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Online Research Optimizer

[Extension for Google Chrome Browser to manage collected web information]

Development Case

Version 1.0

Online Research Optimizer	Version: 1.0
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Initial Development Case Document	

Revision History

Date	Version	Description	Author
23/07/2013	1.0	Initial Development Case Document	Bandara H.M.V.N.

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1. Introduction

1.1 Purpose

Purpose of this document is to describe the development process of the project "Online Research Optimizer". It is done through describing several disciplines in detailed manner.

1.2 Scope

This report covers the developing process of the "Online Research Optimizer". This development case applies to the Inception, Elaboration, Construction, and Transition phases of the project and this would give an overview of the methods and major artifacts which would be used in the development process.

1.3 Definitions, Acronyms, and Abbreviations

1. RUP-Rational Unified Process
2. VP-Visual Paradigm
3. ORO - Online Research Optimizer
4. WBS - Work Break down Structure
5. GC - Google Chrome

1.4 References

- Online Research Optimizer -Project Feasibility Document
- Online Research Optimizer -Project Vision Document
- Online Research Optimizer -Project Schedule

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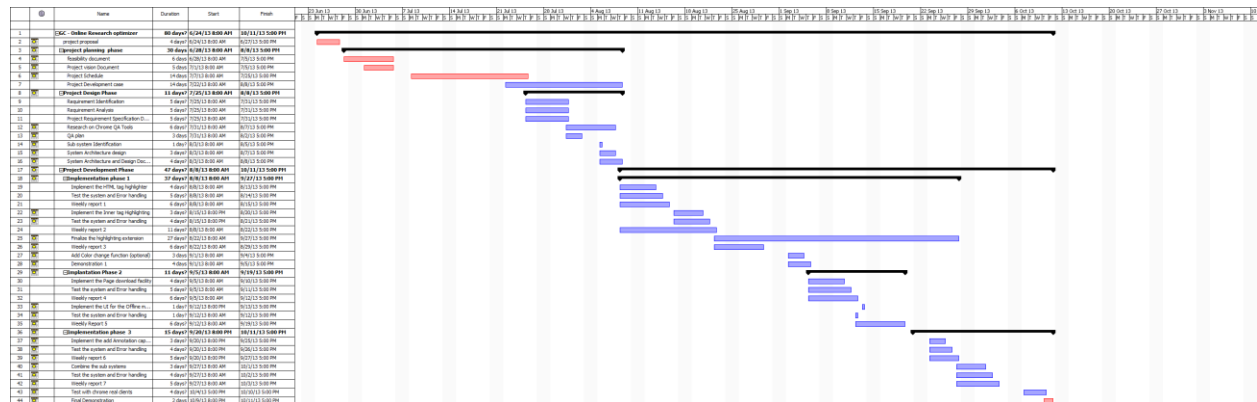
2. Overview of the Development Case

2.1 Lifecycle Model

ORO is developing using Iterative/Incremental development process. There is a single iteration for inception and elaboration phases and three long iterations for construction phase. These iterations and the WBS of the iteration phase is decided and added according to the project sub system analysis.

		Name	Duration	Start	Finish
1		EGC - Online Research optimizer	80 days?	6/24/13 8:00 AM	10/11/13 5:00 PM
2		project proposal	4 days?	6/24/13 8:00 AM	6/27/13 5:00 PM
3		project planning phase	30 days	6/28/13 8:00 AM	8/8/13 5:00 PM
4		feasibility document	6 days	6/28/13 8:00 AM	7/5/13 5:00 PM
5		Project vision Document	5 days	7/1/13 8:00 AM	7/5/13 5:00 PM
6		Project Schedule	14 days	7/7/13 8:00 AM	7/25/13 5:00 PM
7		Project Development case	14 days	7/22/13 8:00 AM	8/8/13 5:00 PM
8		Project Design Phase	11 days?	7/25/13 8:00 AM	8/8/13 5:00 PM
9		Requirement Identification	5 days?	7/25/13 8:00 AM	7/31/13 5:00 PM
10		Requirement Analysis	5 days?	7/25/13 8:00 AM	7/31/13 5:00 PM
11		Project Requirement Specification D...	5 days?	7/25/13 8:00 AM	7/31/13 5:00 PM
12		Research on Chrome QA Tools	6 days?	7/31/13 8:00 AM	8/7/13 5:00 PM
13		QA plan	3 days	7/31/13 8:00 AM	8/2/13 5:00 PM
14		Sub system Identification	1 day?	8/3/13 8:00 AM	8/5/13 5:00 PM
15		System Architecture Design	3 days?	8/3/13 8:00 AM	8/7/13 5:00 PM
16		System Architecture and Design Doc...	4 days?	8/3/13 8:00 AM	8/8/13 5:00 PM
17		Project Development Phase	47 days?	8/8/13 8:00 AM	10/11/13 5:00 PM
18		Implementation phase 1	37 days?	8/8/13 8:00 AM	9/27/13 5:00 PM
19		Implement the HTML tag highlighter	4 days?	8/8/13 8:00 AM	8/13/13 5:00 PM
20		Test the system and Error handling	5 days?	8/8/13 8:00 AM	8/14/13 5:00 PM
21		Weekly report 1	6 days?	8/8/13 8:00 AM	8/15/13 5:00 PM
22		Implement the Inner tag Highlighting	3 days?	8/15/13 8:00 PM	8/20/13 5:00 PM
23		Test the system and Error handling	4 days?	8/15/13 8:00 PM	8/21/13 5:00 PM
24		Weekly report 2	11 days?	8/8/13 8:00 AM	8/22/13 5:00 PM
25		Finalize the highlighting extension	27 days?	8/22/13 8:00 AM	9/27/13 5:00 PM
26		Weekly report 3	6 days?	8/22/13 8:00 AM	8/29/13 5:00 PM
27		Add Color change function (optional)	3 days	9/1/13 8:00 AM	9/4/13 5:00 PM
28		Demonstration 1	4 days	9/1/13 8:00 AM	9/5/13 5:00 PM
29		Implementation Phase 2	11 days?	9/5/13 8:00 AM	9/19/13 5:00 PM
30		Implement the Page download facility	4 days?	9/5/13 8:00 AM	9/10/13 5:00 PM
31		Test the system and Error handling	5 days?	9/5/13 8:00 AM	9/11/13 5:00 PM
32		Weekly report 4	6 days?	9/5/13 8:00 AM	9/12/13 5:00 PM
33		Implement the UI for the Offline m...	1 day?	9/12/13 8:00 PM	9/13/13 5:00 PM
34		Test the system and Error handling	1 day?	9/12/13 8:00 AM	9/12/13 5:00 PM
35		Weekly Report 5	6 days?	9/12/13 8:00 AM	9/19/13 5:00 PM
36		Implementation phase 3	15 days?	9/20/13 8:00 PM	10/11/13 5:00 PM
37		Implement the add Annotation cap...	3 days?	9/20/13 8:00 PM	9/25/13 5:00 PM
38		Test the system and Error handling	4 days?	9/20/13 8:00 PM	9/26/13 5:00 PM
39		Weekly report 6	5 days?	9/20/13 8:00 PM	9/27/13 5:00 PM
40		Combine the sub systems	3 days?	9/27/13 8:00 AM	10/1/13 5:00 PM
41		Test the system and Error handling	4 days?	9/27/13 8:00 AM	10/2/13 5:00 PM
42		Weekly report 7	5 days?	9/27/13 8:00 AM	10/3/13 5:00 PM
43		Test with chrome real clients	4 days?	10/4/13 5:00 PM	10/10/13 5:00 PM
44		Final Demonstration	2 days	10/9/13 8:00 PM	10/11/13 5:00 PM

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2.2 Disciplines

- Business Modeling
- Requirement overview
- Analysis and Design
- Implementation
- Test
- Deployment
- Configuration & Change Management
- Project Management
- Environment

2.3 Discipline Configuration

2.3.1 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/ Examples
	Incep	Elab	Const	Trans			
Feasibility Study	x						

2.3.1.1 Explanation of the table

Column Name	Purpose	Contents/Comments

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Artifacts	Feasibility Study	This study is carried out to analyze the project feasibility.
How to Use	At the inception phase this artifact is used to check the project feasibility.	Must have carried out in inception phase so it will make sure the project risks are at a minimum level.

2.3.2 Reports

Reports	How to Use	Templates/Examples	Tools Used
Project Proposal	Provide a basic introduction on the project.	-	Microsoft Word
Project Feasibility Document	Provide the feasibility of the project proposed, considering the factors such as technical, financial, risk, time legalityetc.	-	Microsoft Word
Project Vision Document	Provide the vision of the project	RUP Vision Document Template	Microsoft Word
Project Schedule	Provide the schedule of the project.	Project schedule template in open project	Open Project (openProj)
Weekly Report	This reports will deliver weekly progress of the project	-	Microsoft Word

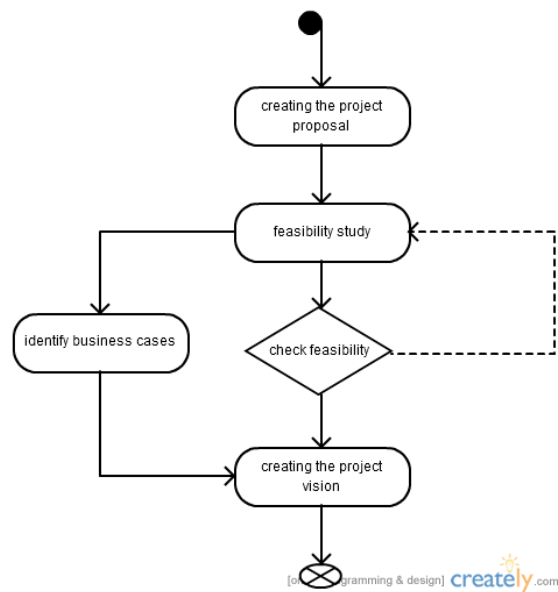
3. Disciplines

3.1 Business Modeling

3.1.1 Workflow

- Modeling of major business cases are done in the inception phase. And business cases and the vision is also done in this phase.

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3.1.2 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/Examples
	Incep	Elab	Const	Trans			
Business Actor	x					Visual Paradigm	
Business Architecture Document	x					Visual Paradigm	
Business Use Case	x					Visual Paradigm	
Business Use-Case Model	x					Visual Paradigm	
Business Vision	x					Visual Paradigm	

3.1.3 Reports

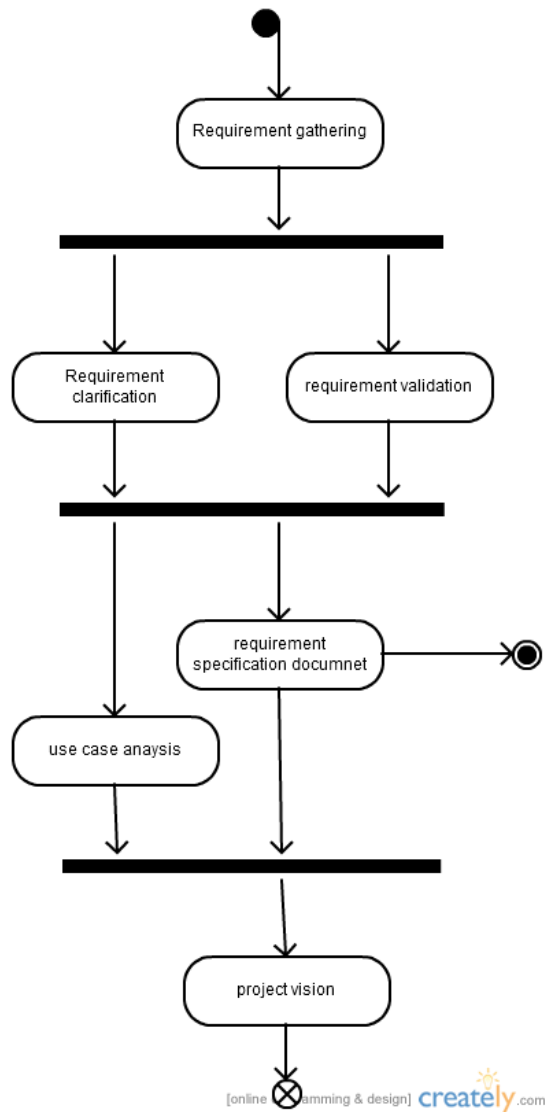
Reports	How to use	Tools Used	Templates/Examples
Business Use-Case	Identify the business use cases in the project.	Visual Paradigm	

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3.2 Requirements

3.2.1 Workflow

- The project requirement identification should done in a very careful manner. It is very important for the project feasibility and the project success. The requirement specification document is produced as a result of this.



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3.2.2 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/Examples
	Incep	Elab	Const	Trans			
Actor	x					Visual Paradigm	
Requirements Management Plan		x				Microsoft Word	
Software Requirements Specification		x				Microsoft Word	
Use Case		x				Microsoft Word & Visual Paradigm	
Use-Case Model		x				Visual Paradigm	
Vision	x					Microsoft Word	

3.2.3 Reports

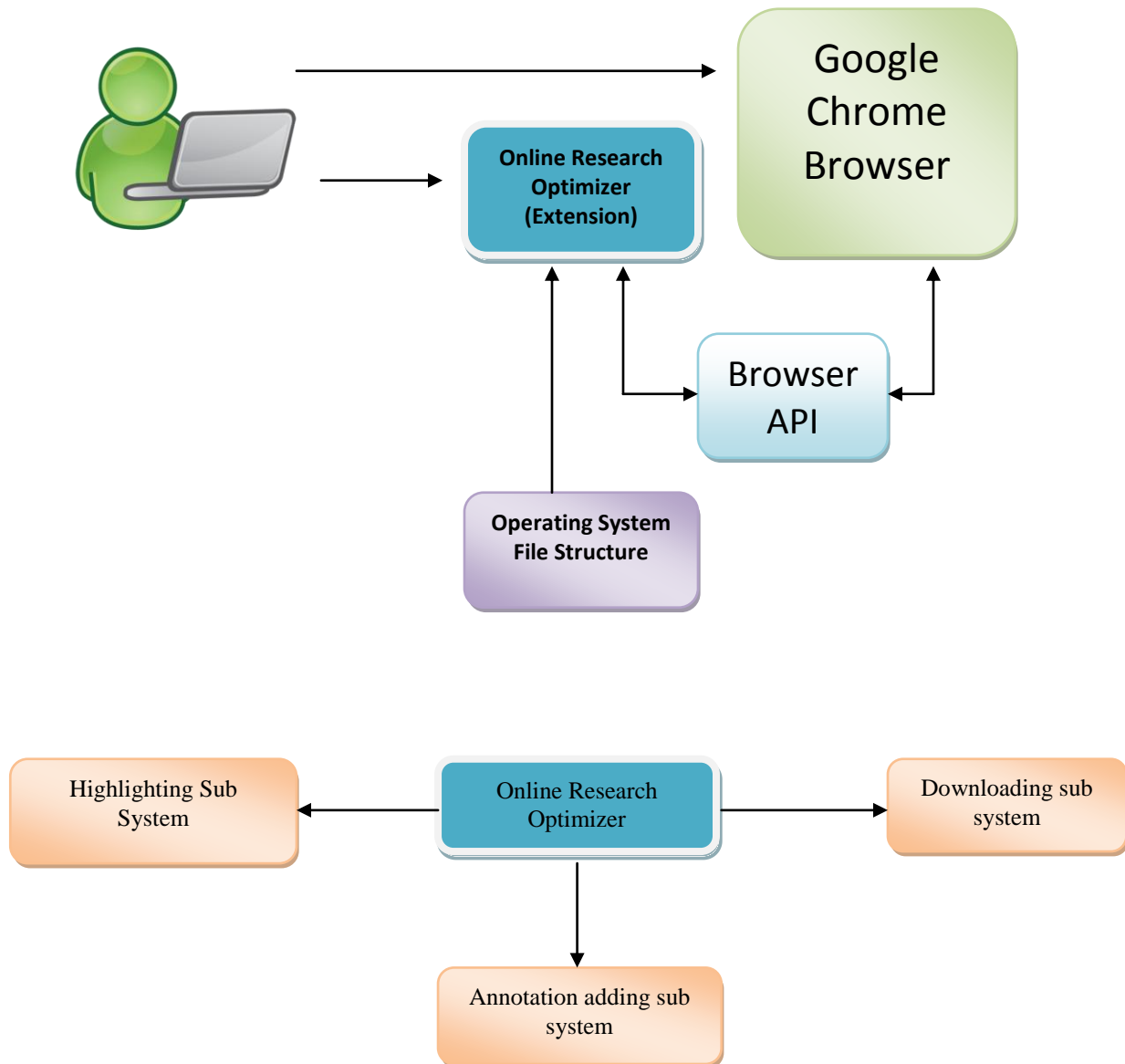
Reports	How to Use	Tools Used	Templates/Examples
Actor	To identify the actors associated with the "FB Watch Later"	Visual Paradigm	
Use-Case	To identify and clarify the use cases of the system to be developed.	Visual Paradigm	

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3.3 Analysis & Design

3.3.1 Workflow

- After successfully analyzing the requirements and the project details our "Online Research Optimizer" can be broken in to several sub systems. And a suitable architecture to carry out the implementation and design is a result of this effort. And those will be used in elaboration , Construction and transition phases as well.



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3.3.2 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/Examples
	Incep	Elab	Const	Trans			
Deployment Model		X	X	X		Visual Paradigm Google Chrome Community	
Data Model		X	X	X		Visual Paradigm Google Chrome Community	
Design Class		X	X	X		Visual Paradigm Google Chrome Community	
Design Model		X	X	X		Visual Paradigm Google Chrome Community	
Design Subsystem		X	X	X		Visual Paradigm	
Event		X	X	X		Visual Paradigm Google Chrome Community	
Interface		X	X	X		Visual Paradigm Google Chrome Community	
Protocol		X	X	X		Visual Paradigm Google Chrome Community	
Reference Architecture		X	X	X		Visual Paradigm Google Chrome Community	
Signal		X	X	X		Visual Paradigm	
Software Architecture Document		X				Microsoft Word	

3.3.3 Reports

Reports	How to Use	Tools Used	Templates/Examples
Class	To Provide flow in implementation	Visual Paradigm	

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Design-Model Survey	For implementation purposes	Visual Paradigm	
Design Package/Subsystem	For implementation purposes	Visual Paradigm	

3.4 Implementation

3.4.1 Workflow

- After the requirement specification and software architecture design document have been finalized the implementation part will be carry out in the construction phase , and may extend to Elaboration and Transition time lines as well.
- The development of the project will be conducted one sub system at a time in separate iterations. And these iterations will be itself incremental.
- The Outcome of the iteration will be properly tested before merge to the main system.

3.4.2 Artifacts

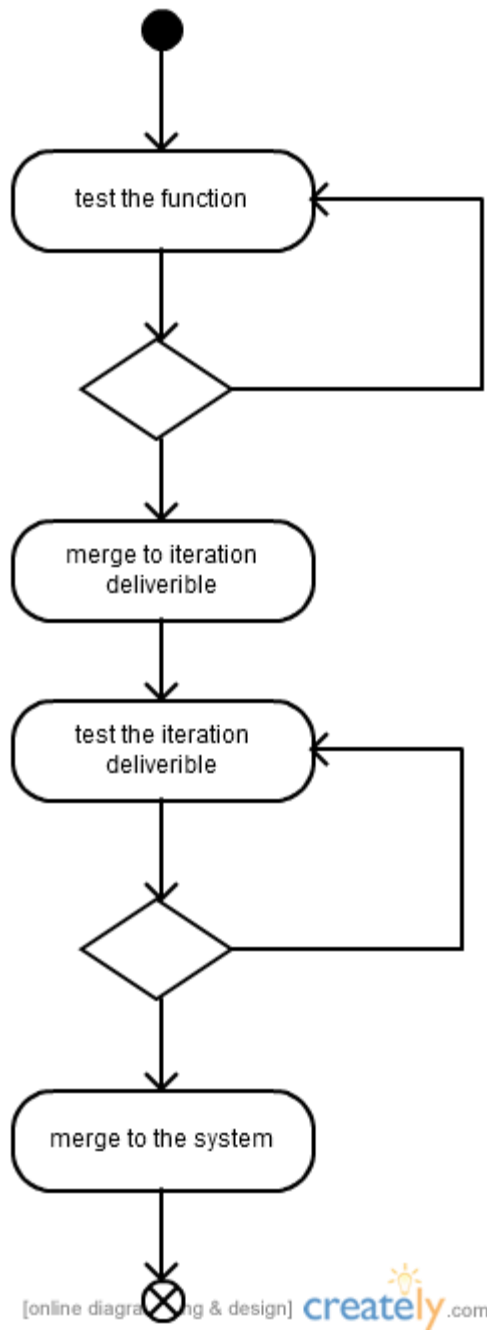
Artifacts	How to Use				Review Details	Tools Used	Templates/ Examples
	Incep	Elab	Const	Trans			
Build		x	x	x		Google Chrome Browser	
Component		x	x	x		Google Chrome Community, HTML,CSS	
Implementation Subsystem		x	x	x		Google Chrome Community, Java script, jQuery	
Integration Build Plan		x	x	x		Microsoft Word, Google Chrome Community	

3.5 Testing

3.5.1 Workflow

- Testing is very important to maintain the robustness, readiness and stableness of the project. User manual testing and automated system testing as well as Google Chrome Browser side testing will be carried out for testing purposes.
- The testing will be conduct to each and every function in the system and mainly it will be in the iterations.
- The functionalities will be properly tested before merge.
- Browser side testing will be done to identify the package errors and the Google standard errors. (File structure errors can be caught)
- User testing will be done to identify bugs of the system.

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3.5.2 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/Examples
	Incep	Elab	Const	Trans			
Test Case		x	x	x			
Test Class		x	x	x		Java script	
Test Components			x			HTML	
Test Evaluation Summary			x	x		MS Word, GC browser	
Test Plan		x	x	x			
Test Results		x	x	x		GC browser, MS Word	

3.5.3 Reports

Reports	How to Use	Tools Used	Templates/Examples
Test Survey	To give a verification on system functionality and clarify the system robustness .	Microsoft Word Google Chrome Community	

3.6 Deployment

3.6.1 Workflow

- After the successful project finalization it should be added to the GC browser for client use. GC community can be a really good help platform for this process and user reviews are very important to future upgrades.

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3.6.2 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/ Examples
	Incep	Elab	Const	Trans			
Deployment Plan				x		Microsoft word	
End-User Support Material				x		Microsoft Word Google Chrome Community	
Installation Artifacts				x		Microsoft Word Google Chrome Community	
Release Notes				x		Microsoft word	
Training Materials				x		Microsoft Word Google Chrome Community	

3.7 Configuration & Change Management

3.7.1 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/ Examples
	Incep	Elab	Const	Trans			
Change Request				x		Microsoft word	
Configuration Management Plan				x		Microsoft word	
Project Repository				x		GIT, dourceforge	
Workspace				x		-	

3.8 Project Management

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3.8.1 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/ Examples
	Incep	Elab	Const	Trans			
Business Case	x						
Iteration Plan		x	x	x			
Product Acceptance Plan		x	x	x			
Quality Assurance Plan	x	x	x	x			
Risk List	x	x	x	x			
Risk Management Plan	x	x	x	x			
Software Development Plan		x	x	x			

3.9 Environment

3.9.1 Artifacts

Artifacts	How to Use				Review Details	Tools Used	Templates/ Examples
	Incep	Elab	Const	Trans			
Business Modeling Guidelines	x	x	x	x		Microsoft word	
Development Case	x	x	x	x		Microsoft word	
Development Infrastructure		x	x	x		Microsoft word	
Programming Guidelines		x	x	x		Microsoft word	
Test Guidelines		x	x	x		Microsoft word	
Tools	x	x	x	x		Microsoft word	
Use-Case Modeling Guidelines	x	x	x	x		Microsoft word	
User-Interface Guidelines	x	x	x	x		Microsoft word	