**Computer Science II**

**Introduction to Project Mgt – UNIT TEST**

NAME: Jake Lorah DATE: 10/24/16

**Each question below is worth 2 points. Please write all answers clearly in the space provided.**

1. What is a project?

A project issomething that is planned / long-term assignment. It produces something unique and must be temporary, has a start date and an end date. It also must create a unique result such as products, services, or constructing a house and must follow incremental steps. Lastly projects are started, worked on, and completed on a daily basis.

1. Explain how a project is different from an everyday task.

Projects are different than tasks because projects require much more planning and preparing (Project Management). Also projects usually are much bigger than tasks. Lastly projects usually require a team and team leader. Task is a usually small piece of work to be done. Example of a project is building an office building. Example of a task is emptying the dishwasher.

1. Project Management means doing whatever is necessary to ensure that the project meets its objectives and is delivered with quality and on time.
2. The following are typical benefits of project management:
   1. Customer satisfaction increases
   2. Quality improves
   3. Schedules are met
   4. All of the above
   5. None of the above

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| Analyze the picture on the right. It is an example of a work breakdown structure. This technique is typically used to break projects into smaller tasks. |  |

1. A project manager is the person responsible for ensuring that the goals and objectives of the project

are met and on time.

1. Two team members have different ideas when it comes to the design of the product and they have numerous discussions about it during project meetings. The project manager has to make sure that these discussions don’t become arguments and that everyone has the opportunity to speak. This is an example of the ability to be a good director.
2. While most team members are doing their best to complete all of their tasks on time, occasionally they fall behind for various personal and work related reasons. The project manager has to make sure that they catch up each time. This is an example of the ability to motivate the team members.
3. The project manager is constantly being asked questions about project progress and various issues related to the work that’s being performed. In order to handle all of these in a timely and informative manner the project manager must be able to communicate quickly and effectively.
4. A team is a group of people working together to accomplish a common goal.
5. List and describe 3 benefits of working as a team.
6. Task sharing – Ability to share work to other members, shared responsibility for outcome.
7. Joint Expertise – Each member brings their experience/best skill for the project, increased knowledge for project.
8. Networking – Making new friends and building future networks.
9. The two types of teams covered in class were healthy and dysfunctional teams.
10. Two team members feel very strongly that they would be the best team leader. This is an example of a healthy team.
11. There is a serious issue with the project the night before it’s due but the person who uncovers the issue cannot contact the team members until the following day. This is an example of a dysfunctional team.
12. The project manager is frequently absent and doesn’t respond to emails, phone calls when they are out. This is an example of dysfunctional team.
13. An HTML programmer a CSS Programmer and a Javascript programmer come together to work on a project. This is a benefit of working with teams called joint expertise.
14. The project sponsor and the client are always the same person. Is this a true statement? Why or why not?

This statement is false because they could be the same person, but aren’t always the same person. The project sponsor is the individual who finances the project, and the client is the recipient of the project. They could be the same person, but don’t always have to be.

1. A typical aspect of a healthy team is that all members of that team know exactly what they are supposed to accomplish and what the team is supposed to accomplish. This is an example of having defined goals.
2. Having a sense of security is an element of Maslow’s Hierarchy of Needs. Explain its impact on the project as a whole.

Maslow's Hierarchy of Needs focuses on physiological needs, safety, security, social needs, esteem, and self actualization of a project. This has a positive impact on the project because this process will make sure that the project is successful and the outcome is very good along with every member being safe.

1. Ensuring that the reward matches your expectations is an element of Vroom’s Expectancy Theory. Explain its impact on the project as a whole.

Vroom’s Expectancy Theory focuses on three parts. Expectancy, Instrumentality, and Outcome. Expectancy is asking Do I know what is expected of me? Instrumentality is asking Can I get the job done? And lastly, Outcome is asking Are they paying me enough to do this? If the reward isn’t enough, then maybe this isn’t worth doing.

1. The common phases of a typical software project are:
   1. Contract, Design, Development, Implementation and Closing
   2. Concept, Define, Development, Implementation and Closing
   3. Contract, Define, Development, Implementation and Closing
   4. Concept, Design, Development, Implementation and Closing
   5. None of the Above
2. Explain the purpose of Lessons Learned.

Lesson learned take place in the closing phase. The purpose is to bring together any insights gained during the project that can be useful to future projects.

1. What is a WBS?

A project management tool/technique used to break projects down into smaller, easy to understand tasks.

1. A WBS will help you to assign responsibilities as well as to estimate project time. It can also help you to accurately break down project work.
2. The physical outcome (product) of the project is known as the project objective. +
3. Requirementsare the specific features of a deliverable that will satisfy the project objective.
4. A small business owner approaches you asking for help with creating a website for their business. This is an example of a project objective. They hope to attract more customers as a result. This is an example of a business objective.
5. Which estimating method is said to be analogous? Who is supposed to use it and why?

Top-Down is said to be analogous because it compares to similar projects. Experts with prior experience should use this technique because this is a little more complicated and you can use your prior experience from other projects in the past to best complete. You must follow a step by step algorithm.

1. The two types of estimating techniques covered in class were:
   1. The Work Breakdown Structure and the WBS
   2. Top-Down and Bottom-Down
   3. Top-Down and Down-Up
   4. All of the Above
   5. None of the Above
2. The Bottom-Up estimating method breaks the project down into small components. This method is used by people who don’t have much prior experience.
3. The Top-Down estimating method looks at a project as a whole and compares it to prior projects. This method should only be used by people with prior experience/experts.
4. You have a project that requires 40 hours of effort and starts today. You can only work on it Monday-Friday for 4 hours a day. What is the expected duration of this project? Provide the answer in days.

10 days.

1. You have a project that requires 40 hours of effort and starts today. You can work on it every day for 5 hours a day, however, you have to wait 3 days before all of the necessary supplies arrive. What is the expected duration of this project? Provide the answer in days.

8 days.

1. The possibility of something going wrong during the course of the project is known as project risk.
2. Project Risk consists of three things: The event, the probability of event, and the impact of event.
3. Planning for unexpected events that may **negatively** impact the project and developing an action plan is known as risk management.
4. Explain the difference between effort and duration.

Effort is the amount of time (expressed in person hours, days, months, etc..) required to complete a specific task. Duration is the number of calendar periods needed to complete the task. Effort never changes but duration may change.

1. Name three things that can be determined by estimating.

How much will it cost, how much effort is required, and how long something will take to complete.

1. An approximate calculationor judgmentthe value, number, quantity, or extent of something is known as an estimate.
2. The data gathering technique that groups risks by their reasons rather than their categories is known as:
   1. Root Cause Analysis
   2. Delphi Technique
   3. Brainstorming
   4. Flowcharting
   5. None of the above
3. The data gathering technique that eliminates data bias and allows multiple participants to voice their opinion is knows as:
   1. Root Cause Analysis
   2. Delphi Technique
   3. Brainstorming
   4. Flowcharting
   5. None of the above

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| Analyze the picture on the right. It is an example of a fish-bone diagram. This technique is typically used to identify risks during the design phase. | http://reliabilityweb.com/ee-assets/my-uploads/art09/galley_fishbone_01.jpg |

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1. Based on the availability of resources, the proposed risk response to a potential snowstorm calls for corrective steps to be taken 2 days prior to the date of the risk event. Does this response meet required eligibility criteria? Why or why not?

Yes because if you take action two days before the snowstorm, you have time to prepare and hopefully avoid the risk. One of the requirements is timely and this meets the requirement because you will have time to try to avoid the risk.

1. The proposed risk response to potential equipment failure calls for the replacement of each computer workstation if any of its major components fail. Does this response meet required eligibility criteria? Why or why not?

Yes because if a major component of a computer fails, you should fix it so that the computer can run correctively. One of the requirements is appropriate for the risk event. Depending on what the job is, this may be very appropriate for the risk event or inappropriate. You can either think of a plan B or fix the computer.

1. Eliminating risk ahead of time is an example of risk avoidance while minimizing the risk while not eliminating it completely is an example of risk mitigating. Enlisting someone else’s help is known as risk transferring while choosing to do nothing about the risk is called risk acceptance.

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**YOU HAVE REACHED THE END OF THE TEST. PLEASE REVIEW YOUR ANSWERS.**