Project Lifecycle Models

SWEN 256 – Software Process & Project Management
Project Life Cycle (Cont)

- **Initiating**
  - Planning
  - Executing

- **Monitoring and Controlling**

- **Closing**
  - Exit Phase/Close Project

- **Enter Phase/Start Project**

- **Start**

  - Project

- **End**
COTS / Design-to-tools
COTS
Code-and-Fix
Code and Fix

IF YOU USE CODE AND FIX
YOU'RE GUNNA HAVE A BAD TIME
Pure Waterfall
Waterfall

- Requirements
- Design
- Implementation
- Verification
- Maintenance
Sashimi / Waterfall w/ Subprojects
Modified Waterfall

Sashimi

Waterfall w/ Subprojects
Spiral
1. Determine objectives

2. Identify and resolve risks

4. Plan the next iteration

3. Development and Test

Cumulative cost

Progress

Review

Requirements plan

Concept of operation

Development plan

Test plan

Verification & Validation

Requirements

Prototype 1

Prototype 2

Operational prototype

Detailed design

Code

Integration

Test

Implementation

Release
Evolutionary Prototyping
Evolutionary Prototyping

1. Design
2. Build prototype
3. Feedback provided
4. User tests prototype
5. Refine prototype
6. Final Product
Staged Delivery / Design to Schedule
Staged Delivery / Design to Schedule

Stage 0
- Analyze
- Design

Stage 1
- Implement
- Test

Stage 2
- Implement
- Test

...Stage N
- Implement
- Test
Evolutionary Delivery
Evolutionary Delivery

1. Software Concept
2. Preliminary Requirements Analysis
3. Design of Architecture and System Core
4. Develop a Version
5. Incorporate Customer Feedback
6. Elicit Customer Feedback
7. Deliver the Version
8. Deliver Final Version
Questions/Discussion