**TUTORIAL 1**

➢ **Multiple Choice:**

1. Approximately what percentage of the world’s gross product is spent on projects?
   1. 10 percent
   2. 25 percent
   3. 50 percent
   4. 75 percent
2. Which of the following is not a potential advantage of using good project management?
   1. Shorter development times
   2. Higher worker morale
   3. Lower cost of capital
   4. Higher profit margins
3. A \_\_\_\_\_\_\_\_ is a temporary endeavor undertaken to create a unique product, service, or result.
   1. program
   2. process
   3. project
   4. portfolio
4. Which of the following is not an attribute of a project?
   1. projects are unique
   2. projects are developed using progressive elaboration
   3. projects have a primary customer or sponsor
   4. projects involve little uncertainty
5. Which of the following is not part of the triple constraint of project management?
   1. meeting scope goals
   2. meeting time goals
   3. meeting communications goals
   4. meeting cost goals

1. \_\_\_\_\_\_ is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements.
   1. Project management
   2. Program management
   3. Project portfolio management
   4. Requirements management
2. Project portfolio management addresses \_\_\_\_\_\_ goals of an organization, while project management addresses \_\_\_\_\_\_\_ goals.
   1. strategic, tactical
   2. tactical, strategic C. internal, external

D. external, internal

1. Several application development projects done for the same functional group might best be managed as part of a \_\_\_\_\_\_\_
   1. portfolio
   2. program
   3. investment
   4. collaborative
2. Which of the following is not true?
   1. Most American companies have a project management office.
   2. You can earn an advanced degree in project management from hundreds of colleges and universities.
   3. Employers are looking for project management skills in new graduates.
   4. IT hiring managers reported that project management certification did not affect starting pay.
3. What is the name of one of the popular certifications provided by the Project Management Institute?
   1. Certified Project Manager (CPM)
   2. Project Management Professional (PMP)
   3. Project Management Expert (PME)
   4. Project Management Mentor (PMM)

➢ **Short Answer:**

1. What is a project, and what are its main attributes? How is a project different from what most people do in their day-to-day jobs? What is the triple constraint? What other factors affect a project?

* **A project is a temporary endeavor undertaken to create a unique product, service, or result.** It has a defined beginning and end, and requires resources, such as people, money, and equipment, to be completed.
* **Main attributes of a project:**

+ unique purpose

+ temporary

+ deadline

+ require resources, often from various areas

+ should have a primary sponsor / customer

* While day-to-day operations focus on ongoing activities to maintain business functions, **projects are distinct initiatives with specific objectives**. Operations are repetitive and cyclical, while projects are unique and time-bound.
* The Triple Constraint:

+ **Scope:** Defines the project's deliverables and boundaries.

+ **Time:** Specifies the project's schedule and deadlines.

+ **Cost:** Determines the project's budget.

* **Other Factors Affecting a Project**

+ Beyond the triple constraint, several other factors influence project success:

+ Quality: The degree to which the project meets requirements and customer expectations.

+ Risk: Potential events or conditions that could have a positive or negative impact on the project.

+ Resources: Availability and allocation of human, financial, and material resources.

+ Stakeholder Management: Effective communication and collaboration with project stakeholders.

+ Change Management: Adapting to project changes while maintaining control.

+ External Factors: Economic conditions, industry trends, and regulatory changes.

1. What is project management? Briefly describe the project management framework, providing examples of stakeholders, knowledge areas, tools and techniques, and project success factors.

**Project management** is the discipline of planning, organizing, securing, and managing resources to bring about specific project goals within a defined scope, time, and budget. It involves leading a team to achieve specific objectives.

**Project Management Framework**

The project management framework provides a structured approach to managing projects. It typically includes:

* **Stakeholders:** Individuals or groups who have an interest in the project. This can include project sponsors, project managers, team members, customers, end-users, and other stakeholders.
* **Knowledge Areas:** These are the key areas of expertise required for successful project management. Examples include project integration management, scope management, time management, cost management, quality management, human resource management, communication management, risk management, procurement management, and stakeholder management.
* **Tools and Techniques:** These are the methods and instruments used to perform project management activities. Examples include work breakdown structure (WBS), Gantt charts, critical path method (CPM), earned value management (EVM), risk assessment matrices, and communication plans.
* **Project Success Factors:** These are the criteria used to determine project success. They can include meeting project objectives, staying within budget and schedule, achieving desired quality, and satisfying stakeholders.

1. What is a program? What is a project portfolio? Discuss the relationship between projects, programs, and portfolio management and the contributions that each makes to enterprise success.

**- Project:** A temporary endeavor with a defined start and end, creating a unique product or service.

**- Program:** A group of related projects managed together to achieve a strategic objective.

**- Portfolio:** A collection of programs and projects aligned with organizational strategy.

**Relationship and Contributions**

* **Projects** deliver specific outcomes.
* **Programs** align multiple projects for strategic goals.
* **Portfolio** optimizes resource allocation for overall business success

1. What is the role of the project manager? What are suggested skills for all project managers and for IT project managers? Why is leadership so important for project managers? How is the job market for IT project managers?

* **Role of a Project Manager**

A **project manager** is responsible for planning, organizing, and directing project resources to achieve specific goals within a defined scope, time, and budget. They oversee all aspects of a project, from initiation to closure.

* **Essential Skills for Project Managers**

**+ Soft Skills:** Leadership, communication, negotiation, problem-solving, decision-making, and conflict resolution.

**+ Technical Skills:** Project management methodologies (Agile, Waterfall, etc.), risk management, budgeting, scheduling, and quality assurance.

* **Skills for IT Project Managers**

+ **Technical Proficiency:** Understanding of IT systems, software development, and emerging technologies.

**+ Business Acumen:** Ability to align IT projects with business objectives.

**+ Change Management:** Managing the impact of IT projects on organizational processes.

* **Importance of Leadership**

Leadership is crucial for project managers as it involves:

**+ Inspiring and motivating** the team.

**+ Building relationships** with stakeholders.

**+ Making tough decisions** under pressure.

**+ Overcoming challenges** and obstacles.

**+ Job Market for IT Project Managers**

* The demand for IT project managers is **strong** due to the increasing reliance on technology in businesses. With the rise of digital transformation and cloud computing, the job market for IT project managers is expected to remain robust in the coming years.

1. What functions can you perform with project management software? What are the main differences between low-end, midrange, and high-end project management tools?

* **Functions of Project Management Software**

+ Project management software (PMS) offers a range of functionalities to streamline project execution:

**+ Task management:** Creating, assigning, prioritizing, and tracking tasks.

**+ Project planning:** Developing project schedules, timelines, and milestones.

**+ Resource allocation:** Assigning team members and other resources to tasks.

**+ Collaboration:** Facilitating communication and teamwork through features like file sharing, messaging, and real-time updates.

**+Time tracking:** Monitoring time spent on tasks and projects.

* **Differences Between Low-End, Midrange, and High-End PMS**

Project management tools vary in features, capabilities, and pricing.

* **Low-End PMS**

**+ Target audience:** Small teams or individuals.

**+ Features:** Basic task management, scheduling, and collaboration.

**+ Examples:** Trello, Asana (basic plans).

**+ Limitations:** Limited scalability, reporting capabilities, and integrations.

* **Midrange PMS**

**+ Target audience:** Medium-sized teams and organizations.

**+ Features:** Comprehensive project planning, resource management, time tracking, and reporting.

**+ Examples:** Monday.com, Basecamp, Wrike.

**+ Strengths:** Balances cost-effectiveness with advanced features.

* **High-End PMS**

**+ Target audience:** Large enterprises with complex projects.

**+ Features:** Advanced project planning, portfolio management, resource optimization, and enterprise-level integrations.

**+ Examples:** Microsoft Project, Oracle Primavera, Adobe Workfront.

**+ Strengths:** Scalability, customization, and integration with other enterprise systems.

**References**

1. [**What is the definition of a project in IT at SSU? | Information Technology at Sonoma State University**](https://it.sonoma.edu/kb/pm/what-definition-project-it-ssu#:~:text=A%20project%20is%20a%20temporary,unique%20product%2C%20service%20or%20result.)
2. [**Understanding Difference Programs vs Projects | PMI**](https://www.pmi.org/learning/library/understanding-difference-programs-versus-projects-6896#:~:text=PMI%20Standards&312)%20is%20%E2%80%9Ca%20group%20of,available%20from%20managing%20them%20individually.)
3. [**Project, Program, and Portfolio Management: Key Differences (northeastern.edu)**](https://graduate.northeastern.edu/resources/project-management-vs-portfolio-management-vs-program-management/)
4. [**8 Ways Project Task Management Software Increases… | Quickbase**](https://www.quickbase.com/blog/8-ways-project-task-management-software-increases-productivity)
5. [**10 Essential Project Management Software Features That Matter (thedigitalprojectmanager.com)**](https://thedigitalprojectmanager.com/projects/managing-schedules/common-features-project-management-software/#:~:text=Project%20Planning&Project%20planning%20features%20allow%20you,%2C%20due%20dates%2C%20and%20dependencies.)
6. [**8 Benefits of Using a Project Management Software by Forecast**](https://www.forecast.app/blog/benefits-of-using-project-management-software)
7. [**Using Project Management Software to Improve Client Communication (teamhub.com)**](https://teamhub.com/blog/using-project-management-software-to-improve-client-communication/#:~:text=By%20leveraging%20the%20features%20and,improve%20collaboration%2C%20and%20enhance%20client)
8. [**Top Project Management Tools with Time Tracking (for Creatives) (workamajig.com)**](https://www.workamajig.com/blog/project-management-with-time-tracking#:~:text=There%20are%20dozens%20of%20project,%2C%20Wrike%2C%20Asana%2C%20Smartsheet%2C)
9. [**What is the definition of a project in IT at SSU? | Information Technology at Sonoma State University**](https://it.sonoma.edu/kb/pm/what-definition-project-it-ssu#:~:text=A%20project%20is%20a%20temporary,unique%20product%2C%20service%20or%20result.)
10. [**Understanding Difference Programs vs Projects | PMI**](https://www.pmi.org/learning/library/understanding-difference-programs-versus-projects-6896#:~:text=PMI%20Standards&312)%20is%20%E2%80%9Ca%20group%20of,available%20from%20managing%20them%20individually.)
11. [**Project, Program, and Portfolio Management: Key Differences (northeastern.edu)**](https://graduate.northeastern.edu/resources/project-management-vs-portfolio-management-vs-program-management/)