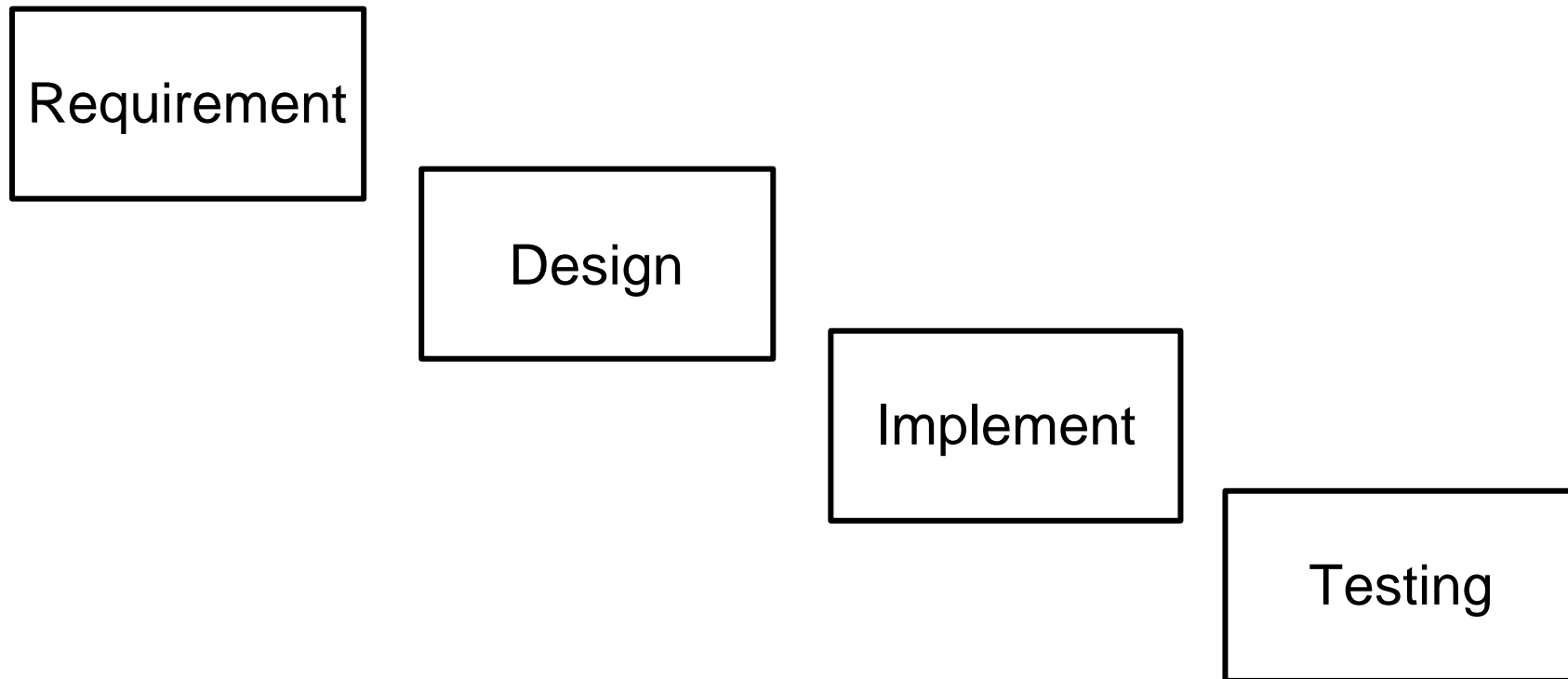


Clement Su



Design Document Introduction

Development Cycle (WaterFall)



Why Design Document?



- Communicate with
 - Architect
 - Fellow developers
 - Tester
 - Successors
 - Yourself
- Help developer/architect to think more
- Reduce possibility of rework

Different Design Document



- High level Design Document
 - ▣ For architect (or written by architect)
 - ▣ Focus on system level design
- Implement level Design Document
 - ▣ For peer developer (or whoever want to know detail)
 - ▣ Focus on component level implementation detail
- Both are important and valuable

Keys of a Good Design Document



- Showing that the requirement is fulfilled
- Describe the design clearly (with Diagram, UML, etc)
- Reveal the reason (benefit) of choosing this design
- List assumptions, risks, issues and future extension

Components of a Design Document



- The goal of this implementation
- High level entities
- For each entity, a detail description
 - ▣ How to use
 - ▣ How to configure
 - ▣ UML Model
 - ▣ How does it interact with others
- Benefits, assumptions, risks, and other issues

Tips



- Prepare a skeleton, then fill it up.
- Pretend you are the readers, what do you want to see?
- Let others to read and ask questions and improve the content.

What to avoid



- Do not assume readers' background knowledge
- Do not use too many abbreviations or create terminology

Design Document Example – Requirement form Customer



- Our hospital registration system needs to be ported to the application running on mobile devices
- The system should be High Availability

Design Document Example – Requirement after SA

- Server Side
 - ▣ Move the infrastructure to cloud
 - ▣ Need to be convert into RESTful web service and be available on hospital registration server
- Client Side
 - ▣ Develop an Android based hospital registration application (ObjectC is the next target)
 - ▣ User can register/login/logout
 - ▣ User are Administrator, Doctor, Patient
 - ▣ etc...