2018年第一学期

《软件工程概论》 平时作业(1-7章)

**开课学期： 2018年第一学期（春季）**

**课 时： 32**

**学 分： 2**

**课程属性： 必修**

**考核方式：考试 闭卷笔试 70%**

**课程作业 30%**

**教学班级： 1613011 1613013**

Chapter 1 Why Software Engineering ?

Part 1 Fill Blanks

1．Software is a set of ， and 。

2．Software engineering means the application of a ， and

approach to the ， ， and ，of software. That is, the

application of engineering to software.

3. Any Problem-solving technique must have two parts, to problem to

determine its nature, and then a solution.

4. The McCall’s quality model concerns the quality of ，CMM concerns

the quality of ，and ROI concerns the quality of .

5. The is the company, organization ,or a person who is paying for the

software system to be developed. The the company, organization ,or

a person who is building the software system. The is the person or

people who will actually use the system.

6. Any entity to be engineered ,we must do ， ， ， ，and 。

Part 2 Brief Description

1. Briefly describe the roles of analyst, designer, programmer,

tester, and trainer.

Chapter 2 Modeling the Process and Life Cycle

Part 1 Fill Blanks

1. We can think a set of ordered tasks as a , a series of , including

， and 。

2．When the process involves building of some ,we sometime refer to the

Process as a 。

3. The life cycle of a software product include ， ， ， ，

and 。

1. The software development usually involves ， ， ， ，

， ， ， and stages。

1. The waterfall model include ， ， ， ， ， ，

and steps.

1. The ensures that the system has implemented all of the requirement,

But the ensures that each function works correctly.

1. The V model makes more explicit some of the and that are hidden

In the waterfall model。

1. The spiral model combine the development activities with management to minimize and control the 。
2. A is a partially developed product that enable customers and developers

To examine some aspect of the proposed system and decide if it is suitable or

appropriate for the final product.

Part 2 Brief Description

1. Briefly describe the advantage and disadvantage of the WatterFall model.

Chapter 3 Planning and Managing the Project

Part 1 Fill Blanks

1. A describe the software development cycle for a particular project

by enumerating the or stages of the project and breaking each into discrete or to be done.

2．The Schedule is a that shows when activities will begin and end, and

When the related development products will be ready.

1. The Deliverables ,that is the that the customer expects to see

during project development.

1. An is a part of the project that takes place over o period of time,

whereas a is the completion of an activity- a particular point of time.

1. The depicts the project as a set of discrete pieces of work.
2. The or for an activity is the estimated amount of time required for

the activity to be completed. The is the amount of time available in the

schedule for the activity’s completion. or for an activity is the difference between the and for that activity

1. The is a path that the slack time at every node is zero.
2. GANTT CHART is used to depict the projects’ .

Part 2 Brief Description and Exercises

1. Gave out some deliverables.
2. Briefly describe the characteristics of software development team’s

individual.

1. Do the exercise 2, and 3 of this chaper ( Forth Edition PP. 138-139)

Chapter 4 Capture the Requirements ?

Part 1 Fill Blanks

1． A requirement is an of 。

2．The process for capturing the requirement has for steps, there are ，

, ,and 。

3. The requirement captures from seven system stakeholders, they are

, , , , , ,and .

4. The sources of possible requirements are the , , , ,

, and the .

5. There four type of requirement, they are the , , and . 6. There are two kinds of requirement documentations, they are and .

7. There are three core constructs in ERD, they are the , and .

8. There are four core construct in DFD, they are the , , and .

9. In UCD, a large box represents the system .

10. There two approaches to prototype, they are the and .

Part 2 Brief Description and Exercises

1. Briefly describe the roles of the seven groups of stakeholders.
2. Briefly describe the function of the four types of the requirement.
3. Briefly describe the functions of three core construct of ERD.
4. Briefly describe the functions of the two approaches of prototyping.
5. Do the Exercise 12 (only draw out USD) of this chapter.
6. Do the exercise 13 of this chapter.

Chapter 5 Design the Architecture

Part 1 Fill Blanks

1. Design is the creative process of figuring out how to implement all the customer’s requirements; the plan is called the design.
2. The software architecture is consisted by three parts, they are ,

and .

1. In pipe-and-filter style, the functions is to pass input data through a sequence of data-transforming components, and the simply transmit data from one filter to the next without modifying the data.
2. In client-server architecture, the component offer services, and access them using a request/reply protocol.
3. In peer-to-peer architecture, each executes as its own process and acts as both a client and a server to other peer component.
4. In publish-subscribe architecture, A component express interest in an event by to it. When another component that the event has take place, the subscribing component are notified.
5. A repository style consists of two types of component, one is called , another is called component.

Part 2 Brief Description and Exercise

1. Briefly describe the process for developing a software architecture.
2. Drawn out(画出) the layout architecture of ISO model for network communication.
3. Do the exercise 2 of this chapter.

Chapter 6 Design the Modules

Part 1 Fill Blanks

1. Design modules means decide how the will be designed

at a modular level so that developers can that the design.

2．This chapter can help you see why certain design and are

applicable, and then assist you in deciding when should apply them.

3. In practice, there is no between the end of the architectural design

Phase and the start of the module design phase.

4. Design principles are guidelines for our system’s required functionality

and behavior into modules.

5. Modularity, also called , is the principle of keeping separating

The various unrelated aspects of the system.

6. There are six types of coupling, they are , , ,

, ,and .

7. There are seven types of cohesion, they are , , ,

, , , and .

8. When complex data structures are passed between modules, we say that

There is between the modules, if only data value, and not structured

data, are passed, then the modules are connected by .

9. The modules is , in that a module’s data and functions are related

only because they are used at the same time at execution.

Part 2 Brief Description and Exercises

1. Do the exercise 7 of this chapter ( Fourth Edition P370)
2. Do the exercise 8 of this chapter ( Fourth Edition P370)

Chapter 7 Writing the Programs

Part 1 Fill Blanks

1. Even when writing the code itself, many people are usually involved, and a great deal of and is required.
2. May companies insist that their code conform to , , and

standards, so that the code and associated are clear to everyone

who them.

1. No matter how what language is used, each program component involves

At least three major aspects, , , and .

1. The program to be the set of written descriptions that explain to a

reader what the programs to and how they do it. is descriptive material

written within the code, all other documentation is .

1. The external documentation is the full blown report, it answers the same questions, , , , , , and using a system rather than

a component perspective.

Part 2 Brief Description and Exercise

1. Briefly describe the content of Head Block Comment.
2. Do the exercise 6 of this chapter( Forth Edition P. 399)

End of Excise of Chapter 1-7.