# **Lucky Imaging CCD Camera Control Software Software Development Plan**

Version 1.1

Lucky Imaging CCD Camera Control SoftwareVersion:1.1Software Development PlanDate: 21/11/09

**SDP** 

# **Revision History**

<b>Date</b> Version		Description	Author	
28/09/09	1.0	Development plan	Miguel Ortiz	
21/11/09	1.1	Corrected version	Miguel Ortiz	

# Software Development Plan

### 1. Introduction

### 1. Purpose

The objective of this Software Development Plan is to define the development activities in terms of the phases and iterations required to the implementation of the software.

### 2. Scope

This Software Development Plan describes the overall plan to be used by the Lucky Imaging CCD Camera Control Software project, including deployment of the product. The details of the individual iterations will be described in the Iteration Plans.

#### 3. Definitions, Acronyms, and Abbreviations

Some words and abbreviations in this document are expressed to refer technologies and frameworks.

CCD : Charge-coupled device, refers to the way that the image signal is read out from the chip, mostly used in digital cameras.

See the Project Glossary.

#### 4. References

[1]http://www.ts.mah.se/RUP/RationalUnifiedProcess

#### 5. Overview

This Software Development Plan contains the following information:

- o **Project Overview**: provides a description of the project's purpose, scope, and objectives. It also defines the deliverables that the project is expected to deliver.
- o **Project Organization**: describes the organizational structure of the project team.
- Management Process: explains the estimated cost and schedule, defines the major phases and milestones for the project, and describes how the project will be monitored.
- Applicable Plans and Guidelines: provides an overview of the software development process, including methods, tools and techniques to be followed.

## 2.Project Overview

### 1. Project Purpose, Scope, and Objectives

This Software Development Plan describes the overall plan to be used by the Lucky Imaging CCD Camera Control Software project, including deployment of the product. The details of the individual iterations will be described in the Iteration Plans.

### 2. Assumptions and Constraints

Since this project is being developed during the 2nd semester of 2009, the system is intended to be fully available on November 27th.

### 3. Project Deliverables

The following deliverables will be produced during the project:

- o Software Development Plan Software Requirements Specification
- Development Case
- Glossary
- o Design Model

- o Build
- o Release Notes

### 4. Evolution of the Software Development Plan

The Software Development Plan will be revised prior to the start of each Iteration phase.

# 3. Project Organization

#### 1. Organizational Structure

It is considered a "black box" during the project development.

#### 2. External Interfaces

The requirements are initially delivered by Roland Lemke and reviewed every iteration by Jaime Pavlich

#### 3. Roles and Responsibilities

Person	Rational Unified Process Role			
	Project Manager			
	Deployment Manager			

Jaime Pavlich

Requirements Reviewer

Architecture Reviewer

Configuration Manager

<u>Configuration Manager</u> <u>Change Control Manager</u>

System Analyst

Requirements Specifier
User Interface Designer

<u>Designer</u>

Mario Aguilera <u>Implementer</u>

Code Reviewer
Test Designer

<u>Tester</u>

<u>Technical Writer</u> <u>System Analyst</u>

Requirements Specifier
User Interface Designer

Luis Gordillo <u>Designer</u>

Implementer
Code Reviewer
Test Designer

**Tester** 

Technical Writer
System Analyst

Requirements Specifier
User Interface Designer

<u>Designer</u>

Miguel Ortiz

Implementer

Code Reviewer

Test Designer

<u>Tester</u>

Technical Writer
Quality Assurance
System Analyst

Requirements Specifier
User Interface Designer

Designer

Francisco Ramirez <u>Implementer</u>

Code Reviewer
Test Designer

<u>Tester</u>

<u>Technical Writer</u> <u>System Analyst</u>

Requirements Specifier
User Interface Designer

Designer

Alexis Tejeda <u>Implementer</u>

Code Reviewer
Test Designer

**Tester** 

**Technical Writer** 

Anyone on the project can perform any role activities.

# **4.Management Process**

### 1. Project Estimates

Time estimations are based on previous software development experience (OcaCCD). Initially, iterations begin on September 7th, 2009 and should be finished on November 27th, 2009.

Costs estimations are not considered for this academic project

## 2. Project Plan

This section contains the schedule and resources for the project.

#### 1. Iterations

Iterations consist in 13 days; the plan will be established at the end of the previous, according to a meeting with the stakeholder. Eight days will be used to review requirements, design and implement the software, the 9th day of the iteration only critical requirements will be added and the 11th day the iteration will be frozen. From there, only bug fixes will be added.

#### 1. Phase Plan

Phase	Iterations number	Start	End		
Inception	1	week 1	week 2		
Elaboration	2	week 3	week 6		
Construction	3	week 7	week 10		
Transition	-	-	-		
Phase	·	Milestone			
Inception		These documents will be delivered  • Software Requirements Specifications  • Software Development Plan  • Development Case  • Glossary			
Elaboration		These documents will be delivered  • Design  • Data Model			
Construction		This document will be delivered  • User prototypes interface The tested software will be released			
Transition		It does not apply for the project			

#### 2. Project Schedule

Task Number 👃	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
1 (	Glossa	•	: : 	: : :	: : 					
.2 (	•	rements			<b>)</b>	-				
3		(	Design	<u>, , , , , , , , , , , , , , , , , , , </u>	<b>D</b>	! ! ! !		! ! !		-
4					Data N	dodel				
5	;			(	User P	rototyp	es Inte	faces		
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10 <u> </u>	;		i		_	nment	: : :	 !		•

# 5.Annexes

The project will follow the RUP for Small Projects process, as tailored by the project Development Case. Other applicable process plans are listed in the references section, including Programming Guidelines.