ĐẠI HỌC TÔN ĐỨC THẮNG
TON DUC THANG UNIVERSITY

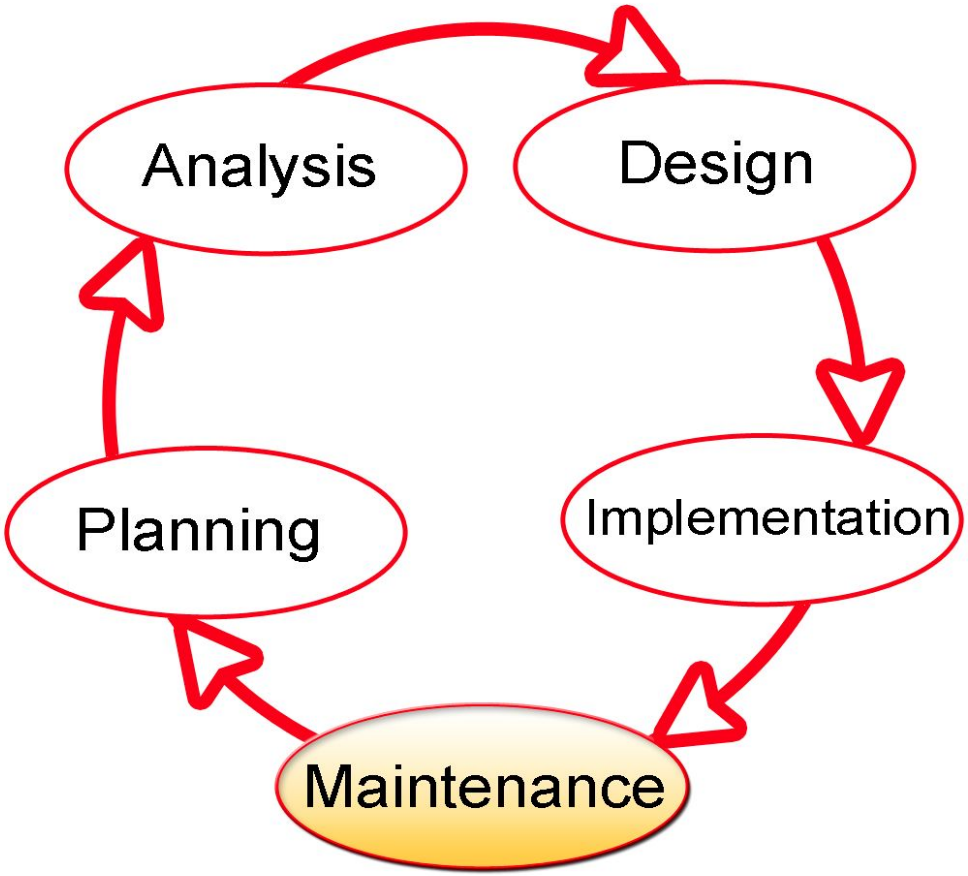
REQUIREMENTS ANALYSIS AND DESIGN (PHÂN TÍCH VÀ THIẾT KẾ YÊU CẦU) 502050

Chapter 2
Systems Development Life Cycle (SDLC) & Business Modeling

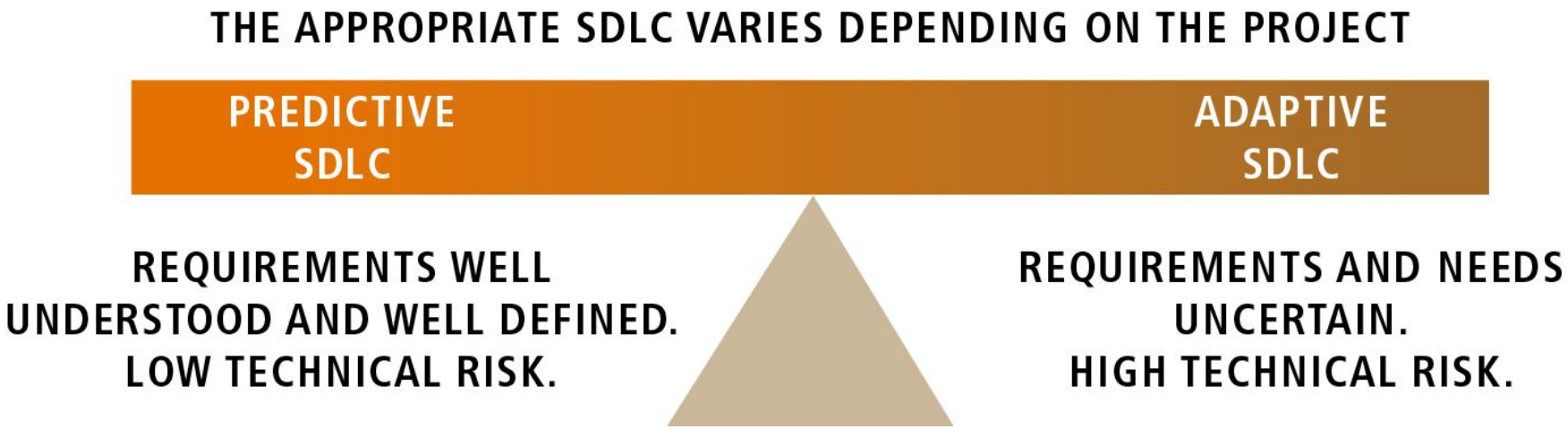
Outline

- Predictive (Waterfall model) and Adaptive (Agile model) SDLC
- SDLC Phases
- Business Modeling
- Intiation Phase (Intro)
- Business Use Cases and Activity Diagrams

Systems Development Life Cycle



Predictive and Adaptive SDLC



SDLC Phases

We can generalize SDLC into 5 different phases:

1. Initiation
2. Discovery
3. Construction
4. Final Verification and Validation
5. Closeout

Business Modeling

- Objective: Understand business environment and potential improvements, Communicate this understanding to the end users, manager, system developer, etc
- Purpose: Understand business environment, Document the Business Vision, the model of the business, etc

Initiation Phase (Intro)

We can generalize SDLC into 5 different phases:

1. **Initiation**
2. Discovery
3. Construction
4. Final Verification and Validation
5. Closeout

Initiation Phase (Intro)

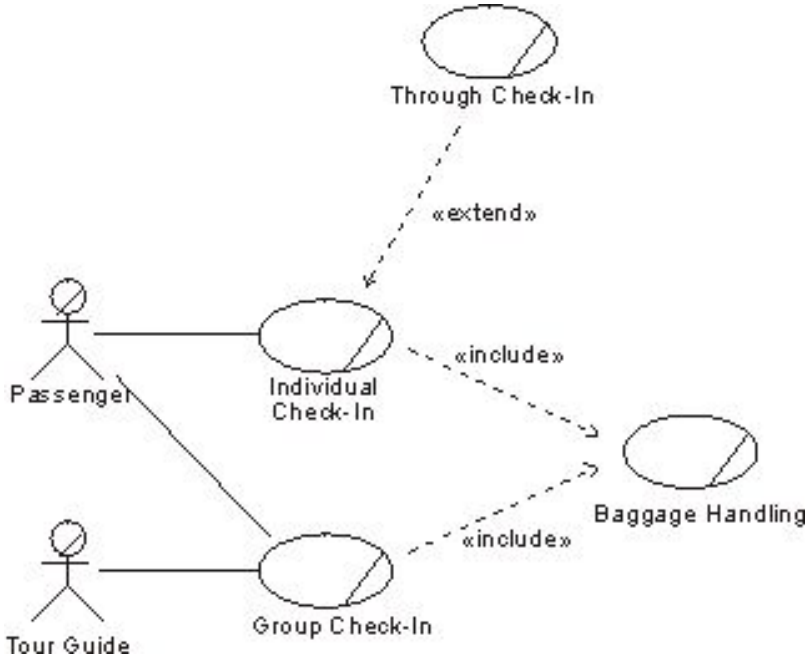
- Objectives:
  - Develop the business case of the project
  - Establish Project/Product scope
  - Explore solutions (Preliminary)

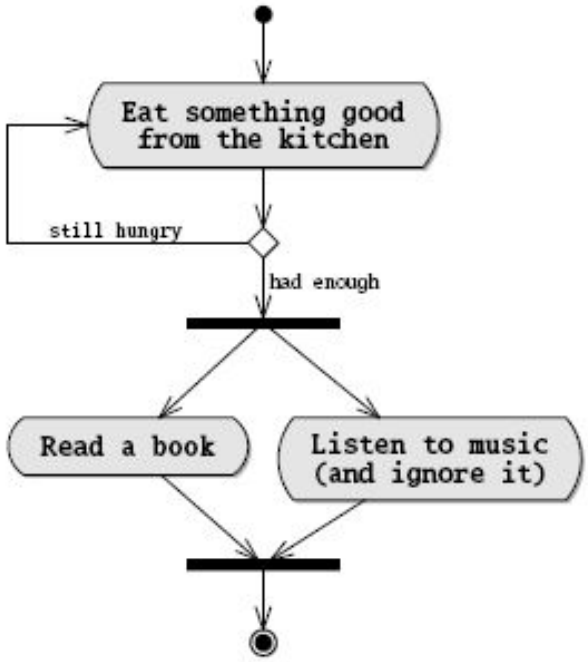
Business Use Cases and Activity Diagrams

- Business Use Cases
- Activity Diagrams

Model Business Use Cases

- Identify business use cases (business use-case diagram)
- Scope business use cases (activity diagram)





Activity Diagrams

- Workflow can be documented in text and/or through the use of a workflow diagram (**Activity diagram**)

Activity Diagrams Elements

- **Initial node**: indicates where the workflow begins
- **Activity**: indicates a step in the process. Notice anything about the typical naming convention?
- **Control flow**: an arrow showing the direction of the workflow
- **Decision**: a diamond symbol, indicating a possibility of different paths
- **Guard condition**: a condition attached to a control flow. A guard is shown within square brackets
- **Merge**: model a number of alternative flows that lead to the same activity