
An Interduction to OPENPROJ™

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What is “project management?”

- the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project **goals** and **objectives**.
- What is the difference between project and program management?

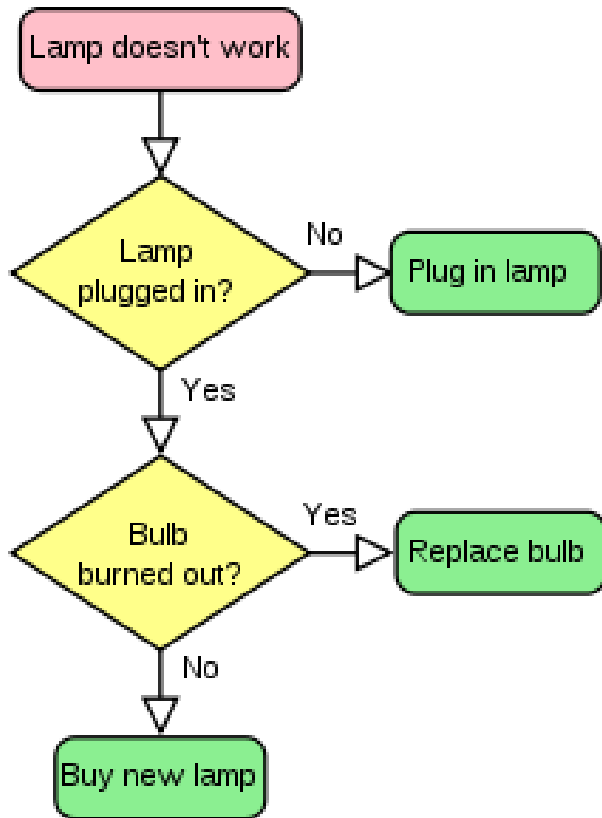
Challenges of Program Management

- The primary challenge of project management is to achieve all of the project goals and objectives while honoring the preconceived project constraints.
 - Typical constraints are scope, time, and budget.
 - The secondary - and more ambitious - challenge is to optimize the allocation and integration of inputs necessary to meet pre-defined objective
 - To meet this more ambitious challenge, tools help
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Characteristics of OpenProj

- OpenProj is a free, open source project management solution available at: <http://openproj.org/>
 - OpenProj is a replacement of Microsoft Project and other commercial project solutions.
 - The OpenProj solution has been download more than 1,250,000 times in the few months since launch and is being used in over 142 countries.
 - OpenProj is ideal for desktop project management and is available on Linux, Unix, Mac or Windows.
 - OpenProj shares the industry's most advanced scheduling engine and includes the most advanced scheduling, resource and cost **algorithms** in the industry.
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What is an Algorithm?



- This is an algorithm that tries to figure out why the lamp doesn't turn on and tries to fix it using the steps.
- Flowcharts are often used to graphically represent algorithms.

Main Functions

- Gantt Charts
- Network Diagrams (PERT Charts)
- WBS and RBS charts
- Earned Value costing

Gantt Chart

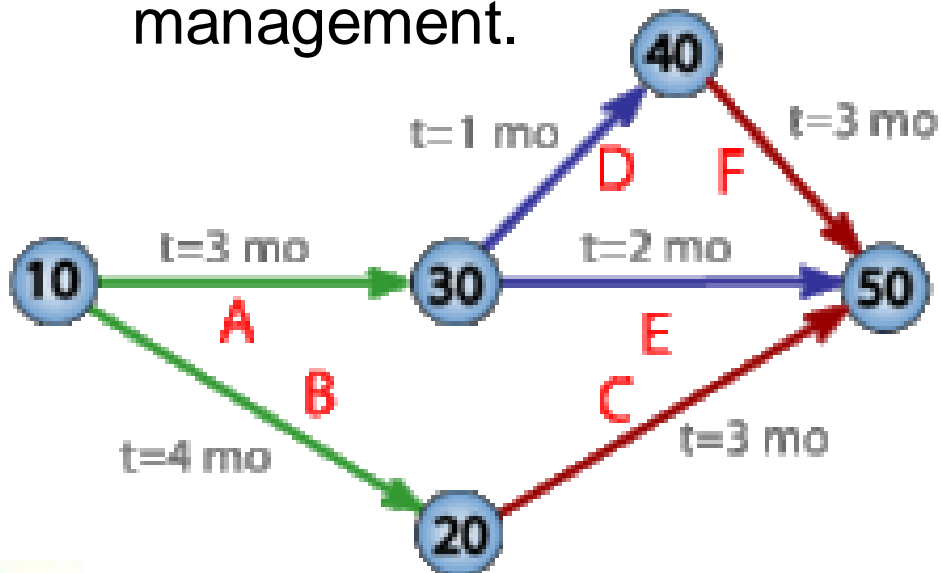
- a primary tool for project managers, and are the main workspace of your project
- it consists of a hierarchical spreadsheet on the left which lists your tasks, and a time-scaled diagram off to the right
- it enables you to see both the tasks in your project, their structure, and their ordering in time

PERT Chart

- **Program (or Project) Evaluation and Review Technique (PERT)**
- a model for project management designed to analyze and represent the tasks involved in completing a given project
- It is commonly used in conjunction with the critical path method

Critical Path Method

- The **critical path method (CPM)** - more properly called **critical path analysis** - is a mathematically based algorithm for scheduling a set of project activities.
- It is an important tool for effective project management.



Exercise:

Devise a Gantt Chart

Getting started with OpenProj

- You can start a new project either by choosing the option in the Welcome dialog, clicking on the New Project toolbar button (POD), or choosing File | New Project from the menu (OpenProj)
- The New Project dialog appears
 << Demonstration >>

1. Project Name and Features

- Enter Project Name
 - The Project Start date will be today (or the next working day after today) by default, but you can change it
 - Normally projects use forward scheduling, where you pick a start date and the dates are calculated in the future
 - However, you can also use "reverse" scheduling, in which case, you pick a finish date for the project and the application will schedule dates backwards from that date
 - Dates are calculated using the Critical Path Method
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2. Create Tasks

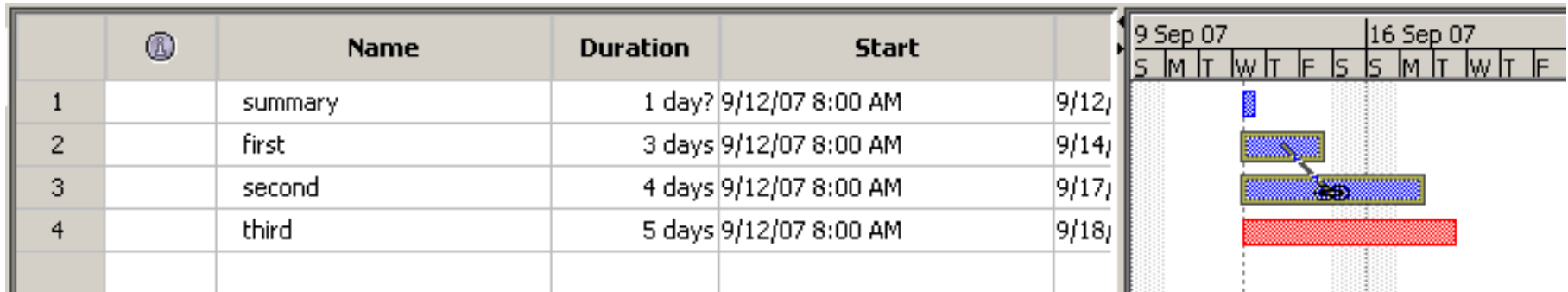
Data enter the following information:

Activity	Predecessor	Time estimates			Expected time
		Opt. (<i>O</i>)	Normal (<i>M</i>)	Pess. (<i>P</i>)	
<i>A</i>	—	2	4	6	4.00
<i>B</i>	—	3	5	9	5.33
<i>C</i>	<i>A</i>	4	5	7	5.17
<i>D</i>	<i>A</i>	4	6	10	6.33
<i>E</i>	<i>B, C</i>	4	5	7	5.17
<i>F</i>	<i>D</i>	3	4	8	4.50
<i>G</i>	<i>E</i>	3	5	8	5.17

3. Link Tasks

- Link Tasks by defining dependencies
- Click on the predecessor task, and keeping the mouse button pressed, drag the cursor to the successor task
- The mouse cursor will change to a link icon

3. Link Tasks (cont.)



Time parameters...

- Automatic calculation of dates
- Working with Time/Duration
- Timescale viewing
- Hierarchy
 - phases
 - tasks
 - subtasks