**Chapter 12**

1. List three customer support functions that a customer support/service organization performs. (pg 250)

* Talking/recording/checking the name and identification of customer to ensure that the person is a legitimate customer
* Listen to and record the problem
* Answer the question if the solution is known or search the FAQ database for an answer including an expected fix data if the problem is yet unresolved.

1. Explain the customer problem arrival curve in terms of customer usage of the product and the fixes. (pg 251)

Once a software produce is released, there is usually a surge of question and problem reports from users as the early usage rate picks up. The problem arrival rate increase very quickly in the beginning as users try a new software product. As these major problems get fixed and user sophistication increases, the problem reporting rate will also decrease to a lower rate.

1. What is a problem priority level? What is it used for? (pg 254)

* Problem priority level is a metric that gauges and categorizes the severity level of a reported software problem
* It is used to prioritize the problem fixing task and provide a rough estimate of problem fix-response time to the customer.

1. Describe the steps involved with a customer problem is passed from the customer service/support representative to the technical problem/fix analyst until the problem is resolved. (pg 255)

* Problem description, problem priority, and other related information is recorded in a problem report that is submitted to the problem-fix-and-delivery group.
* The problem-fix-and-delivery group will explore and analyze the problem, including the reproduction of the problem
* The problem-fix-and-delivery group either accepts or rejects the problem
* If the rejected, the direct customer support group is immediately notified; if accepted, then a change request is generated and the problem enters a fix cycle of design, code, and test
* Depending on the priority and nature of the problem, the fix may be individually packaged and released immediately to the customer or the fix may be integrated into a fix release package.
* The FAQ database is updated to reflect the status of all the problems so that the customer support/service representatives may quickly and accurately advise the customers on the problem resolution status.

1. What is the estimated effort field on the change request form used for? (pg 260)

Estimated effort is needed for the change request to be evaluated for planning the required resources and scheduling a potential completion date.

1. Visit the online customer support site of a software product company and compare the list of support functions it offers against your list from question 1 above.

I visited Amazon, they have all the ones listed in question one.

1. Explain what the problem arrival curve may look like if a software product that is released does not get installed and used until six months later.

I think it’d be relatively flat for the first six-months as it was not used. After released and more people are using the software, there will be a steep increase in the problem arrival curve. Over a period of time, the problem arrival curve should start to slowly decrease and eventually flat out.

1. Consider a situation where an important customer has installed a software application and also customized some parts of the application. Explain the effect that would have on supporting this customer if under the following circumstances:
   1. The customized code is only in interfacing with an application that customer wrote in-house.

* Little to none effect as the core of the application is not compromised
  1. The customization is only in adding an entry in a database table.
* Depend on what this “entry” does, the effect can range from low effect to severe effect. If the entry does not conflict to break any existing field(s) in the database, it might have low effect; in contrast, if the entry conflict or break existing field(s) in the database, it will have a severe effect.
  1. The customized code is in the main logic of the purchased software application.
* Definitely severe effect
* Should work on it immediately

**Chapter 13**

1. List and discuss the elements of a (traditional) project plan.

* Executive summary: defining the purpose of the projects, the objectives/success criteria (including time, cost, and quantity).
* Policy and procedures: describe the procedures that will be used to control the project
* Schedules: the schedules and logs that define the detailed plans for the project
* Resource plans: defining roles, responsibilities, schedules, and communication
* Budgets and cost management: the estimating costs and the settings of an agreed budget, and the management of actual and forecast costs against that budget.

1. What are the four phases of project management?

* Planning (pg 267): understanding the requirements of the project
  + Perform estimation
  + Clearly define and establish measurable “goals” for the project
  + Determine the project resource allocations
  + Identify and analyze the project risks
* Organizing (pg 270): once a plan is formulated or partially formulated, organizing will start
  + Organization structure needs to be designed
  + Human resource hiring
  + Completing any required education and training
  + Mechanisms for tracking must be established
* Monitoring (pg 271): one the project is started, there needs to be regular tracking to ensure that it is headed in the right direction
  + Monitoring project status information collection
  + Analysis and evaluation of collected information
  + Presentation and communication of the project status
* Adjusting (pg 273): as soon as the project status suggests potential problem, we must make changes appropriately
  + Adjusting resources
  + Adjusting schedule
  + Adjusting content

1. What are the three components of risk management? (pg 269)

* Risk identification
* Risk prioritization
* Risk mitigation

1. What are the three attributes of a software project that are most often considered for trade-off decisions for project adjustment? (pg 274)

* Resources
* Schedule
* Content

1. What is a WBS and what is it used for? (pg 283)

* WBS stands for Work Breakdown Structure
* It’s a depiction of the project in terms of discrete sub-activities that must be conducted to complete the project.

1. Compare and contrast a software development process with the software project management (POMA) process.

The below table is a compare and contrast of traditional Waterfall development VS POMA

|  |  |
| --- | --- |
| Similarities | Differences |
| -Both required requirements analysis in its planning stage  -Both have established measurable “goals”  -Organization start after planning, where all aspects relating to project is considered  -Product is monitored and tested | -Waterfall goes into deep detail and written documentation while POMA is only estimation. However, waterfall does not take into account the people factor of its resources. Also, POMA include risk management in this stage while Waterfall does not include it.  For POMA, this stage can be partially completed while Waterfall does not.  -Waterfall is more detailed about its goals  -Waterfall is more structured and forceful in this stage  -Waterfall is not as flexible as POMA in welcoming changes at this stage |

1. Consider the task network illustrated in Figure 13.6, with the estimated effort shown in units of person-months. Make the appropriate assumptions to convert it into a project schedule. (Although it is not often realistic, 1 person month == 1 person working for 30 days == 2 people working for 15 days, etc..)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Task | Person | Time | | | | | | | | | | | | | |
| A | 1 | 6 person-months | | | | | |  |  |  |  |  |  |  |  |
| B | 1 |  |  |  |  |  |  | 3 | | |  |  |  |  |  |
| C | 2 |  |  |  |  |  |  | 7 | | | | | | |  |
| D | 3 |  |  |  |  |  |  |  |  |  | 5 | | | | |