Human-Computer Interaction

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Headlines

- The waterfall lifecycle model

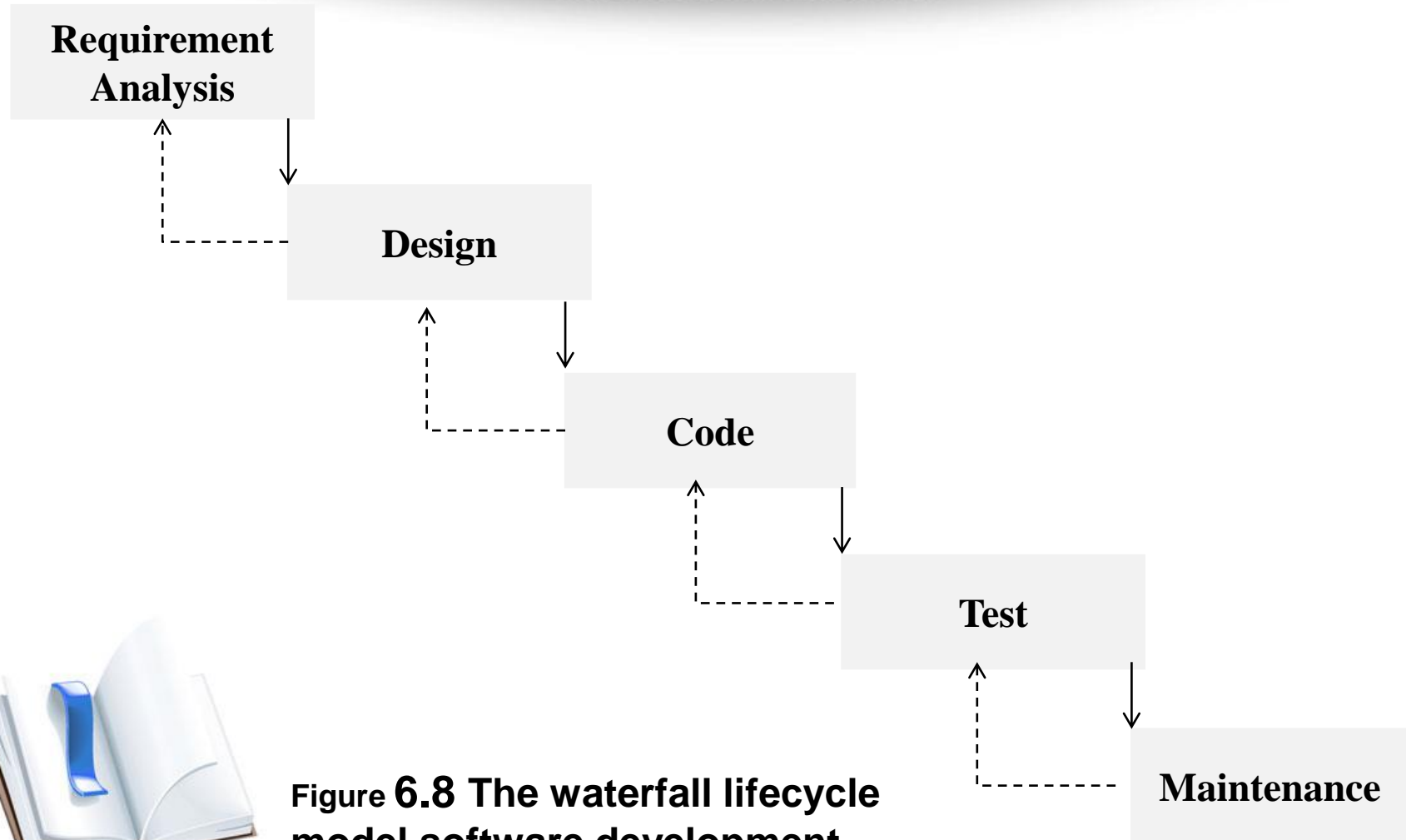- The spiral life cycle model

- Evaluation

The waterfall lifecycle model

The waterfall lifecycle was the first model generally known in software engineering and forms the basis of many lifecycles in use today. This is basically a linear model in which each step must be completed before the next step can be started
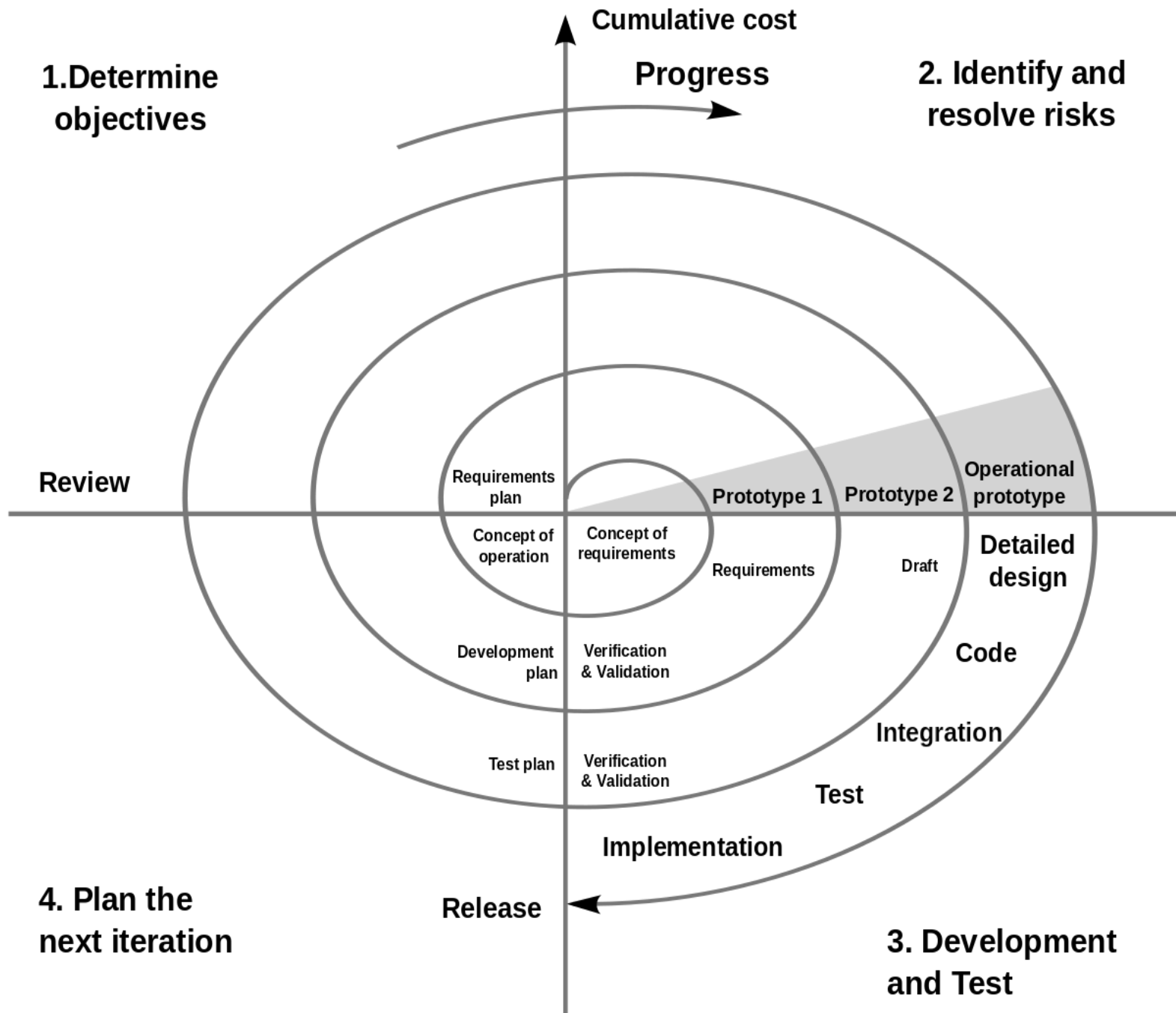
Cont.

Requirement Analysis

Design

Code

Test

Maintenance

Figure 6.8 The waterfall lifecycle model software development.

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The spiral life cycle model

Two features of the spiral model are immediately clear from Figure 6.9: risk analysis and prototyping. The spiral model incorporates them in an iterative framework that allows ideas and progress to be repeatedly checked and evaluated.

Cumulative cost

1. Determine objectives

Progress

2. Identify and resolve risks

Review

Requirements plan

Concept of operation

Concept of requirements

Requirements

Prototype 1

Prototype 2

Draft

Operational prototype

Detailed design

Development plan

Verification & Validation

Code

Test plan

Verification & Validation

Integration

Test

Implementation

Release

4. Plan the next iteration

3. Development and Test

6

Evaluation

why is evaluation important?

Because without evaluation, designers cannot be sure that their software is usable and is what users want.

Cont.

Why you need to evaluate?

users look for much more than just a usable system, as the Nielsen Norman Group, a usability consultancy company, point out User experience encompasses all aspects of the end user's interaction .

Cont.

The requirement for an exemplary user experience is to meet the exact needs of the customer, without fuss or bother. Next comes simplicity and elegance that produce products that are a joy to own, a joy to use.

The goal of evaluation is to assess how well a design fulfills users' needs and whether users like it.

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Cont.

When to evaluate

The product being developed may be a brand new product or an upgrade of an existing product. If the product is new, then considerable time is usually invested in market research.

Cont.

Designers often support this process by developing of the potential product that are used to elicit reactions from potential users. As well as helping to assess market need, this activity contributes to understanding users' needs and early requirements.

Thank You

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