

Graph report

1- List of file :

AppMain : the main of the PW2 project
AppMainPW4 : the main of the PW4 project
Edge : the class for manipulate edge
Node : the class for manipulate node
Graf : the class for manipulate graph
nodePert : the class for manipulate node pert
pertPW : the class for manipulate pert chart
UndirectedGraf : the class for manipulate undirected graph
workers : the class of workers

2- Compile project :

- Unzip the file
- With a terminal go in current repertory
- launch the project with the makefile 'make'

3- Computing the earliest and latest start times, as well as the critical paths :

For the earliest start times : we have developed the algorithm give in ressources. Then, the value of earliest is set in the node structure in variable earliest.

For the latest start time : we have reverse the graph and execute again earliest start times. Then, the value of latest is set in the node structure in variable latest.

For critical paths, we check if the earliest and latest start times are equals and i rebuild the path, to check if the path is correct.

4- Strategy :

For the first strategy : the purpose of strategy is realize all child of the the task before in first, then the child of the child, etc ... And finish in the last task.

For the second strategy : the purpose of this strategy is take a random task in task free (by browsing the graph from node 0). And make this task. If the dependencies of task is not realize, we realize dependencies task and then i make this task. And we explore the graph to finish all task.

We suggest other strategy (we don't have the time for developed this) :

- We can make a strategy who make in priority the task with the higher duration.
- We can make a strategy who make in priority the task with the lower duration.
- The purpose of strategy is follow the critical paths, the priority task is the task in the critical path. If the dependencies of task is not realized, is realize before. And, then, the task is realize. This strategy is realize during all the critical paths.

We have used us PW2 package.