2013

SOFTWARE DEVELOPMENT PLAN (SDP)

SYSTEM NAME

AUTHOR NAME
[Type the company name]
To be submitted to the Software Planning & Requirement Workshop
Bachelor of Computer Science (Software Engineering)

DOCUMENT APPROVAL

	Name	Date
Authenticated by: _____ Project Manager		
Approved by: _____ Client		

Software :

Archiving Place :

Copies Available :

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1. INTRODUCTION

This section should describe the project and the software product being to be built.

1.1 PROJECT IDENTIFICATION

Give a full identification of the system and the software including the identification number(s), title(s) and abbreviation(s).

1.2 PROJECT OVERVIEW

*Give a **short summary** of the project objectives, the software to be delivered, major activities, major deliverables, major milestones, and required resources. Describe the relationship of this project to other projects, if appropriate.*

1.3 PROJECT DELIVERABLES

List all of the major items to be delivered to the customer (external customer, in-house user, etc.)

List the deliverables, delivery dates, delivery locations, delivery method (email, FTP, CD, etc.), and quantities necessary to satisfy the project's requirements.

Sample:

In-house user: SRS, SDD, STR, system,etc

External user : system, user manual etc

1.4 REFERENCE MATERIALS

*List all the documents and other materials referenced in this document. This section is like the **bibliography** in a published book.*

Example:
Wirsching, P.H., Paez, T.L. and Oritz, K. 1995. Random vibration: theory and practice. New York: John Wiley and Sons, Inc.

Example:
*Haiba, M., Barton, D.C., Brooks, P.C. and Levesley, M.C. 2002. Review of life assessment techniques applied to dynamically loaded automotive components. Computers and Structures. **80**(5-6): 481-494.*

Example:
Pritzer, T.J. (1999). An early fragment from central Nepal (online). http://www.ingress.com/astanart/pritzer.html (5 June 2000)

2. SOFTWARE DEVELOPMENT MANAGEMENT

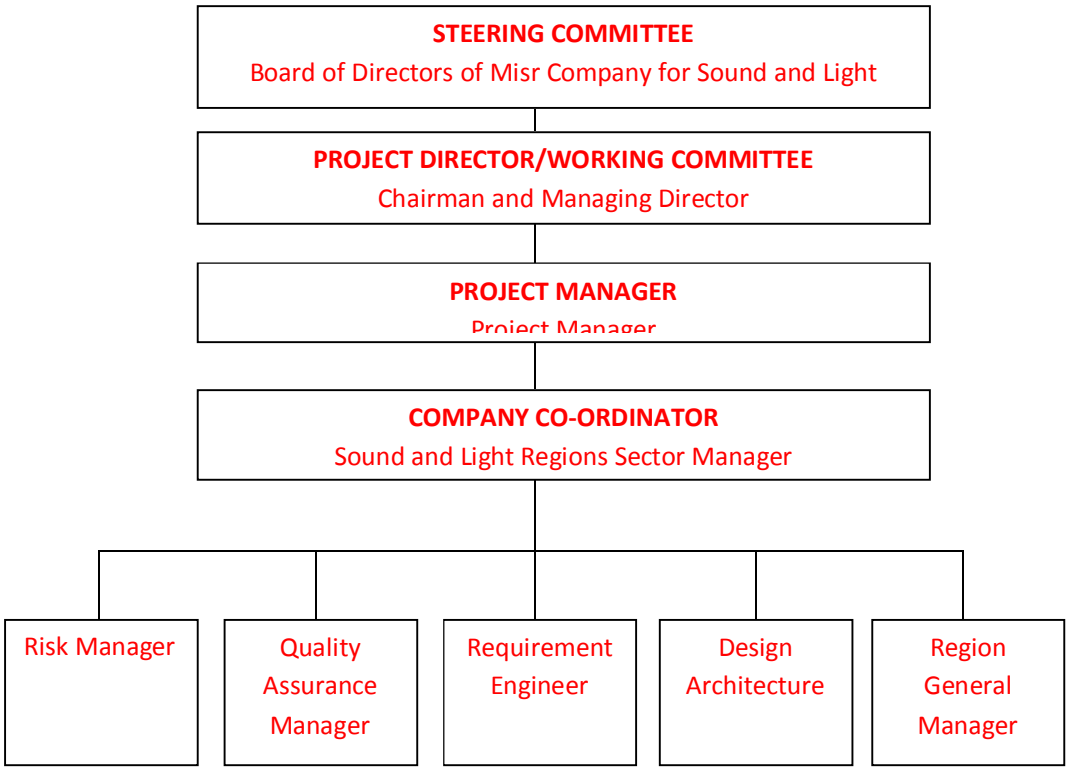
In this section, describe the organizational structure (e.g., chain of command or management reporting structure), and responsibilities of individuals on the project.

2.1 PROJECT ORGANIZATION AND RESOURCES

This section shall be divided into the following subsections to describe the project organization and the project resources of the contractor.

2.1.1 Project Organizational Structure

Describe the overview of the client's software's project organization structure



2.1.2 Internal Management Organizational Structure

Describe the internal management structure of the project. Use organizational charts or other appropriate notations to describe the lines of authority, responsibility, and communication within the project. Explain roles and responsibilities for each member.

Student's company organization chart hierarchy

2.1.3 Organizational Boundaries and Interface

Describe the relationships between the project and each of the following organizations:

- *Parent organization (upper management)*
- *Customer organization (internal or external)*
- *Subcontracting organization(s) (if any)*
- *QA organization, if separate*
- *Documentation organization, if separate*
- *End-user support organization, if separate*
- *Any other organizations the project interacts with*

This list should include a description of a specific person or project role that is responsible for maintaining the interface between the project and each of these other organizations.

Be sure to identify the person who has ultimate decision-making authority over the project.

Not applicable

2.1.4 Project Resources

Describe the resources to be applied to the project. It shall include, as applicable:-

- *Personnel resources, including*
  - *The estimate staff loading for the project (number of personnel)*
  - *The breakdown of the staff loading numbers by responsibility (eg. Manager, software engineer, developer, tester, quality control and etc.)*
  - *The breakdown of the qualification and skill levels.*
- *Overview of developer facilities to be used, including geographic locations in which work will be performed, facilities to be used, and secure areas and other features of the necessary facilities.*
- *Acquirer furnished equipment, software, services, documentation, data and facilities required.*

- *Budget Allocation*

  Student may divide the cost according to software (license etc), hardware, salary etc . most important they must total up all cost incurred. They may write in document body or as appendix.

Budget Allocation Plan

Task Name	Duration(hours)	Costs
Project Management		

Initial Plan		
Meeting with Customer	16	RM 300.00
Meeting with Acquirer	40	RM 500.00
Preparation of Initial Plan	50	RM 100.00
Revision of Initial Plan	48	RM 100.00
SDP		
Discussion about topic	24	RM 50.00
Managerial Process Plan	40	RM 200.00
Technical Process Plan	56	RM 100.00
Supporting Process Plan	64	RM 150.00
Preparation of SDP	32	RM 350.00
Revision of SDP	40	RM 220.00
Risk Management		
Identification of Risk Factors	48	RM 600.00
Analysis of Risk Factors	96	RM 500.00
Prioritization of Risk Factors	64	RM 400.00
Monitor of Risk Factors	42	RM 300.00
Requirement Analysis		
Discussion	40	RM 50.00
Requirement Elicitation	56	RM 40.00
Analysis of Requirements	48	RM 60.00
Preparation of SRS	64	RM 55.00
Revision of SRS	40	RM 40.00
Design		
Discussion	40	RM 100.00
GUI Design	80	RM 800.00
Data Design		
Data Structure Design	120	RM 320.00
Database Design	80	RM 150.00
Object Design	80	RM 170.00
Preparation of SDD	96	RM 180.00
Revision of SDD	24	RM 360.00
Implementation		
Development of DB	120	RM 550.00
Coding	160	RM 880.00
Testing		
Unit / Integration Testing	80	RM 400.00
System Testing	40	RM 160.00
Acceptance Testing	48	RM 350.00
Maintenance		

2.2 PROCESS MODEL

Describe the project's lifecycle model (e.g., spiral model, evolutionary prototyping model, etc.) to be used.

Student must draw gantt chart according to chosen life cycle

2.2.1 Schedule and Gantt Chart

- *Schedule identifying the activities in each build and showing initiation of each activity, availability of draft and final deliverables and other milestones, and completion of each activity*
- *A Gantt chart, depicting sequential relationships and dependencies among activities and identifying those activities that impose the greatest time restrictions on the project.* ***(**start date 1st November 2013 – 30th April 2014*)***

2.3 RISK MANAGEMENT

Identify the major risks and corresponding strategies

2.4 SECURITY AND PRIVACY

Describe how to implementing the security requirements

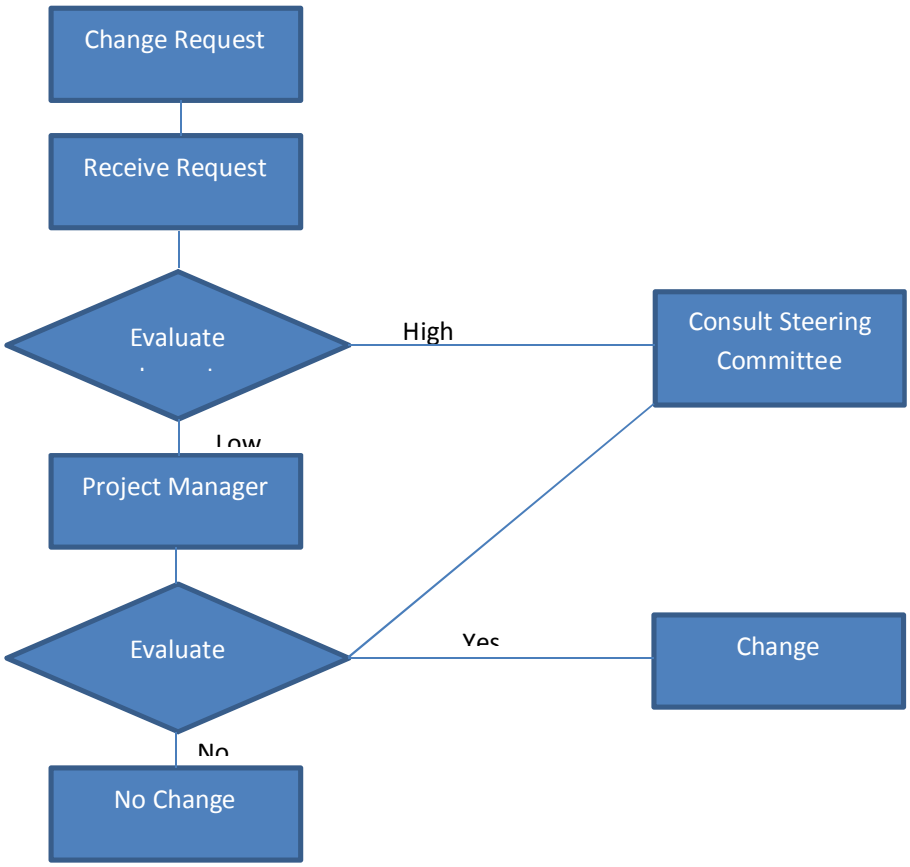
2.5 FORMAL REVIEWS

Describe the internal procedures for preparing and conducting formal reviews.

2.6 CORRECTIVE ACTION PROCESS

Describe the monitoring and controlling mechanisms would be implemented on corrective action process throughout the project.

sample



2.7 PROBLEM OR CHANGE REPORT

Design and describe the Problem Change Report form to be used. This report will be used to identify and controlling the problem changes entire the development. Items to be recorded are eg. Project name, originator, problem number, problem name, software element or document affected, origination date, category and priority, description, analyst assigned to the problem, date assigned, date completed, analysis time, recommended solution, impacts, problem status, approval of solution, follow up actions, corrector, correction date, version where corrected, correction time, description of solution implemented and so on

sample

PROBLEM OR CHANGE REPORT

Problem Reporting Form

Dates	Enquirer Name	Enquirer Phone No.	Email	Priority (1,2,3,4,5)	Requirement Part Number
Problem					
Document Title			Version		
Date			Attachment (Y/N) If Y, state it		

(i) Problem Description

(Please describe the problem that you have faced when you using this system)

(ii) Analyse the Problem

(Please write the details that make us easily to correct your problem)

Problem			Assigned by(with cop and date)
Not user-friendly	Error always occur	Requirement not meet	Others(please state)
Approval Status			
[ ] Agree [ ] Disagree [ ] Defer			
Authorised by		Date	

(iii) Correction

(Please write your desired changes that will improve your system)

Describe changes and provide information			
Authorised by		Date	

(iv) Release

(Provide details of the documentation in this section)

Document Name	Release Date	Version
Work performed by	Date	

3. SOFTWARE ENGINEERING

This section describes software engineering processes including the technical methods, tools, and techniques; major software documents; and supporting activities such as configuration management and quality assurance.

3.1 SOFTWARE ITEMS

3.1.1 Software Items

Identify the details and purpose of software items to be used such as operating systems, compilers or IDE, design tools, debugging aids, and defect tracking and so on.

List of development software to be used

3.1.2 Hardware Items

Identify the details hardware items to be used such as server and personal computer.

List of hardware to be used

3.2 SOFTWARE STANDARDS AND PROCEDURES

Describes the software standards and procedures to be used

3.2.1 Software Development Methodologies

Describes the development methodologies including requirements development practices, design methodologies and notations, programming language, coding standards and documentation standards,

Agile, JAD, SCRUM etc
Documentation standard – BCS2333 documentation template.

3.2.2 Design Standards

Describes the design standards to be followed and applied

3.2.3 Coding Standards

Describes the coding standards to be followed and applied.
The code shall follow at a minimum:-

- *Naming conventions for variables, parameters, packaged, procedures, files, etc.*
- *Standards for comments of each line of code.*

3.2.4 Testing Approach

Describes the testing approach to be followed and applied

3.3 SOFTWARE PRODUCT EVALUATION PROCEDURES AND TOOLS

Describes the approach to be followed for software product evaluation

3.3.1 Evaluation Procedures

Identify and describes the procedure that will be used to evaluate and inspect the software and associated documentation.

Decision Analysis Spreadsheet etc

3.3.2 Evaluation Tools

Identify and describes the tools that will be used in the software product inspection
Rational robot, HP testing tool

3.3.3 Independence in Software Product Evaluation

Detail of software's product evaluation procedures.

4. SOFTWARE CONFIGURATION MANAGEMENT

4.1 CONFIGURATION IDENTIFICATION

4.1.1 Developmental Configuration Identification

4.1.2 Identification Methods

Configuration Control method

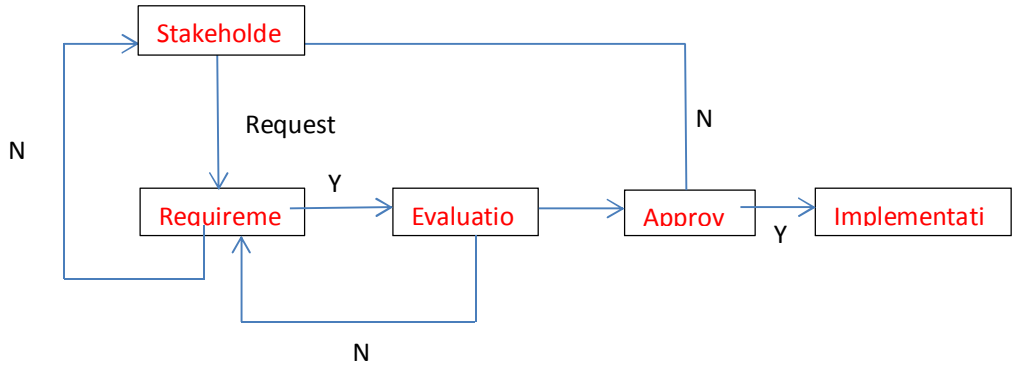
Configuration identification consists following criteria:

- Change request
  - In this part, the request that the customer want to change will be proceed by software
- Change evaluation
  - The impact of changing requirement and others factors will be evaluated
- Change approval
  - The company's board has the priority to approve or reject the changes that request by stakeholder
- Change implementation
  - Meanwhile when the changes of approval has been confirmed, the progress of implementation will take place.

4.2 CONFIGURATION CONTROL

Detailed description of the procedures to be used in controlling changes to and maintaining the Developmental Configuration(s) and internally controlled documentation.

4.2.1 Flow of Configuration Control



4.2.2 Review Procedures

4.3 CONFIGURATION STATUS ACCOUNTING

Not Applicable

4.4 CONFIGURATION AUDITS

Brief, informal functional audits of in- scope work products will be held during the software testing and integration phases and findings will be documented.

Quality assurance audits

Review	Schedule	Resources	Method	Procedure
Project documentation reviews	Weekly, during period when project documentation is being created.	• Project Manager • Company Coordinator • Project Team	• Review documentation work products, particularly for consistency with the higher-level plans. • Inconsistencies of documentation with the system will be noted and an action plan for resolution produced.	1. Resources booked by Quality Assurance Manager. 2. Quality assurance manager distribute review summary to resources
Closure review	After all work products delivered	• Project Director • Project Manager • Company Coordinator • Project Team	• To review all the documents • If necessary, add some additional criteria that will make the documentation much more efficient	1. Resources booked by Quality assurance manager. 2. Goal of the meeting to be communicated to resources at least 48 hours before meeting. 3. Quality

				assurance manager will distribute meeting results to resources.

5. NOTES

Provide alphabetical listing of all acronyms, abbreviations and their meanings as used in this document and a list any terms and definitions needed to understand this document.