

# **Iteration Plan**

## **Data Mining of Digital Library Usage Data**

### **Team 07**

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## Version control

<b>Date</b>	<b>Author</b>	<b>Version</b>	<b>Changes made</b>
2/6/2005	Vu Nguyen	1.0	<ul style="list-style-type: none"><li>• 1<sup>st</sup> Draft</li></ul>

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# 1 Iteration Overview

## 1.1 Capabilities to be implemented

CAPI-1	Log Analysis
Relevant	C-2 Log Analysis SR3 Relationship generation

CAPI-2	Visualization log analysis results
Relevant	C-3 Visualization log analysis results SR-6: Visualization

## 1.2 Capabilities to be tested

All capabilities listed in section 1.1.

## 1.3 Capabilities not to be tested

Every capability will be tested.

## 1.4 Objective

The objective of the first iteration of construction phase is to build a reliable algorithm so that the other modules can be built up on.

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## 2 Plan

### 2.1 *Tool Support*

The following tools are used in all iterations associated with this project:

#### **Hardware Tools:**

1. PCs provided by USC/ISD

#### **Software Tools:**

1. Microsoft Office 2000
2. Internet Explorer
3. Microsoft Project 2002
4. Rational Rose
5. USC COCOMO II
6. Adobe Acrobat 5.0
7. C/C++, H3viewer
8. ClearCase
9. OpenMotif

Both hardware and software tools are provided by University of Southern California (USC)

Please refer to LCP section 4.2 and section 5.2 for more information

### 2.2 *Schedule of Activities*

ID	Task Name	Duration	Start	Finish	Prede	Sep 12, '04		Sep 19, '04			Sep 26, '04			Oct 3, '04	
						S	T	T	S	M	W	F	S	T	T
395	<b>Elaboration Iteration #2 (RLCA)</b>	<b>119.5 days?</b>	<b>Mon 9/13/04</b>	<b>Wed 2/23/05</b>											
396	Team Formation	5 days	Mon 1/17/05	Fri 1/21/05											
397	Identify the activities for the next week	16 days	Mon 1/24/05	Mon 2/14/05											
402	Identify the issues, defects and problems of the prior	16 days	Wed 1/26/05	Wed 2/16/05											
407	Risk Management - Update Assessments	16 days	Wed 1/26/05	Wed 2/16/05											
412	Record the weekly project progress	16 days	Wed 1/26/05	Wed 2/16/05											
417	Team weekly meeting	16 days	Mon 1/24/05	Mon 2/14/05											
422	Client weekly meeting	16 days	Wed 1/26/05	Wed 2/16/05											
427	Planning	18 days	Mon 1/24/05	Wed 2/16/05	396										
428	Update LCP	0.6 days	Tue 2/1/05	Tue 2/1/05											
429	Iteration Plan - Construction Iter #1	2.4 days	Mon 2/7/05	Wed 2/9/05	428										
430	Quality Management Plan (QMP)	4 days	Mon 1/24/05	Thu 1/27/05											
431	Create Peer Review Plan	4 days	Mon 1/24/05	Thu 1/27/05											
432	Create Transition Plan	4 days	Mon 1/24/05	Thu 1/27/05											
433	Create Test Plan and Case Description	4 days	Mon 1/24/05	Thu 1/27/05											
434	Develop SSSP	4 days	Fri 2/11/05	Wed 2/16/05											
435	Training	6 days	Mon 1/24/05	Mon 1/31/05	396										
436	Study project materials	4 days	Mon 1/24/05	Thu 1/27/05											
437	Study Bollen's Algorithms	5 days	Tue 1/25/05	Mon 1/31/05											
438	Requirements Management	6 days	Wed 1/26/05	Wed 2/2/05	396										
439	Update OCD	6 days	Wed 1/26/05	Wed 2/2/05											
440	Update SSRD	6 days	Wed 1/26/05	Wed 2/2/05											
441	Detailed Design	21 days	Mon 1/24/05	Mon 2/21/05	396										
442	Provide solutions for implementing Bollen's Algorithm	4 days	Thu 1/27/05	Tue 2/1/05											
443	Review solutions	0.5 days	Wed 2/2/05	Wed 2/2/05	442										
444	Update system analysis	4 days	Mon 1/24/05	Thu 1/27/05											
445	Refine architectural design	4 days	Fri 1/28/05	Wed 2/2/05	444										
446	Refine and detail implementation design	5 days	Thu 2/3/05	Wed 2/9/05	445										
447	Update SSAD	21 days	Mon 1/24/05	Mon 2/21/05											
448	Implementation	2 days	Mon 2/7/05	Tue 2/8/05	396										
449	Implement Algorithms	2 days	Mon 2/7/05	Tue 2/8/05											
450	Environment and Configuration management	15 days	Mon 1/24/05	Fri 2/11/05	396										
451	Create team website	1 day	Tue 2/8/05	Tue 2/8/05											
452	Decide to use CM tool	1 day	Mon 1/31/05	Mon 1/31/05											
453	Configure and study to use CM tool	4 days	Tue 2/1/05	Fri 2/4/05	452										
454	Install Linux OS, dev. Tool, H3viewer	1 day	Wed 2/9/05	Wed 2/9/05											
455	Maintain and control configuration	15 days	Mon 1/24/05	Fri 2/11/05											
456	Assessment	15 days	Thu 1/27/05	Wed 2/16/05	396										
457	Update Business case analysis	3 days	Thu 1/27/05	Mon 1/31/05											
458	Update Risk Analysis	4.8 hrs	Thu 2/3/05	Thu 2/3/05											
459	Update FRD	4 days	Tue 2/1/05	Fri 2/4/05	457										
460	Validate RLCA Drafts Quality Reports	5 days	Thu 2/10/05	Wed 2/16/05	465										
461	IV&V review RLCA Drafts on Web	5 days	Thu 2/10/05	Wed 2/16/05	465										
462	Quality Management Review	4 days	Fri 2/4/05	Wed 2/9/05	396										
463	Peer review OCD, SSRD, SSAD, Role Model and Pli	3 days	Fri 2/4/05	Tue 2/8/05											
464	Authors to Incorporate review feedback into docume	1 day	Wed 2/9/05	Wed 2/9/05	463										
465	RLCA Drafts on Web	0 days	Wed 2/9/05	Wed 2/9/05	464										
466	RLCA ARB Review	3.13 days	Mon 2/14/05	Thu 2/17/05											
467	RLCO ARB Preparation	2.88 days	Mon 2/14/05	Wed 2/16/05											
468	Schedule the ARB with stakeholders	0.5 days	Mon 2/14/05	Mon 2/14/05											
469	Allocate presentation tasks	1 hr	Mon 2/14/05	Mon 2/14/05											
470	Develop slides	15 hrs	Mon 2/14/05	Tue 2/15/05	469										
471	Dry run with the client	15 hrs	Mon 2/14/05	Tue 2/15/05											
472	Update presentation based on the dry run feedt	8 hrs	Tue 2/15/05	Wed 2/16/05	471										
473	RLCA ARB Meeting	2 hrs	Wed 2/16/05	Thu 2/17/05	467										
474	IV&V Review the changes in the document package	4 hrs	Thu 2/17/05	Thu 2/17/05	473										
475	Incorporate review feedback into documents	3 days	Thu 2/17/05	Tue 2/22/05	473										
476	RLCA Package Delivery	1 day	Wed 2/23/05	Wed 2/23/05	475,476										
477	IOC Working Set #0	1 day?	Mon 9/13/04	Mon 9/13/04											

Figure 1 Elaboration Iteration II Plan

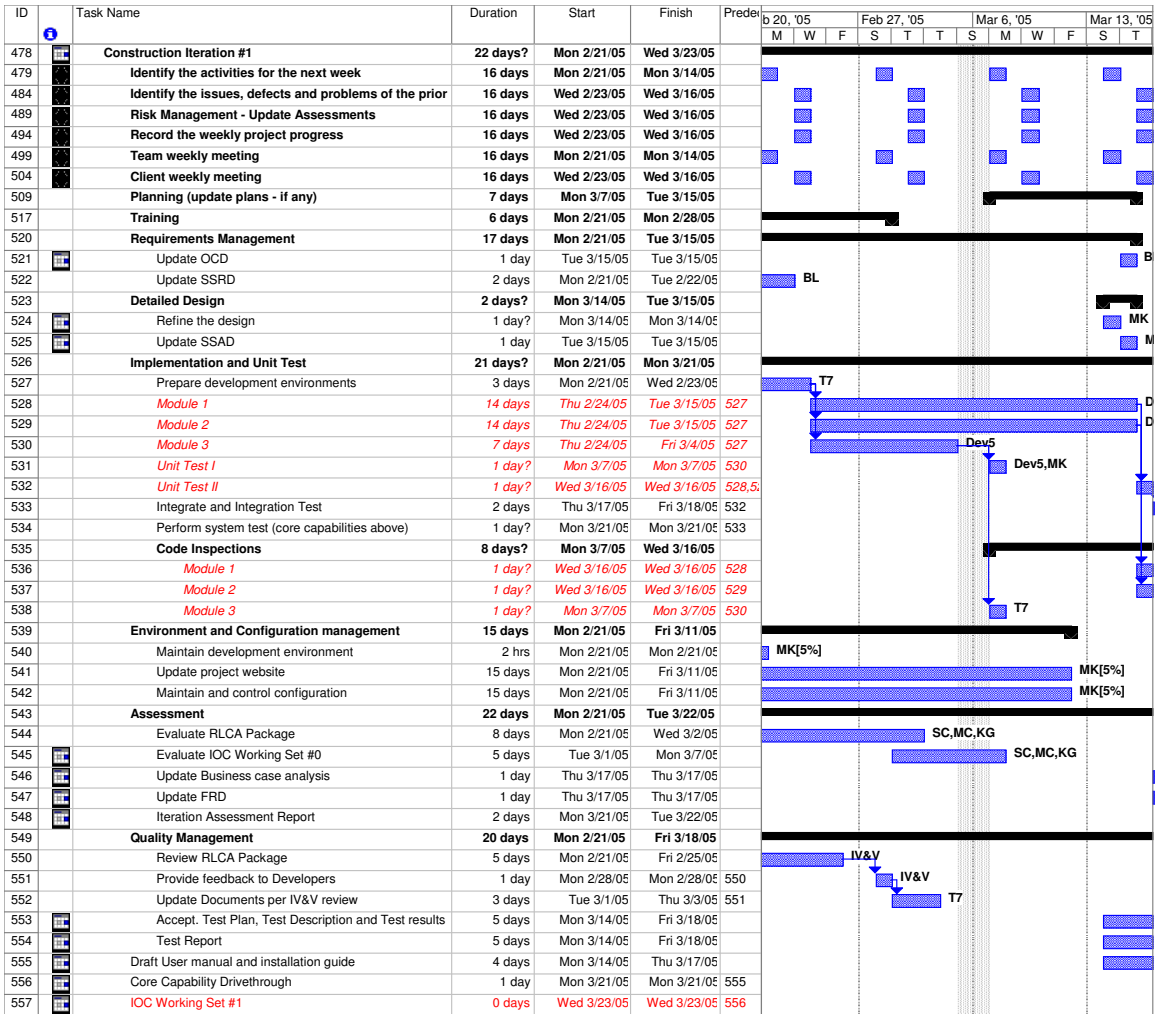


Figure 2 Construction Iteration #1 Plan

### 2.3 Resources

#### Human resources

CS577a and CS577b teams are responsible for developing the project. There were 8 members of CS577a team and 7 members including 3 IV&V members of CS577b team. Additionally, there are CSCI 577 teaching staffs participating in each ARB review of all iterations.

Moreover, Jewel H. Ward, a client, and Jeff Pearson, a client and a maintainer, are also considered as critical resources since they have to be available to support the development team in order to successfully achieve the high quality product within the budget and on time.

#### Budget:

The development of this iteration is zero since this project is a zero-cost project. Please refer to LCP section 5.2 for specific details

**Constraints:**

- The clients and maintainers are only available for a limited amount of time. Meetings with them are scheduled as early as possible to ensure the most productive use of time.
- Software resources from the maintainers must be provided before construction begins so that the project will remain on schedule.

## 2.4 Team Responsibilities

**Table 1 Team Responsibilities**

<b>Team Member</b>	<b>Elaboration Iteration 2</b>	<b>Construction</b>	<b>Transition</b>
Maks Krivokon	SSAD	SSAD, Coding ( <sup>1</sup> )	SSAD
Bo Lee	SSRD, QMP, PRP, Test Plan and Description, OCD	SSRD, QMP, PRP, Test Plan and Description, OCD, Coding.	SSRD, QMP, PRP, Test Plan and Description, OCD
Vu Nguen	LCP, MPP, SSSP	LCP, MPP, SSSP, Coding.	LCP, MPP, SSSP
Genesan Kim	FRD, Transition Plan	FRD, Transition Plan, Coding.	FRD, Transition Plan
Kristine Guevara	IV&V	IV&V	IV&V
Shing-Cheung Chan	IV&V	IV&V	IV&V
Marie Chi	IV&V	IV&V	IV&V

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## 3 Approach

This section describes the approach employed in all three iterations with respect to the risk management, the quality management, and the testing.

### **Risk Management:**

According to LCP section 4.1.4 and FRD section 4, the top-6 risks encountered during the life cycle, as well as, a detailed description and the approach to mitigate the effect of each risk have been identified.

### **Quality Management:**

The primary quality management technique used in these iterations is a peer review and a team review. Additionally, configuration change management: checking-in, checking-out, and others, could ensure the delivery of the high quality of this product.

Please refer to the Quality Management Plan and LCP section 4.4 for more information

### **Testing:**

Generally, testing will be performed immediately after each module has been finished in order to ensure that particular module fulfills all the necessary requirements. During the end of Construction phase I and II, the integration test will be complete on the entire system, resulting in the completed system met all requirements specified in SSRD of this project.

Please refer to the Test Plan for more information on testing activities.

## **4 Assumptions**

Refer to the Assumption section in LCP section 1.2

## **5 Common Definition Language**

**ARB**

Architecture Review Board

**FRD**

Feasibility Rationale Description

**LCA**

Life Cycle Architecture

**LCO**

Life Cycle Objective

**IOC**

Initial Operational Capability

**LCP**

Life Cycle Plan

**OCD**

Operational Concept Description

**SSRD**

Software and System Requirement Definition

**SSAD**

Software and System Architecture Description

**PR**

Progress Report

**QMP**

Quality Management Plan

**SSSP**

System and Software Support Plan

## **6 Appendix**