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**Student Name: Omnia Alam (40261762)**

**SOEN 6481: Software Project Management**

**Journal URL:** [**hhttps://github.com/OmniaAlam/SOEN6481**](https://github.com/AlamOmnia/SOEN6481)

# Week 3: February 4th -10th February 2024

Date: 8th February 2024

**Key Concepts Learned**

Along with Chapter 3 that I have added in my journal week 2, I am adding more from Week 2.

**Learned on Feb 4th,2024:**

**Risk on a Project:**

A risk on a project refers to any uncertain event or condition that could potentially impact the project's objectives, such as delays, budget overruns, or quality issues.

**Kinds of Risks for a Project:**

Various types of risks exist for a project, including technical risks (e.g., technology failure), financial risks (e.g., budget constraints), schedule risks (e.g., delays), resource risks (e.g., insufficient staffing), and external risks (e.g., regulatory changes, market fluctuations).

**Impact of Risks on a Project:**

Risks may have detrimental impacts on a project, leading to schedule delays, budget overruns, reduced quality, compromised stakeholder satisfaction, damage to the organization's reputation, and even project failure.

**Strategy to Deal with Risks:**

An effective risk management strategy involves identifying, assessing, prioritizing, and mitigating risks through proactive planning, contingency planning, risk transfer (e.g., insurance), risk avoidance, risk sharing (e.g., partnerships), and continuous monitoring and adaptation throughout the project lifecycle.

**Learned on 8th February:**

**Configuration Management System:**

A configuration management system is a set of processes, tools, and policies used to systematically manage changes to the components, configurations, and versions of software or hardware systems throughout their lifecycle.

**Parts of a Configuration Management System:**

* Version Control: Tracks changes to source code, documents, and other artifacts.
* Configuration Identification: Identifies and labels configuration items (CIs).
* Change Control: Manages requests for changes, evaluates impacts, and approves or rejects them.
* Configuration Audit: Ensures that configurations are consistent with their specifications and standards.
* Release Management: Plans, schedules, and deploys software releases into production environments.
* Baseline Management: Establishes a set of approved configurations as a baseline for future changes.

**Importance of Configuration Management System in Software Projects:**

* Ensures traceability and accountability for changes made to software components.
* Facilitates collaboration among team members working on the same project.
* Helps maintain consistency and stability in software configurations.
* Enables efficient problem resolution and rollback in case of issues.

**Strategies for Successful Deployment of Configuration Management System:**

* Define Clear Policies: Establish well-defined procedures and guidelines for configuration management processes.
* Select Appropriate Tools: Choose configuration management tools that align with project requirements and team workflows.
* Provide Training: Offer training sessions to team members to ensure they understand the importance and usage of the configuration management system.
* Implement Incrementally: Introduce configuration management processes gradually to minimize disruption and allow for adjustment.
* Foster Communication: Encourage open communication among team members to address concerns and gather feedback during the deployment process.
* Regularly Review and Improve: Continuously evaluate the effectiveness of the configuration management system and make adjustments as necessary to optimize its performance.

**Chapter 6**:

**Software Project Plan:**

A software project plan is a comprehensive document that outlines the objectives, scope, resources, schedule, and tasks required to successfully execute a software development project. It serves as a roadmap for project stakeholders, guiding the planning, execution, and control of the project from inception to completion.

**Parts of a Software Project Plan:**

Project Objectives and Scope

Project Deliverables

Schedule and Milestones

Resource Allocation

Risk Management Plan

Communication Plan

Quality Assurance Plan

Change Management Plan

Budget and Cost Estimates

Stakeholder Roles and Responsibilities

**Types of Software Project Plans:**

Development Plan: Focuses on the technical aspects of software development, including coding, testing, and integration.

Deployment Plan: Details the process of deploying the software into production environments and ensuring its successful implementation.

Maintenance Plan: Outlines procedures for ongoing maintenance and support of the software after deployment.

Documentation Plan: Describes the documentation requirements for the project, including user manuals, technical specifications, and training materials.

**Inputs for Making a Software Project Plan:**

* Project Requirements: Detailed specifications and expectations from stakeholders.
* Stakeholder Input: Feedback and requirements from project sponsors, users, and other stakeholders.
* Resource Availability: Information about team members, budget constraints, and available tools and technologies.
* Organizational Policies: Guidelines, standards, and procedures set by the organization for project management and development processes.

**Techniques Used in Making a Software Project Plan:**

* Work Breakdown Structure (WBS): Decomposes project tasks into smaller, manageable components.
* Gantt Charts: Visualize project schedules, dependencies, and milestones.
* Critical Path Method (CPM): Identifies the sequence of tasks that determine the minimum duration of the project.
* Risk Analysis: Identifies potential risks and develops strategies to mitigate them.
* Resource Allocation: Assigns resources to project tasks based on availability and skillsets.
* Stakeholder Engagement: Involves stakeholders in the planning process to ensure alignment with project objectives and expectations.

**Also in the chapter it mentioned about Smoke testing :**

Smoke testing, also known as build verification testing, is a preliminary test conducted on a software build to ensure its stability and functionality. It involves running basic tests on critical features to determine if the build is suitable for further testing. If the smoke tests pass, the build is considered stable; if issues are found, they must be resolved before proceeding. Smoke testing helps identify major defects early in the development process, reducing risks and ensuring subsequent testing efforts are focused on stable builds.

**Application in Real Projects:**

We are using Google drive to put our Project report for Configuration manager. Since it is not a true development project we are only using Google drive. But we are open to migrate to any CM tool like GitHub anytime in future.

Also, in my other software development course I am using GitHub for software version controlling like: creating issues, push, pull requests and release note creation. It is a group of 6 people and all of them are working on the same source.

<https://github.com/OmniaAlam/OpenTracks-Winter-SOEN-6431_2024>

**Peer Interactions:**

Some questions and topics that came up during the lecture:

Which CM is better related to changes: Scrum is better adoptive.

Continuous testing is a part of the configuration management.

I have also worked on the project proposal a little bit more where I have to work on the market analysis. I am not wafting for my team members review.

**Challenges Faced:**

I am facing some challenges on my weekly journal writhing as I was confused which chapters to add in the journal. I didn’t add chapter 4 in my last journal.

Also I have changed the ownership of my GitHub account and my week 2 journal has the old GitHub link which I think caused the TA not to be able to see the journal in the GitHub. So I have fixed the issue of the GitHub and put the correct one on this journal.

**Personal Development activities:**

* Reading material 4,5,6
* Assignment 4.1

**Goals for the Next Week:**

* Going to have a meeting on 9th Feb for finalizing the project report.
* Prepare for project presentation.