

LDAC Building an Information System

Building an information system (IS) requires multiple component skills. The core process steps in Systems Development Life Cycle (SDLC) are:

- (1) **Identify the problem or need and obtain approval.** This is the **Discovery or Inception** step. One of the skills required is to prepare a Systems Vision Document. The IS project is successful only when the problem has been resolved.
- (2) **Plan and monitor the project.** This is the **Project Management** step. We need to identify the SDLC methodology (e.g., Agile / Scrum) and assign the team members of the project. In Scrum, the Sprint Retrospective event encourages the team to reflect and plan to make improvements for future Sprints.
- (3) **Discover and understand the details of the problem or need.** This is the **Systems Analysis** step. We need to learn Unified Modeling Language (UML) techniques such as drawing a UML Use Case Diagram.
- (4) **Design the system components that solve the problem.** This is the **Systems Design** step. We need to learn Unified Modeling Language (UML) techniques such as drawing a UML Design Class Diagram.
- (5) **Build, test, and integrate system components.** This is the **Construction** step. We need to learn how to write product code, test the product code and integrate the code to the entire system with multiple components.
- (6) **Complete the system tests and deploy the solution.** This is the **Transition** step. We need to learn skills such as user-acceptance testing and learn how to install the working software solution for production.

Note that “writing code” is only a part of SDLC Core Process **Step 5**. Many IS projects fail because the project team focused on writing code and did not learn and apply the other component skills to build an IS successfully.