

### Project Management Assignment

#### Instruction:

- Complete all exercises below.

The following table summarizes some of the classes and modules you might need to develop players and zombies for the game. (The program would also need lots of other pieces not listed here to handle other parts of the game).

TASK	TIME (DAYS)	PREDECESSORS
A. Robotic control module	5	—
B. Texture library	4	C
C. Texture editor	4	—
D. Character editor	6	A, G, I
E. Character animator	6	D
F. Artificial intelligence (for zombies)	6	—
G. Rendering engine	6	—
H. Humanoid base classes	3	—
I. Character classes	3	H
J. Zombie classes	4	H
K. Test environment	5	L
L. Test environment editor	6	C, G
M. Character library	9	B, E, I
N. Zombie library	17	B, J, O
O. Zombie editor	5	A, G, J
P. Zombie animator	7	O
Q. Character testing	3	K, M
R. Zombie testing	4	K, N

#### Exercises:

1. Draw a PERT chart for these tasks **by any drawing program**. Include the tasks' letters, predecessors, and expected times.
2. Use critical path methods to find the total expected time from the project's start for each task's completion. Find the critical path (highlight the critical path). What are the tasks on the critical path? What is the total expected duration of the project in working days?
3. How long is the second-longest path in the PERT network you built for Exercise 2? What tasks lie along a second-longest path? By how much could the tasks on the path slip before impacting the project's total time?
4. Build a Gantt chart **using the Excel spreadsheet program** for the network you drew in Exercise 3. The Gantt chart Start on Monday, March 16, 2020, and don't work on weekends or the following holidays:

HOLIDAY	DATE
Chakri Memorial Day	April 6
Songkran Festival	April 13-15
Coronation Day	May 4
Visakha Bucha Day	May 6

5. What date do you expect the project to be finished?

#### How to submit:

- For the exercise 1-5, create a word-processed document on which you have answered each of the above questions
  - On the document, enter your student Id and your name in the upper-left corner of the page.
  - Submit your file (word or pdf file) on Google classroom.