Life Cycle Plan (LCP)

Mission Science Information and Data Management System 2.0

Team number 2

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11/26/12

Version History

Date	Author	Version	Changes made	Rationale
10/03/12	AS	1.0	• Initial the document • Add individual skills	• Initial draft of LCP document
11/05/12	AS	1.5	• Add individual skills • Add Introduction information	• Completion the minimum exit requirements for Core Foundations Commitment Package
11/05/12	AS	2.0	• Fixed Section 1,2, and 3	• For DC package
11/26/12	AS	3.0	• Added section 5 and 6	• For TRR package

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1. Introduction

1.1 Purpose of the LCP

LCP is organized to answer the most common questions about a project or activity: why? Whereas? What? When? Who? Where? How? and how much?

The purpose of a development project's LCP is to:

- Serve as a basis for monitoring and controlling the project's progress
- Help make the best use of people and resources throughout the system's life cycle
- Provide evidence to other key stakeholders that the developers have thought through the major life cycle issues in advance

1.2 Status of the LCP

The status of the LCP is currently at the TRR phase with version number 3.0.

1.3 Assumptions

- The requirements from the client are stable and will not change dramatically.
- The project is of 12 weeks duration.
- Client will stop making changes to database as soon as the development begins on the major capabilities.

2. Milestones and Products

2.1 Overall Strategy

Mission Science Information and Data Management System is following NDI process because there is Non-Development Item and Web service that would fit to most of the core capabilities.

Exploration phase

Duration: 09/12/12- 10/03/12

Concept: They identify project operational concept, system and software requirement, system and software architecture, and life-cycle plan. These phases prioritize the capabilities, conduct investment and feasibility analysis, and implement the software prototype.

Deliverables: Valuation Commitment Package

Milestone: Valuation Commitment Review

Strategy: One Incremental Commitment Cycle

Valuation phase

Duration: 10/01/12- 10/15/12

Concept: To identify the objectives, constraints, and priorities of the project based on negotiation of Win conditions amongst success-critical stakeholders, to explore NDI alternatives, reassess and plan the project life cycle, create a prototype of the system and its capabilities, and acquire and familiarize with NDI components.

Deliverables: Core Foundations Commitment Package (FCP) – OCD, PRO, SSAD, LCP, FED, SID

Milestone: Core Foundations Commitment Review

Strategy: One Incremental Commitment Cycle

Foundations phase

Duration: 10/14/12 - 10/22/12

Concept: To detail the project plan, to assess and record project and individual progress, to assess feasibility, operational concept, system architecture, prototype, and life cycle, to prioritize capabilities included in prototype, and to acquire NDI components.

Deliverables: Development Commitment Package (DCP) – OCD, PRO, SSAD, LCP, FED, SID, QMP, ATPC

Milestone: Development Commitment Review

Strategy: One Incremental Commitment Cycle

Development phase

Duration: 11/02/11- 11/05/11

Concept: To assess the development iteration, implement the system, perform testing, develop a support plan and transition plan, and continue to perform testing

Deliverables: Transition Readiness Review Package (TRR) – OCD, PRO, SSAD, LCP, FED, SID, QMP, ATPC

Milestone: Re-Baseline Development Commitment Review

Strategy: One Incremental Commitment Cycle

2.2 Project Deliverables

2.2.1 Exploration Phase

Table 1: Artifacts Deliverables in Exploration Phase

Artifact	Due date	Format	Medium
Client Interaction Report	09/19/12	.doc, .pdf	Soft copy
Valuation Commitment Package • Operational Concept Description (OCD) Early Section • Life Cycle Plan (LCP) Early Section • Feasibility Evidence Description (FED) Early Section	10/03/12	.doc, .pdf	Soft copy
Effort Report	Every Monday	Website	ER system
Project Plan	Every Wednesday	.mpp	Soft copy
Progress Report	Every Wednesday	.xls	Soft copy

2.2.2 Valuation Phase

Table 2: Artifact Deliverable in Valuation Phase

Artifact	Due date	Format	Medium
Response to Evaluation of VC Package	10/08/12	.doc, .pdf	soft copy
Core Foundations Commitment Package • Feasibility Evidence Description (FED) • Life Cycle Plan (LCP) • Operational Concept Description (OCD) • Supporting Information Document (SID) • System and Software Architecture Description (SSAD) • Prototype	10/15/12	.doc, .pdf	soft copy
Evaluation Of Core Foundation Commitment Package	10/22/12	.doc, .pdf	soft copy
Draft FC Package	10/22/12	.doc, .pdf	soft copy
Evaluation of Valuation Commitment Package	10/08/12	.xls	Soft copy
Evaluation of Draft FC Package	10/29/12	.doc, .pdf	soft copy

2.2.3 Foundations Phase

Table 3: Artifact Deliverable in Foundations Phase

Artifact	Due date	Format	Medium
Develop Commitment Package • Feasibility Evidence Description (FED) • Life Cycle Plan (LCP) • Operational Concept Description (OCD) • Supporting Information Document (SID) • System and Software Architecture Description (SSAD) • Quality Management Plan (QMP) • Test Plan and Cases (TPC) • Prototype	11/05/12	.doc, .pdf	soft copy
Effort Report	Every Monday	website	ER system
Progress Plan	Every Wednesday	.mpp	soft copy
Progress Report	Every Wednesday	.xls	soft copy

2.2.4 Development Phase

Table 4: Artifact deliverable in Development Phase

Artifact	Due date	Format	Medium
Draft Transition Readiness Review Package	12/26/12	.doc, .pdf	soft copy
Transition Readiness Review Package • Feasibility Evidence Description (FED) • Life Cycle Plan (LCP) • Operational Concept Description (OCD) • Supporting Information Document (SID) • System and Software Architecture Description (SSAD) • Quality Management Plan (QMP) • Test Plan and Cases (TPC) • Prototype • Training Plan (TM) • Transition Plan (TP) • User Manual (UM) • Test Procedures and Results (TPR)	12/10/12	.doc, .pdf	soft copy
Effort Report	Every Monday	website	ER system
Progress Plan	Every Wednesday	.mpp	soft copy
Progress Report	Every Wednesday	.xls	soft copy

3 Responsibilities

3.1 Project-specific stakeholder's responsibilities

Stakeholders in this project are client, users, maintainer, high school students, and high school teachers. Some of them have responsibilities on make lesson plans, manage the inventory, generate reports. Others will participate in the Mission Science Information project.

3.2 Responsibilities by Phase

Table 5: Stakeholder's Responsibilities in each phase

	Primary / Secondary Responsibility				
Team Member / Role	**Exploration**	**Valuation**	**Foundations**	**Development-** Construction Iteration	**Development-** Transition Iteration
Nakarin kamkheaw: Project manager/Feasibility Analysis	**Primary Responsibility** • Analyze current system **Secondary Responsibility** • Collect Win conditions	**Primary Responsibility** • Lead the group meeting	**Primary Responsibility** • Develop the system • Record project progress	**Primary Responsibility** • Lead the group meeting • Develop the system	**Primary Responsibility** • Lead the group meeting **Secondary Responsibility** • Test the system
Yuling Lan: Operational Concept Engineer/Prototyper/ Builder	**Primary Responsibility** • Analyze current system • Collect Win conditions	**Primary Responsibility** • Create OCD document	**Primary Responsibility** • Create Prototype **Secondary Responsibilty** • Create OCD document	**Primary Responsibility** • Develop the system **Secondary Responsibilty** • Create OCD document	**Primary Responsibility** • Developer **Secondary Responsibility** • Test the system
Robert Morse: IIV&V/Sytem Architect	**Primary Responsibility** • Check the documents **Secondary Responsibility** • Analyze current system	**Primary Responsibility** • Check the documents • Generate bug reports on Bugzilla	**Primary Responsibility** • Check the documents • Generate bug reports on Bugzilla • Monitor the project	**Primary Responsibility** • Check the documents • Generate bug reports on Bugzilla	**Primary Responsibility** • Check the documents
Abhijeet Singh: Lifecycle Planner/Tester	**Primary Responsibility** • Develop project plan	**Primary Responsibility** • Develop project plan	**Primary Responsibility** • Develop project plan • Generate Test Plan	**Primary Responsibility** • Develop project plan • Generate Test Plan • Test the system	**Primary Responsibility** • Generate Test Plan • Test the system

Darin Gray (Client)	**Primary Responsibility** • Present project requirements	**Primary Responsibility** • Work on win conditions(Client side)	**Primary Responsibility** • Check the prototypes	**Primary Responsibility** • Check on the development	**Primary Responsibility** • Check the development

3.3 Skills

Team members	Role	Skills
Yuling Lan	Operational Concept Engineer/Prototyper	**Current skills:** Integration Development, Microsoft Access, VB **Required skills:** Balsamiq
Robert Morse	IIV&V/System Architect	**Current skills:** Oracle, MySQL, UML, VB **Required skills:** Microsoft Access, Visual Paradigm
Abhijeet Singh	Life Cycle Planner/Tester	**Current skills:** Microsoft Project, Project Coordination **Required skills:** Microsoft Access, VB
Nakarin Kamkheaw	Project Manager	**Current skills:** Project management, Feasibility evaluation, Microsoft Project, VB **Required skills:** Microsoft Access

4 Approach

4.1 Monitoring and Control

Progress Report has been used for monitoring and controlling the project. It is the weekly report of the Program size in terms of SLOC

4.2 Closed Loop Feedback Control

There are scheduled meetings for internal feedback. All the progress report is made available to all members Via Email and also via the google group.

4.3 Reviews

Reviews will be relayed via email and the google group.

4.4 Methods, Tools and Facilities

Tools	Usage	Provider
Microsoft Project Manager	Assist a project manager in developing a plan, assigning resources to tasks, tracking progress, managing the budget, and analyzing workloads.	USC
COCOMO II Version 2000.3	Cost Estimation tool for estimating effort, cost and schedule for software projects	USC
MS Access	Database Management Program which allows users to create and extract data from rational users	USC
Win Book	Working on Win conditions and	USC
Team website	Documentation of work	USC
email	Communicating with various team members	USC

5. Resources

Cost	Value	Rationale
RELY	Nom	This module provides one of the most important functions in the whole system. However, the failure of this system will not cause financial loss but only inconveniences to users. Since the performance report might be generated everyday, the inconveniences caused by system failure can be huge. This cost driver is normal.
FLEX	Nom	The project has been specified and descriptions that the client provides so the flexibility is Nominal.
TEAM	Hi	We have a highly dedicating team; clients are easy to communicate with.
PMAT	Hi	Our team follows ICM guidelines carefully and there is no need to perform extra project management.
DOCU	Nom	There will be only a moderate amount of documentations as the report is pretty self-explaining.
ACAP	Hi	The team members have good communication & technical skills
PCAP	HI	The team members have worked on similar module in previous projects
PLEX	HI	The members have worked on different tools used and can complete the project easily
APEX	LOW	The team has not any experience in building such a system.

6. Iteration Plan

6.1 Plan

6.1.1 Capabilities to be implemented

The following are the capabilities

Capability	Priority Level
1. Error Checking: Student Worker should be able to detect the duplicates in the database, and make change accordingly.	Must have
2. Information Editing: Student Worker should be able to make change to the existing data in the database.	Must have
3. Assign Lesson Plans: Coordinator should be able to assign standards to given activities.	Must have
4. Logging System: Coordinator should be able to monitor the usage of the system using a logging system.	Should have
5. Back-up Management: All databases, to include tables, queries, and database relationships will be backed-up at predetermined intervals.	Could have

6.1.2 CCD Preparation Plans

Core Capability Drive through will take place on 12/03/12 with the client and all the team members. Client was given a run through of all the capabilities which were completed and feedback for improvement was recorded.
The recorded feedback is
http://greenbay.usc.edu/csci577/fall2012/projects/team02/CMN/ccd.html