifact deliverable in Exploration Phase

Artifact	Due date	Format	Medium
PR/Week 01 Progress Report	09/23/2015	.xlsx	Soft copy
PR/Week 01 Risk and Defect	09/23/2015	.xlsx	Soft copy
Report			
PR/Week 01 Project Plan	09/23/2015	.mpp	Soft copy

2.2.2 Valuation Phase

Table 2: Artifact deliverable in Valuation Phase

Artifact	Due date	Format	Medium
Valuation/Win Conditions Report	09/28/2015	.pdf	soft copy
Valuation/Client Interaction	09/28/2015	.pdf	soft copy
Valuation/Top Risks and Prototypes Presentation	10/02/2015	.pptx	soft copy
PR/Week 03 Progress Report	10/07/2015	.xlsx	soft copy
PR/Week 03 Risk and Defect Report	10/07/2015	.xlsx	soft copy

PR/Week 03 Project Plan 10/07/2015 .xlsx soft copy
--

2.2.3 Foundations Phase

Table 3: Artifact deliverable in Foundations Phase

Artifact	Due date	Format	Medium
Valuation/Operational Concept	10/16/2015	.docx	soft copy
Description 10/16 ARB/FCR			
Valuation/Prototype Report 10/16	10/16/2015	.docx	soft copy
ARB/FCR			
Valuation/System and Software	10/16/2015	.docx	soft copy
Architecture Description 10/16			
ARB/FCR			
Valuation/Life Cycle Plan 10/16	10/16/2015	.docx	soft copy
ARB/FCR			
Valuation/Feasibility Evidence	10/16/2015	.docx	soft copy
Description 10/16 ARB/FCR			
Valuation/ARB Presentation 10/16	10/16/2015	.pptx	soft copy
ARB/FCR			

2.2.4 Development Phase

Table 1: Artifact deliverable in Development Phase

Artifact	Due date	Format	Medium
Database schemas	11/01/2015	.php	soft copy
E-Commerce Tool (WordPress)	11/13/2015	.php	soft copy
Blogging Tool (WordPress)	11/13/2015	.php	soft copy
Completion of GUI	11/13/2015	.php	soft copy
Blogging Creation	11/27/2015	.php	soft copy
Automation for vendors	11/27/2015	.php	soft copy
Newsletter set up	11/27/2015	.php	soft copy
Search plugin	11/27/2015	.php	soft copy
Modify and combine appropriate	12/02/2015	.php	soft copy
prototypes			

In the development phrase, the team is going to finalize the development, entering this phrase most of the GUI should have been completed. The database schemas designed in Foundation phase will be implemented. Both the E-Commerce and Blogging tool should also be completed. Other key features, including automation for vendors, newsletter set up, and search plugin have been implemented. In the development transition phase, which we are entering right now, training will be performed for the clients, final touches and appropriate UM,TM documentation will be compiled. Finally the project will be deployed and delivered at the clients hosting service.

The following is the Gantt chart, which outlines the past and the future schedule that the team will do by time:

ID	Task Name			
				ter 1st Quarter 2nd Dec Jan Feb Mar Apr
1	Preparation for FCR and FC Package	Sep	OCTINOV	Dec Jan Feb Iviar Apr
2	Complete FCR Deliverables			
3	Finish Navigation Flow		I	
4	Complete Second Wireframing Iteration in Cacoo		I	
5	Team Meeting - Wireframe Updates		I	
6	Test Stripe Xcart Module		I	
7	Test Paypal Xcart Module		I	
8	Client Status Update and Website Stylistic Input Request		I	
9	Develop Admin Page Templates in Xcart			
10	Incorporate Client Stylistic Suggestions		I	
11	Develop Vendor Page Templates in Xcart		•	
12	Incorporate Client Stylistic Suggestions		I	
13	Develop Buyer Page Templates in Xcart			
14	Incorporate Client Stylistic Suggestions		I	
15	Prepare FCR Presentation		I	
16	Practice FCR Presentation		I	
17	Present FCR		I	
18	Complete FC Package Deliverables			
19	PM Complete FED			
20	Assistant PM Complete LCD			
21	PM and Assistant PM Complete OCD		I	
22	PM and Assistant PM Complete PRO		I	
23	PM Complete SSAD		I	
24	Team Meeting - FC Package Review and Next Website Assignments		I	
25	Submit FC Package After Review		I	
26	Complete Trade Study on xcart vs woocommerce			
27	Install Wordpress and Woocommerce and conduct evaluation		I	
28	Complete Trade Study Report		I	
29	Evaluate and select WooCommerce template that fits requirements best		II All	
30	Development of three main use cases in prototype			
31	Customize home page in WooCommerce Storefront			xuan,Weijiang,King
32	Customize catalog and cart pages in WooCommerce Storefront			nanjay,Antonis
33	Customize vendor pages in WooCommerce Storefront		De	þ
34	Preview progress with Client		I	

ID	Task Name			- 10 V
		te		ter 1st Quarter 2nd
35	County Deptators Departmention	Se	T	Dec Jan Feb Mar Apr
36	Create Prototype Presentation		T All	
	Present Prototype Progress			
37	Core Capability Drivethrough			ınxuan,Weijiang,King
38	Customize home page		_	unxuan,weijiang,king ntonis
39	Customize vendor pages			II .
40	Develop search function and filters		9770	ng .
41	Main menu modifications		(To)	hananjay
42	Develop User Manual			eb
43	Develop high-level test plans			eb
44	Core Capability Presentation		I A	
45	Continue development from CCD feedback			100000000
46	Continue main menu modifications			Weijiang
47	Automate blog creation when a new vendor is registered		_	Dhananjay
48	Featured vendor display for home page			Weijiang
49	Continue to develop search function and filters			King
50	Develop vendor themes			Antonis
51	Home page alignment fixes		_	Runxuan
52	See if login link can be moved to the top right of home page			Dhananjay
53	TRR Preparation		-	ų.
54	Define and delegate documents for ARB		I	eb
55	Determine use of acceptance vs test cases		111	eb
56	Determine project end state with Client			Antonis
57	Continue development of User Manual			Deb,Weijiang,Dhanai
58	Execute test cases			Deb
59	Complete documents for ARB/TRR			Runxuan,Weijiang,A
60	Conduct TRR			Runxuan,Weijiang,A
61	Transition to production			ip .
62	Conduct Training Sessions		J	Deb,Antonis
63	Discuss implementation plan with client			Deb,Antonis,Dhanai
64	Transfer or Install to clients server			Dhananjay
65	Conduct final testing on production server			Deb,Dhananjay
66	Provide final documentation to client			Deb,Dhananjay

3. Responsibilities

3.1 Project-specific stakeholder's responsibilities

N/A

3.2 Responsibilities by Phase

Table 2: Stakeholder's Responsibilities in each phase

	Exploration	Valuation	Foundations
Dhananjay Nakrani	Primary Responsibility develop prototype Secondary Responsibility Come up Win-Win conditions	Primary Responsibility Evaluate different prototype alternatives Secondary Responsibility Quality for both project and team processes & deliverables GUI Prototype (XCart) admin main page	Primary Responsibility Identify Risks relating to multivendor modules Try out different COTS and analyze them Secondary Responsibility Quality for both project and team processes & deliverables
Runxuan Wei	Primary Responsibility field observations Secondary Responsibility develop prototype	Primary Responsibility SSAD doc create and update xcart setup and hello world page Secondary Responsibility buyer use case development	Primary Responsibility analyze payment method risk with multivendor Secondary Responsibility assistant in group documents and report
Deb Baker	Primary Responsibility Facilitate in WinWin negotiation Quality for both project and team processes & deliverables Secondary Responsibility field observations	Primary Responsibility Quality for both project and team processes & deliverables Secondary Responsibility Identify project risk	Primary Responsibility Quality for both project and team processes & deliverables Secondary Responsibility Identify project risk
Weijiang Dang	Primary Responsibility Initial user interface Secondary Responsibility Contact with the client	Primary Responsibility Customer's ware framing Secondary Responsibility Identify project risk	Primary Responsibility Develop Prototype of XCart Secondary Responsibility Improve Prototype
King Lun Au	Primary Responsibility field observations come up Win-Win conditions	Primary Responsibility identify project risk buyer user case development Secondary Responsibility	Primary Responsibility LCP documentation Secondary Responsibility Identify project risk

	Secondary	develop prototype (X-cart)	
	Responsibility Initial user interface		
Antonis	Primary Responsibility Contact with the client Secondary Responsibility Identify project's risk	Primary Responsibility Vendor Case Wire framing Secondary Responsibility GUI Prototype vendor main page	Primary Responsibility Prepare OCD documentation Secondary Responsibility Identify Risks relating to multivendor modules
Client	Primary Responsibility: Engage in conversation with dev. Team about project vision	Primary Responsibility: Discuss win conditions with team negotiate risk and costs	Primary Responsibility: Provide feed back to the team regarding website appeal and GUI interface

	Development-	Development-
	Construction	Transition Iteration
	Iteration	
Dhananjay	Primary Responsibility	Primary Responsibility
Nakrani	Multi-Site to achieve	
Ivakiani	Multi-Vendor	Secondary Responsibility
	functionality.	secondary responsionicy
	Automated blog creation	
	Customized theme a	
	little	
	Secondary	
	Responsibility	
	Tested functionality	
	Maintained Team	
	Website	
Runxuan	Primary Responsibility	Primary Responsibility
Wei	Create and Maintain	
	SSAD documentation	Secondary Responsibility
	Secondary	
	Responsibility	
	Changed CSS for	
	website front page	
	Research for payment	
	tool	
Deb Baker	Primary Responsibility	Primary Responsibility
	Facilitate in WinWin	
	negotiation	Secondary Responsibility
	Quality for both project	
	and team processes &	
	deliverables	
	Secondary	
	Responsibility field observations	
XX7 - : : :		Duimous Dogramathilite
Weijiang	Primary Responsibility	Primary Responsibility
Dang		Secondary Responsibility
<u> </u>	1	zeromany responsibility

	Create short code for displaying featured vendor Secondary Responsibility	
	Change CSS for website front page	
	Adding plugin for user	
King Lun	avatar Primary Responsibility	Primary Responsibility
Au	Develop search function and filter	Secondary Responsibility
	Create and Maintain LCP documentation	
	Secondary	
	Responsibility	
	Customize home page in	
	WooCommerce	
	Storefront	D. 1. D. 11.11.
Antonis	Primary Responsibility	Primary Responsibility
	OCD Documentation	G 1 B 11111
	Bi-weekly reports,	Secondary Responsibility
	Client interaction and	
	meetings	
	Secondary	
	Responsibility	
	UI improvements Backup functionality	
Client	Primary	Primary Responsibility:
Chent	Responsibility:	Read and understand the
	Engage in conversation	manual, provide
	with dev. Team about	recommendation for
	project vision	transition
	Provide feedback and	
	recommendation	

3.3 Skills

>>

Team members	Role	Skills
Dhananiay Nakrani	Developer, System Integrator,	PHP, python, LAMP Stack,
	Team Website Admin	Flask, Rails (a bit), Bootstrap,
		jQuery, Wordpress
		PHP, JavaScript, AJAX,
Runxuan Wei	Dev/system integrator	MySQL, Python, JQuery
	QFP (Team/Web	
	Req)/Assistant PM/ Team	HTML, Java, C++, DBs,
Deb Baker	Website Admin	Javascript, vbscript

		PHP, Javascript, AJAX,
		jQuery, Bootstrap, some rails,
		Apache, MySQL, Wordpress,
Larry Stratton	PM/QFP (Web Req)/Dev	Java, C++
Weijiang Dang	QFP (Web Req)/Dev	JAVA, C, C++, javascript
		Java, javascript, C++, C,
King Lun Au	QFP (Web Req)/Dev	Matlab, Python
		Python, Javascript
Antonis Papantoniou	Sys/can dev when needed	Frameworks:None

4. Approach

4.1 Monitoring and Control

For monitoring purposes and control the team is using bi-weekly progress reports which are uploaded at the team website. Additionally weekly tasks are divided and tracked between the team members using slack.

4.1.1 Closed Loop Feedback Control

In terms of feedback between individual tasks we are having multiple Slack meetings per week to accommodate our DEN members and also document our discussions. In the meetings we present our respective progress and monitor the document status using Google docs and Bitbucket for code reviews and staying updated on code status. Finally all work is logged in to Jira to gauge each team member's individual contribution to the project.

4.1.2 Reviews

Each task is usually divided between multiple teammates. This method allows each teammate to peer review the work of another to get feedback and ensure good work quality. Documentation is also reviewed by the PM and the assistant PM for final editing before submission.

4.2 Methods, Tools and Facilities

Tools	Usage	Provider
WordPress	Blog management	Wordpress.com
BitBucket	Code reviews and staying	Atlassian Inc.
	updated on code status	
Amazon EC2	Test deployment	Amazon.com
Slack	Communication and team	Slack.com
	meeting	
Jira	Team project management	Atlassian Inc.
	and checking progress	

5. Resources

Identify the following information in order to estimate the software cost:

- Estimated CSCI577a Effort: 6 team members at 12 hrs/week for 12 weeks
- Estimated CSCI577b Effort: 6 team members at 12 hrs/week for 12 weeks
- Total estimated effort = unknown
- Budget information = \$0
- Project duration = 12 weeks
- Component modules in your development project = E-commerce tool, multi-vendor support, payment methods, search, blog posting, forums, database, web server
- Programming language used = php

For this effort, we used COCOMO II.2000.4. All drivers not specified below are considered "Nominal".

Rationale **Scale Driver** Value **PREC** System is widely used, but new to development team Low **FLEX** Requirements are on the more specific end Low Using established platforms should eliminate larger RESL Low design problems Team cohesion is lacking and introduces risk **TEAM** Low **PMAT** Nominal SEI CMM process maturity rating is poor

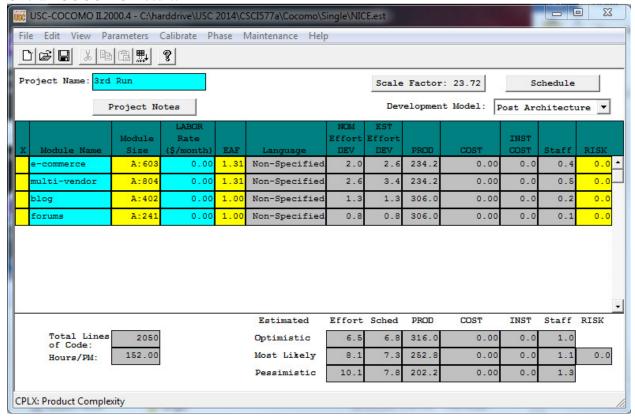
Table 3: COCOMOII Scale Driver

Table 4: COCOMOII Cost Driver for modules "e-commerce" and "multi-vendor"

Cost Driver	Value	Rationale	
APEX	Low	Only a few members of the team have experience	
		developing applications	
LTEX	Low	Only two members of the team are experienced	
		developers	
TOOL	Low	The MVC and e-commerce platforms introduce a new	
		environment to the team – lack of experience is	
		significant	

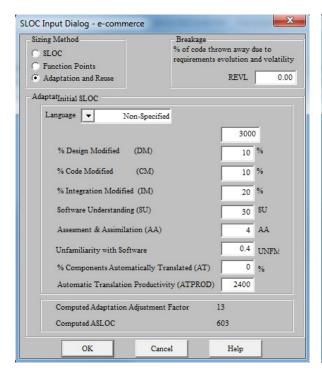
COCOMOII Cost Driver values for modules "blog" and "forums" was determined to be nominal.

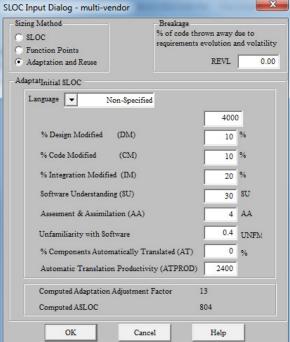


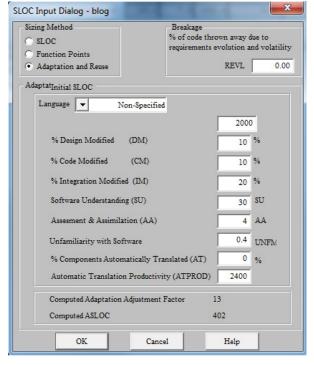


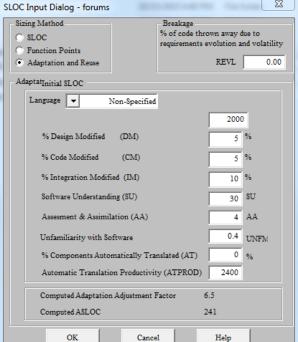
Based on this estimate, 8.1 person months is required to do the work, with a staff of 1.1 persons for 7.3 months. In the case of CS577, this estimate is reduced to 4.86 person months based on a 6 person team. Therefore, it is estimated that our team can complete the project on time.

The following are the individual module inputs based on Adaptation and Reuse of existing code.









6. Iteration Plan

6.1 Plan

This Iteration Plan is intended to accomplish the major features and described the detailed plans for the iteration of this E-commence project. In the Iteration plan, the requirements would be further analyzed. Due to the fact that it is a one semester project, the team has prioritized list of objectives to work on. There are two iterations to implement the capabilities. The first iteration is to finalize the features that already included in the original WordPress. The second iteration is to edit and modify the existing Plugin and codes to accomplish the project requirements. The analysis and design for all use cases selected were completed. The architectural prototype were developed to test the feasibility and performance of the architecture that is required for the E-commence website.

6.1.1 Capabilities to be implemented

Table 5: Construction iteration capabilities to be implemented

ID	Capability	Description	Priority	Iteration
UC4	Vendor can	Check if the vendor can successfully	M	1
	register for	create a new account.		
	account			
UC8	Add new	Check if the vendor can successfully	M	1
	product	add a product.		
UC7	Edit existing	Check if the vendor can successfully	M	1
	product	edit a product.		
UC12	View products	Check if a user can view a specific	M	1
		product.		
UC12	Search function	Check if a user can search a specific	M	2
		product.		
UC13	View orders	Check if a user can view his or her	M	1
		order.		
UC6	Checkout or	Check if a user can check out after he	M	1
	purchase	or she finish purchasing.		
	product			
UC10	Vendor can	Check if a vendor can create his or	M	2
	create a blog	her own blog.		
UC10	Vendor can edit	Check if a vendor can edit a specific	M	2
	a blog	product.		
UC3	Customer can	Check if a user can create a new	M	1
	create account	account.		

1 1 1
1
1
1
-
1
1
2
2
1
1
2
2
2
2
2
1
1
1
2
1

UCxx	Admin can	Check if the admin can display and	M	1
	display vendors	sort the vendors by sales and		
	by sales and	transactions.		
	transactions			
UCxx	Admin can	Check if the admin can suspend a	M	1
	suspend vendor	specific vendor account.		
	accounts			

6.1.2 Capabilities to be tested

Table 6: Construction iteration capabilities to be tested

ID	Capability	Description	Priority	Iteration
UC4	Vendor can	Check if the vendor can successfully	M	1
	register for	create a new account.		
	account			
UC8	Add new	Check if the vendor can successfully	M	1
	product	add a product.		
UC7	Edit existing	Check if the vendor can successfully	M	1
	product	edit a product.		
UC12	View products	Check if a user can view a specific product.	M	1
UC12	Search function	Check if a user can search a specific	M	2
		product.		
UC13	View orders	Check if a user can view his or her	M	1
		order.		
UC6	Checkout or	Check if a user can check out after he	M	1
	purchase	or she finish purchasing.		
	product			
UC10	Vendor can	Check if a vendor can create his or	M	2
	create a blog	her own blog.		
UC10	Vendor can edit	Check if a vendor can edit a specific	M	2
	a blog	product.		
UC3	Customer can	Check if a user can create a new	M	1
	create account	account.		
UC14	Approve	Check if an admin approve a new	M	1
	pending vendor	vendor.		
UC1	Login	Check if the user can login	S	1
		successfully		
UC2	Logout	Check if the user can logout	S	1
		successfully		
UC5	Add item to cart	Check if the user can add items into	M	1
		shopping cart.		
UC9	Delete product	Check if the user can delete items	M	1
		from the shopping cart.		

6.1.3 Capabilities not to be tested

Most capabilities were tested in order to check if the features of the website can operate properly. For example, the capabilities of WooCommerce and WC vendors were tested. However, the team did not do load testing because there was no high load requirements.

6.1.4 CCD Preparation Plans

In CCD, the clients would test and implement the features from WordPress in their local machine. A user manual that outlined all the test cases, was sent to the clients. The clients can go through them on their own. Following from the manual steps by steps, the clients would experience the current system. Meanwhile, the team would have a computer for dry run simultaneously along with the clients. When the clients were confused, they can come back to us with any concerns or feedback, and we can answer their question instantly. Feedback forms would be used in order to record the problems and comment from the clients. The feedback is highly important because the team would need that information for further risk analysis. It can reduce the risks, and provide a better user experience in the future development.

6.2 Iteration Assessment

6.2.1 Capabilities Implemented, Tested, and Results

ID	Capability	Test Case	Test Results	If fail, why?
UC4	Vendor can register for account	TC-01	Pass	N/A
UC8	Add new product	TC-02	Pass	N/A
UC7	Edit existing product	TC-03	Pass	N/A
UC12	View products	TC-04	Pass	N/A
UC12	Search function	TC-05	Pass	N/A
UC13	View orders	TC-06	Pass	N/A
UC6	Checkout or purchase product	TC-07	Pass	N/A
UC10	Vendor can create a blog	TC-08	Pass	N/A
UC10	Vendor can edit a blog	TC-09	Pass	N/A
UC3	Customer can create account	TC-10	Pass	N/A
UC14	Approve pending vendor	TC-11	Pass	N/A

Table 7: Capabilities implemented, tested, and results

UC1	Login	TC-12	Pass	N/A
UC2	Logout	TC-13	Pass	N/A
UC5	Add item to cart	TC-14	Pass	N/A
UC9	Delete product	TC-15	Pass	N/A
UC11	Write feedback on vendor	TC-16	Pass	N/A
UCxx	Write feedback on products	TC-17	Pass	N/A
UCxx	Approve pending product	TC-18	Pass	N/A
UCxx	Customer can sign up for	TC-19	Pass	N/A
	newsletter			
UCxx	Admin can create and email	TC-20	Pass	N/A
	newsletter			
UCxx	Customer can subscribe to	TC-21	Pass	N/A
	alerts			
UCxx	Create discount coupons	TC-22	Pass	N/A
UCxx	Customer can get	TC-23	Pass	N/A
	recommendation based on			
	questions			
UCxx	Manage account settings	TC-24	Pass	N/A
UCxx	Delete item from cart	TC-26	Pass	N/A
UCxx	Edit quantify of item in cart	TC-27	Pass	N/A
UCxx	Admin can post site-wide	TC-28	Pass	N/A
	communications and blogs			
UCxx	Admin can email vendors	TC-29	Pass	N/A
UCxx	Admin can display vendors by	TC-30	Pass	N/A
	sales and transactions			
UCxx	Admin can suspend vendor	TC-31	Pass	N/A
	accounts			

6.2.2 Core Capabilities Drive-Through Results

The overall CCD was successfully, the clients left positive feedback and they were comfortable with most of the features. For instance, clients where able to intuitively login as a vendor, create and delete products from the cart or add new products to the catalog. This is an indication that the user interface remains intuitive despite the multitude of features that are included.

Nevertheless, there are improvements that can be done in future development. Home page login can be placed a bit better the same for the search function. Some more complicated admin tasks are not as intuitive for the non-tech savvy person, and thus the training manual will focus a lot on them with detailed descriptions and screenshots.

Some changes that can be considered are as following. For the admin to approve a product, the clients felt that is too complicated because they had to click on the product to show the details, and then approve that specific product. After, they did not know how to go back to the list. The meaning of "pending" and the back button would need to explain during the session. The possible issues were when the clients saw the list of items to be approved and clicked to see the details, if they wanted to go back to the list of items, during CCD the user needed to click at the menu to go back to the list. Therefore, this action would redirect users to the first page of the item lists. However, it is possible that clients were looking at some other pages (e.g. page #5). It would be easier for the clients if they can go back to the page that they were looking.

When the clients tried to make purchase by adding to the cart and paying with an ordering page, they had a difficulty. It was hard for them to find the "shop" link. The checkout button, which is at the bottom of the screen, should consider to be relocated to the top of the screen so that clients did not have to scroll down to the bottom of the screen every time they make a purchase. In addition, the order Icon in the left menu was a gear icon, the team should find a new icon that give more intuitive.

A potential risk could be from the case of suspending a vendor. First, clients had some problems in finding logging link. Second, clients went into the super administrator, instead of the administrator of the website. In order to mitigate these risks, the training manual should provide a detailed explanation, including with screenshot.

6.3 Adherence to Plan

The iteration is currently doing well according to the initial plan. The team has finished the work on schedule without extra labor cost. The only uncertainty in the Software Development Status is that the team needs to customize and modify the co-existing front page to meet the expectation of clients matching feedback from the client/team meetings. Such changes must be made carefully so the whole functionality of the website is not affected as this is the end of the semester and there is not much time to recover from potential problems that may arise.