Computer Science 2 - Weekly Quiz 10/07 **NAME: Jake Lorah**

**Each question below is worth 10 points. Please answer clearly in the space provided.**

* 1. Name two ways to develop an estimate and describe each.

The two ways to develop an estimate are approximate calculation and judgment. Approximate calculation uses math skills to estimate and judgment uses prior knowledge and experience.

* 1. You have a project that requires 20 hours of effort with just one employee on the job. What is the duration of this project based on a 4 hour workday M-F? Name some of the factors that could shorten the amount of time needed for this project.

The duration is one whole work week (5 days). You can work on the project 4 hours per day. Factors that could shorten the project include not playing Xbox for that week. Now if you don’t play Xbox, you will have an extra 2 hours to work on it each night and maybe complete the project a little earlier.

* 1. Explain the significance of the term “approximate” when it comes to estimating.

Approximate is very important when it comes to estimating because when you estimate cost, time, or effort, you estimate approximately what the number is. It usually isn’t exact. It is in the same ballpark, but most likely not exact.

* 1. List and describe 3 benefits of using Work Breakdown Structures in project work.

3 benefits of using the Work Breakdown Structure are it breaks a complex project down into small easily manageable components, it assists with accurate project organization, and it helps with assigning responsibilities.

* 1. What is a WBS? A project management tool/technique used for breaking down complex projects into the smallest possible, easy to understand tasks. What computer programming structure does it resemble and why? The WBS resembles an algorithm because in an algorithm, you must follow a sequence of steps **in order**. In the WBS, you must do the same and follow all of the steps in order to make the project successful and easier to complete.
  2. Each box in a WBS is called an activity. A box connected to boxes below is called a task.  A box connected to boxes above is called a work package. It is possible for this item to be a work package and a task at the same time.
  3. Describe 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. It is the amount of work **you** put into the project. The effort may change. Duration is the number of calendar periods needed to complete the task. The duration does not change.

* 1. The amount of work required to complete a specific task is known as effort. How is it expressed? Person hours, days, months
  2. The number of calendar periods needed to complete a specific task is known as project duration.
  3. T/F: While the project duration remains constant, the amount of effort can change due to a variety of factors such as the number of people working on the project or the availability of project resources.

True