

Software tools for activity scheduling

Activity scheduling

- A **schedule** is a timetable showing the forecast start and finish dates for activities or events within a project, programme or portfolio
- **Activity scheduling** is a mechanism to communicate what tasks need to get done and which resources will be allocated to complete those tasks in what timeframe
- Focused on: managing time, people and processes
- Roles: planning + scheduling

Role 1: Planning

- Creating an implementation strategy
- Involves:
 - Developing the strategy
 - Determine phases, work areas and control
 - Selecting processes and methods
 - Optimizing time
 - Managing threats and opportunities

Role 2: Scheduling

- Interpreting the results of planning to create a schedule
- Involves determining:
 - Duration of activities
 - Resources to be applied to the activities
 - Sequencing of activities
 - The effect of delays & disruptions

How to define a schedule?

- Define activities
- Do estimate the time and effort
- Determine dependencies
- Assign resources

Maintaining the schedule

- Use of scheduling software that triggers alarms
- Through the duration of the activities
 - Status of the progress
 - Updating the schedule for relevance and accuracy

Time management

- Measure how much time the work “really” takes
- Prioritize the tasks
- Plan the time
- Plan long term
- E.g. use [ManicTime](#) (computer usage, free features: auto tracking, tag time, statistics)
- E.g. use [todoist](#) (to-do list, free for starters)
- E.g. use Google Calendar or iCal
- E.g. use Gantt diagram

Prioritize tasks

Urgent & Important Matrix

High	Urgent, Not Important	Urgent and Important
Low	Not Urgent, Not Important	Not Urgent, Important
	Low	High

Urgency

Importance

Another example: data oriented

Task Name	Q1			Q2			Q3			Q4		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1 1 - Literature Review			[Task Bar: Mar to May]									
2 1.1 - Topic Set-up			[Task Bar: Mar]									
3 1.2 - Literature Review			[Task Bar: Mar to May]									
4 1.3 - Edit Proposal			[Task Bar: Apr]									
5 Milestone - Project Proposal Due				◆								
6 2 - Data Analysis for External Dataset				[Task Bar: Apr to Sep]								
7 2.1 - Feature Selection				[Task Bar: Apr]								
8 2.2 - Statistical Analysis				[Task Bar: Apr to Aug]								
9 3 - Experiment Design and Implementation				[Task Bar: Apr to Sep]								
10 3.1 - Experiment Design				[Task Bar: Apr]								
11 3.2 - Implementation				[Task Bar: Apr to May]								
12 3.3 - Pilot Study and Revisions					[Task Bar: May to Aug]							
13 3.4 - Prepare Experiment						[Task Bar: Jun]						
14 3.5 - Run Experiment							[Task Bar: Aug]					
15 4 - Data Analysis for My Experiment								[Task Bar: Sep]				
16 4.1 - Statistical Analysis								[Task Bar: Sep]				
17 5 - Reports				[Task Bar: Apr to Sep]								
18 5.1 - Edit Report				[Task Bar: Apr to Oct]								
19 5.2 - Edit Progress Report				[Task Bar: Apr]								
20 5.3 - Tentative Task - Write a Publication					[Task Bar: May to Oct]							
21 Milestone - Progress Report Due					◆							
22 Milestone - Treatise Due										◆		

Company- university collaboration

<i>Month</i>	<i>May</i>					<i>June</i>				<i>July-August</i>			<i>September</i>				
<i>Week</i>	18	19	20	21	22	23	24	25	26	27	28-34	35	36	37	38	39	
Pre-study Phase											Vacations						
Specification																	
Working plan																	
Investigation of provisioning systems																	
Experimental Phase																	
Implementation of JavaME client																	
Test of Implementation																	
Enhancements & Modifications																	
Comparison with Symbian client																	
Provisioning System setup & configurations																	
Tests & comparisons with other systems																	
Writing Phase																	
Results & Measurements																	
Report writing for company																	
Report writing for KTH																	
Presentation																	