

Lecture Title: The Concept of Project Management

Department of Computer Engineering Technologies – Fourth Stage

Eng. Rafah Hassan

Why Do We Learn Project Management ?

In a world characterized by complexity and speed, project management has become an indispensable skill. Whether you are developing software, building a bridge, organizing an event, or even managing a team, understanding the basics of project management helps you :

- Achieving goals efficiently
- Reduce waste of time and resources
- Improve the quality of final outcomes
- Avoid chaos and ensure smooth project execution

Example: When organizing a graduation ceremony, you need to plan the budget, choose the venue, coordinate schedules, and supervise the team. All these tasks are part of project management. Without proper management, the event might be delayed, costs could exceed the budget, or the final outcome might be unsatisfactory .

What is Project Management ?

Project management is the **art and science** of directing resources (such as time, money, and people) to achieve specific goals within a defined timeframe .

Example: Imagine you want to build a house. Project management means :

- Designing the blueprint (Planning)
- Selecting contractors and workers (Organizing)
- Monitoring daily progress (Directing)
- Ensuring work aligns with the plan (Controlling)

Why is Project Management Important?

- **Increasing Complexity:** Projects have become more complex due to technology and high expectations .
- **Limited Resources:** Time, money, and human resources are not unlimited, so they must be managed effectively .
- **Competition:** In the business world, success depends on completing projects quickly and with high quality .

Elements of Project Management

- 1- **Planning** :This involves creating a detailed plan that outlines what needs to be done, how, and when .

Example: In a mobile app development project, planning includes :

- Setting the budget
- Defining deadlines
- Breaking down tasks (e.g., design, programming, testing)

- 2- **Organizing** :This is the arrangement of resources and tasks to execute the plan .

Example: In a bridge construction project, organizing includes :

- Providing necessary materials (cement, steel) .
- Arranging equipment (cranes, trucks) .
- Allocating labor (engineers, workers) .

- 3- **Staffing** :This involves selecting the right people for the right tasks .

Example: In a software project, staffing includes hiring :

- Programmers for coding .
- Designers for the user interface .
- Quality testers to ensure the app works correctly .

- 4- **Directing (Leadership)** :This is about guiding and motivating the team to achieve their goals .

Example: The project manager holds regular meetings to review progress, solve problems, and provide support to the team .

- 5- **Controlling** :This involves monitoring progress and ensuring adherence to the plan .

Example: In a marketing project, sales are monitored daily to ensure targets are met. If sales are below expectations, the marketing strategy is adjusted .

Phases of Project Management

Phase 1: Project Initiation :This is the phase where the project idea and objectives are defined .

Example: The idea of developing a task management app .

Phase 2: Project Planning :Creating a detailed plan that includes tasks, resources, and a timeline .

Example: Determining that the design will take two weeks, and programming will take one month .

Phase 3: Project Scheduling :Setting timeframes for completing each task .

Example: Scheduling app testing for the final week of the project .

Phase 4: Cost Estimation :Estimating the financial costs of the project .

Example: Determining that app development will cost \$10,000 .

Phase 5: Project Control :Monitoring progress and making necessary adjustments .

Example: If programming is delayed, more programmers are added to the team .

Phase 6: Project Closure and Evaluation :Evaluating the results and identifying lessons learned .

Example: After launching the app, user feedback is collected to improve future versions .

References:

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