MANAGING INFORMATION SYSTEM PROJECT

by
Roslina Abd Hamid
Faculty of Computer Systems & Software Engineering
roslina@ump.edu.my
Chapter Description

Expected Outcomes

• To explain the process of managing an information systems project.
• To know about project scheduling and process of creating Gantt Chart
• To know about the role of CASE tools to support SDLC

References

• Klaus Pohl, "Requirement Engineering Fundamentals", Santa Barbara, CA : Rocky Nook, 2011
A project is the application of knowledge, skills, tools, and techniques to project activities thus meet the project requirements.

Characteristics of a project such as:

i. Every project has specific objective
ii. Project has start and end time
iii. Project needs adequate resources example budget, manpower etc
Software project has complete procedure from elicit requirement to testing and maintenance. Along with the execution methodologies in a specified duration to achieve its goal.

Software is an intangible product therefore experience of one product may not be applied to the other one.
Software project manager is a person who is responsible on executing the software project. They need to manage the team, liaise with stakeholders/client, control budget, monitoring progress, manage risks etc.
As a project manager they must have skills to lead their project.

Skills they must possess:

i. Communication

ii. Leadership

iii. Team Management

iv. Risk Management
Basic steps in project management are:

- Initiate
- Plan
- Implement
- Close project
The development team must set project goals and objectives. Other activities such as:

- Appoint a project manager
- Identify stakeholder potentials
- Select team members
- Identify deliverables and outcomes
Second step is to plan the project, involving:

- Define project scope
- Define tasks/activities/tasks
- Identify sequences of tasks
- Identify resources
- Get the company approval
This is the longest step in the whole project, activities to be carried out:

- Get all resources
- Team must be lead and maintain its communication
- Evaluate change requests
- Manage and solve risks or conflict
- Control and monitoring project
- Update management
Project Close

Every project has its end, therefore after the project finish, project manager must:

• Conduct post-project review
• Prepare final report
• Close down operation
• Terminate the team
Project Scheduling

After project manager define the project scope, he must develop a work breakdown structure (WBS). WBS tool shall help him to identify activities, sequences among them, estimate their durations then create the schedule. Furthermore, estimate the costs, plan the human resources allocation etc.
WBS is a tool to establish tasks involved in a project. One of it is top-down approach - break high level tasks into smaller, detailed tasks.
Example:
Subject Assignment Grading
1. Create grading plan
   1.1 Develop grading schema
   1.2 Develop checking figures and plagiarism
2. Prepare assignment projects for Subject Grading
   2.1 Download submitted assignments
   2.2 Extract and zipped all files
3. Do on all assignments
   3.1 Checking on plagiarism
   3.2 Apply grading schema and give marks
Project Scheduling

Identify the relationships between activities involves the sequencing plus dependencies between activities.

Basically to create the project schedule, used:
Bar/ Gantt Chart
Network Diagram
Project Scheduling

Example of Gantt Chart using CASE tool (Microsoft Project)

OER Systems Analysis & Design by Roslina Abd Hamid work is licensed under Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.
Risks management is concerned with finding risks and setting up plans to minimize their effect on project. A risk is a probability that some adverse situation will occur.

- Project risks on schedule or resources
- Product risks affect the quality of the development software
- Business risks affect the organization developing or procuring the software.
CASE tools

Computer-Aided Software Engineering (CASE) tools support specific tasks in project management. Tasks which CASE tools support such as:

- Project management plans, task assignments and develop scheduling
- Producing reports
- Business and analysis modelling

example: Microsoft Project, Rational ROSE