CSE360 Team Project Overview - Phase 1

Your team is required to deliver the following – nothing more, nothing less.

Functionality

The program is to analyze a network diagram and determine all paths in the network.

Input:

- The input will consist of multiple occurrences of the following: activity name, duration, and a list
 of dependencies (predecessors). There is no maximum on the number of activities and
 predecessors.
- Activity names can be multiple characters.
- Duration must be integer. If other input is found, then an error should be displayed and the user must re-enter before proceeding.
- The starting node or nodes will not have predecessors.
- Once all input is completed, then the processing can begin.

Output:

- All paths in the network must be listed with the duration of each path. The output must the name of all activities in the path.
- The list of paths must be displayed in descending order by duration.

Error checking:

- All nodes must be connected.
- There cannot be a cycle.

If one of these errors occurs on the input, an error message should be displayed and then the user will need to start over.

Once the output is displayed, the user should have an option to enter another set of inputs or quit.

GUI

There must be a GUI for the program. All functionality of the program must be available through this interface and there must be an "about" option as well as "help" as well as options to enter input, process, restart or quit.

The design of the layout is to be determined by your team. You will be graded on the following

- Readability the layout must be clear. All buttons must be labeled and the screen content not crowded. The default rarely meets this criteria.
- Ease of use the GUI should be very easy to use.

Design

• There is no requirement on data structure(s) and other design decisions. This is a matter for your team to work together and make decisions.

• You will be required to report on the decisions made in the first report.

Restrictions

- Coding must be done in Java.
- All code must be placed under version control.
- All members of the team are required to participate and contribute to the project.
- The inclusion of second party content is explicitly prohibited and will result in a failing grade for the entire team.
- All member of the team are responsible for all deliverables.

Deliverables for Phase 1

Users Guide: September 25 11:59 PM (To be submitted on the assignment link on Blackboard)

Demonstration Phase 1: See class schedule. Your team must set up an appointment with your teaching assistant to demonstrate the success of your release and show your code under version control.