1 Project Lifecycle: Introduction

- A project is something that has a beginning and an end.

- Learning cycles:

  - understand and frame the problem
  - plan
  - act
  - reflect and learn

- typical lifecycle:

  - define goal (provides destination)
  - plan (provides the route)
  - objectives: scope, schedule, budget, quality
  - resources; people, facilities, technology
  - controls: ensuring project gaols and objectives are met,
  - execution of project plan
  - project end
  - evaluation (analysis what went right/wrong).

- knowledge areas for management

  - project integration management: development, execution, and control of changes.
  - project scope
  - time
  - cost
  - quality
  - human resource: people are most important resource; develop a project team as well understanding and responding to the behavioral side of project management
  - communication
  - risk
  - procurement; resources outside organization

- stakeholder management

- process: an activity with inputs and outputs.

  - project management process
  - initiating project process
  - business case;
  - planning process; scope planing, activity planning,
  - executing;
  - monitoring and controlling
  - progress metrics
  - closing; lessons learned

- SDLC: systems development life cycle

  - planning
  - analysys
  - design
  - implementation
  - maintenance
  - support

- project life cycle focuses on phases, processes, tools, knowledge, and skills for managing a project.

- sdlc focuses on creating and implmeneting the project product.

- SDLC is part of PLC; much of develpment happens during "execution" phase of PLC

- Waterfall:

  - define requirements
  - design
  - build
  - test
  - deploy
  - maintain

- Agile:

- individuals and interactions over processes and tools
  - working software over comprehensive documentation
  - customer collaboration over contract negotiation
  - responding to change over following the plan

- Agile themes:

  - frequent releases of working software
  - integrated testing to enable quick turn-arounds

- what went right, what went wrong.

- learning record:

  - what we know
  - what we think we know (assumptions)
  - what we don't know (questions to be answered).

- Action plan:

  - who does what?
  - by when?