Software Project Management

Integrate software project management process with the business and technical processes to develop high quality product in predictable ways

Project
- starting and ending date
- team
- schedule and budget
- objectives
- roles, responsibilities and authority

Management: planning and coordinating work acitivities. (planning and estimation ➡ measuring and controlling ➡ leading and communicating ➡ managing risk)
Why?: make sure project is on track, within budget and time constraints

GQM Approach: Establish **G**oals, generate **Q**uestions regarding achievement of goals and mesure **M**etrics to answer those questions.

Why do we measure: Make sure that targets are realistic, to plan, to find important areas, evaluate performance, find improvements or just help in decisions

QA: check that product meet quality goals of customers and improve. (measurement + feedback)
Review (short informal)
Inspection (formal, long, detailed)

Quality:
- design
- conformance (implementation)

Managing is more quantitative (planning and estimating, measure and control) **VS** Leading is qualitative (communicate and coordinate, inspire and maintain morale)

> Project managers' goal:
> To delivering projects on time, within budget and according to scope and quality.

Organizational structure:

- **Functional**: Requirement group, design group, implementation group, …
- **Product**: UI, Algo, Database
- **Project**: P1, P2, P3,..
- **Matrix**: group in function and project