

CS335 Lab
Project Planning
Wednesday 3rd May

Part 1- Project Planning

Description: In this lab you are going to create a project plan for a small software project for your group/team of 2 persons. The project consists of two software features/Main components. You will do some initial analysis and design together, then develop and test the two features separately first, and then in parallel. Then you will integrate and test the two features into the final system.

Your project task list:

Summary Tasks: Initial Work, Feature 1, Feature2, Integration	
Sub Tasks (Initial work): <ul style="list-style-type: none">• User requirement gathering – 3 days• Analysis – 3 days• System Design – 4 days	Sub Tasks (Feature 2): <ul style="list-style-type: none">• Detailed Design- 2 days• Coding-4 days• Testing and fix bug- 4 days
Sub Tasks (Feature 1): <ul style="list-style-type: none">• Detailed Design – 2 days• Coding – 3 days• Testing and Fix bugs – 4 days	Sub Tasks (Integration): <ul style="list-style-type: none">• Build the system– 1 day work• Test the system – 4 days work• Write the user’s guide –2 days work

You will both work on the Initial Work. Then you will do Feature 1, and your partner will do Feature 2. You won’t start working on the features until the Initial Work is done. Then, after both features are complete, you’ll do the integration together. Your partner will only spend 50% of her/his time on the initial analysis, but otherwise will work 100% on this project. You will work 100% on all tasks.

Create new project

-Open GanttProject on your Desktop

-Create a new project, name it as you want

Create a new task

-Write click on the task space, select new task from the pop up menu to create a new task (Fig.1).

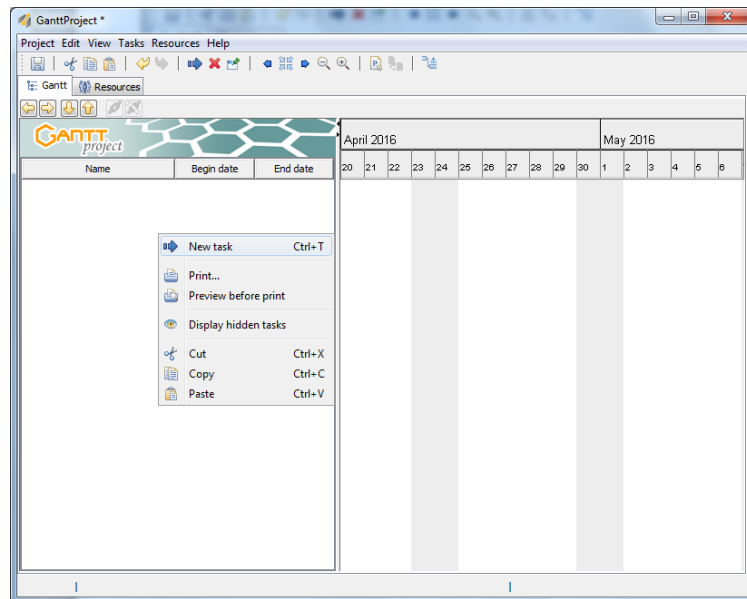


Fig 1. Create a new task

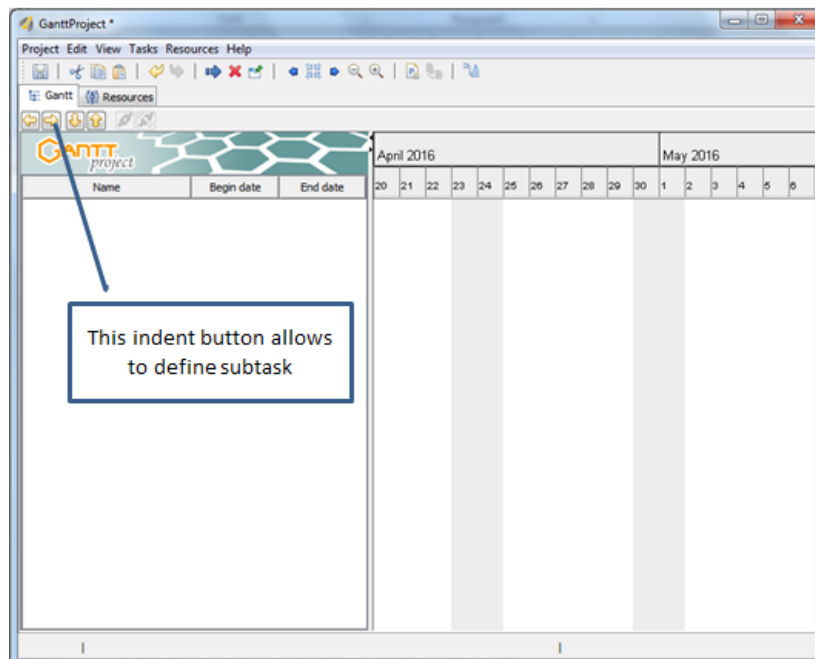


Fig.2 Indent button for sub task definition

For instance, you can get the first group of task like this, in which Initial is the summary task.

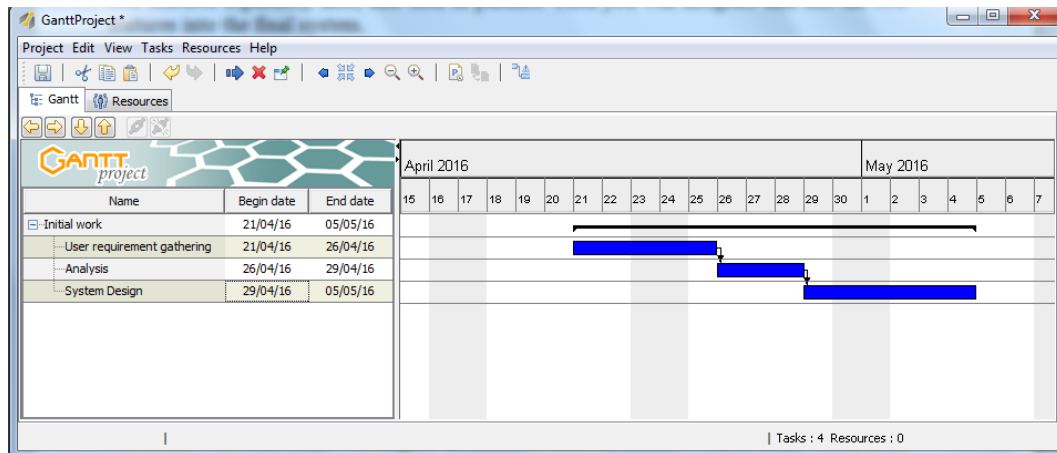


Fig 3. Gantt chart Example with task dependencies

Define the duration of a task, predecessors (dependency), or resource for a task using Task Properties menu, for example:

Properties for 'User requirement gathering'

General | Predecessors | Resources | Edit Notes... | Custom Columns

Name: User requirement gathering Duration: 3

Progress: 0 Priority: Normal

Date

Begin date: 26 April 2016 End date: 29 April 2016

☐ PProject Color Default Shape

Web Link: http://

Ok Cancel

Fig.4. Task properties

It is easier to select the Begin date, type in the Duration and click OK, the software will calculate the end date (it takes into account weekends).
Predecessors tab allows to define the dependencies between tasks.

Add a new role for resources

Go to Edit/Settings/ Resource role.

Properties for 'User requirement gathering'

General Predecessors Resources Edit Notes... Custom Columns

Name: User requirement gathering Duration: 3

Resources

...	Resource Name	Unit	Coordina...	Role
2	BW	50.0	<input checked="" type="checkbox"/>	
3	AL	100.0	<input type="checkbox"/>	
			<input type="checkbox"/>	

Ok Cancel

Once you finish the Gantt chart, save your project.

Part 2 – Activity network in project planning

A set of tasks, their durations and dependencies of a project is presented in Table 1.

1. Provide the corresponding activity network
2. Identify the critical path
3. How long is the duration of that project ?

Table 1- Task list

Task	Duration (days)	Dependencies
T1	10	
T2	15	T1
T3	10	T1,T2
T4	20	
T5	10	
T6	15	T3,T4
T7	20	T3
T8	35	T7
T9	15	T6

T10	5	T5,T9
T11	10	T9
T12	20	T10
T13	35	T3,T4
T14	10	T8,T9
T15	20	T2,T14
T16	10	T15