SPECIFICATION OF

Member Load Report per Project by Period
Planning (similar Gantt)

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Description

In Project planning is important to see Member load to control situation, if member is underloaded or overloaded. So, it's necessary to extend functionally of Redmine with Member Load Report per Project by Period.

Data

Today is 20.02.2008.
We would like to see the work load graphs for 1 month period lets say from 01.03.2008 to 31.03.2008.

Line No	Member	Project	Task Id	Time Estimated	Time Spent	Start Date	Due Date
1	John	Apple	1	80	20	15.02.2008	15.03.2008
2	John	Apple	2	120	0	15.03.2008	15.04.2008
3	John	Pie	3	20	0	01.03.2008	31.03.2008
4	Andrew	Apple	4	40	0	10.03.2008	20.03.2008
5	Michael	Pie	6	80	0	10.03.2008	20.03.2008

Calculations

First we calculate how many hours of that task belong to the period of interest.

1 **John** calculations:

    1.1 Lets calculate for line 1 how many hours the employee will have to spend for this task in the period of interest:

1.1.1 If some time has been spent for a given task then it is being subtracted from the time estimated, line 1 - hours to do is 80-20 = 60h;

1.1.2 We take these hours left to do and split them on the days from today till the due date. From 20.02.2008 to 15.03.2008 we have 18 working days so we can assume for this task to have 60h/18days – 3.3 hours per day to do;

1.1.3 But for this report we have selected a period time frame from 01.03.2008 to 31.03.2008 so we have interest in 10 working days, so the employee will have to spend 10days * 3.(3)h = 33h for this task in the period of interest.

1.2 Line 2 calculations

1.2.1 John will have to spend 120 hours from 15.03.2008 to 15.04.2008 – thats 22 working days – thats 120h/22days=5,45 h per day;

1.2.2 11 working days are in the period of interest so John will spend 5.(45)* 11 = 60 hours for this task in the period of interest.

1.3 Line 3 - finally John uses 20 hours in the period of interest for the Pie project

1.4 Total for John: 33h (line1) + 60h (line 2) + 20h (line 3) = 113h for this period, in this period we have 21 working days * 8hours per day that means John has total 168h for his tasks available. Johns workload in march is 100/168 * 113 = 67% From which he works 100/168 * 93 = 55% on Apple and 100/168*20 = 12% on project Pie.

If you select data from multiple months, then work load should be calculate for each month separately.

2 **Andrew** calculations:

2.1 Andrew has 40 hours in 10.03.2008 to 20.03.2008 that is 9 working days (72h) thats 100/72*40 = 55% of his time in the tasks period and that's 24% of the time available in the period of interest for Apple.

3 **Michael** calculations:

3.1 Michel has 80 hours 10.03.2008 to 20.03.2008 that is 100/72*80 = 111%, oops he will need help on this one, to finish in time but it is only   100/168*80= 47% of the total period of interest, so we probably extend the due date for few more days.

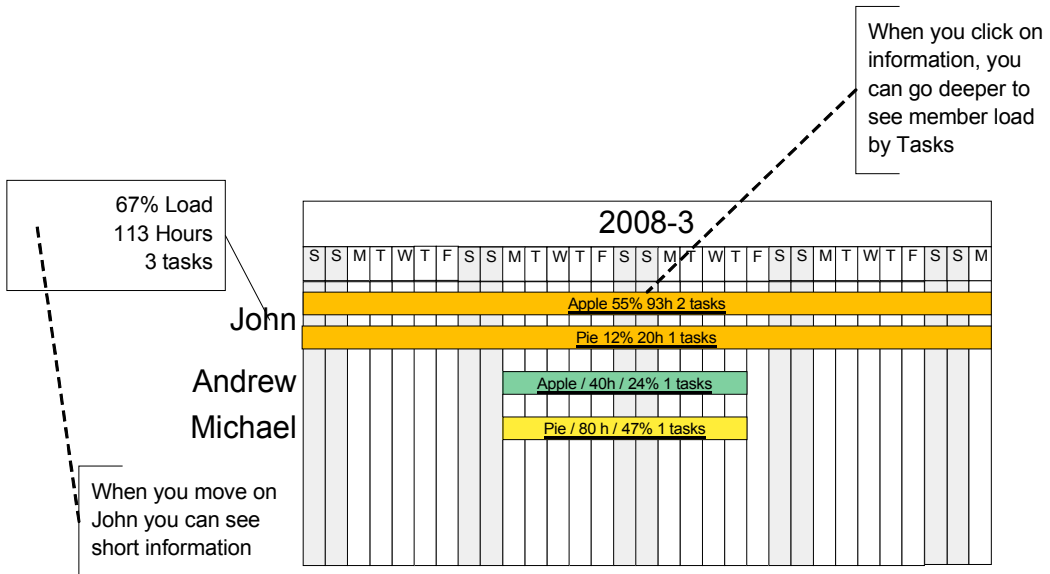## *Data Overview in Report of Period (01.03.2008 – 31.03.2008)*

Member	Project Title	Total Tasks	Total Estimated Hours (h)	Total Spent Time (h)	Load (%)	Period
John	Apple	2	33	20	55%	01.03.2008 – 31.03.2008
John	Pie	1	20	0	12%	01.03.2008 – 31.03.2008
Andrew	Apple	1	40	0	24%	10.03.2008 –

						20.03.2008
Michael	Pie	1	80	0	47%	10.03.2008 – 20.03.2008

Report

And here you can see how can look the report of these data.

Member Load Report by Projects

Member Load Report by Tasks