Analysis

Project 1

Project Plan

Write Plan:PM1
Review Plan
Preparation for Review:PE1,RE1,SE1,TE1
Review Meeting: PE1,RE1,SE1,TE1,PM1
Rework:PM1

Requirement

Write Requirements:RE1,RE4,RE13,RE15
Write Use Case Model: RE1,RE4,RE13,RE15
Review Requirement/Use Case Model
Preparation For Review: :DE1,PE1,SE1,TE1
Review Meeting:DE1,PE1,SE1,TE1,RE1
Rework:RE4

Analysis Document

Write Analysis Document:SE1,SE2,SE5
Review Analysis Documents
Preparation for Analysis Documents:DE1,PE1,RE1,TE1
Review Meeting: DE1,PE1,RE1,TE1,SE1
Rework:SE1,SE2

Design Document

Write DD: SE1,SE2,SE5
Review DD
Preparaton for DD:DE1,PE1,RE1,TE1
Review Meeting: DE1,PE1,RE1,TE1,SE1
Rework:SE1

Coding and Unit Testing

Write Code:PE1,PE4,PE6,PE22,PE37,PE43
Unit Testing
Prepare/Execute Test Case:TE1,TE25,TE34,TE49,TE51
Fix Found Defects: PE1,PE4,PE6,PE18,PE22,PE37,PE43
Test Fixed Defects: PE1,PE4,PE6,PE22,PE37,PE43
Code Inspection
Preparation for Code Inspection:PE18,PM1,RE1,SE1
Code Inspection Meeting: PE18,PM1,RE1,SE1,PE1
Rework:PE1,RE1,SE1,SE2,SE5,SE8

Testing

Write Test Plan (TP):TE6,TE19,TE25,TE51
Review TP
Preparation for TP:DE1,PE78,RE1,SE1
Review TP Meeting: PE1,PM1,RE1,SE1,TE6
Rework:TE6,TE19,TE25
Execute TP(test cases): TE1,TE25,TE34,TE49,TE51
Fix Found Defects: PE22,PE37,PE43,PE78
Test Fixed Defects:TE1,TE6,TE19,TE25

Documenation

User Documentation:DE36,DE37,DE42,DE43,DE46
Review UD
Preparation for UD:RE4,SE12,TE1,PE18
Review UD Meeting:DE36,PE18,PM1,RE4,SE12
Rework:DE36,DE42,DE43,DE46

Project 2

Project Plan

Write Plan:PM7
Review Plan
Preparation for Review:PE4,RE4,SE2,TE6
Review Meeting: PE4,RE4,SE2,TE6,PM7
Rework:PM7

Requirement

Write Requirements:RE17,RE32
Review Requirement/Use Case Model
Preparation For Review: :PE4,PE6,SE8,TE49
Review Meeting: PE4,PE6,SE8,TE49,RE17
Rework:RE17

Lab and Environment Setup

Hardware
Install Server: SE1,SE2,SE5
Install Clients: SE8,SE12,SE13,SE47
Software
Install Development Tools: SE8,SE12,SE13,SE47
Install Testing Tool: SE8,SE12,SE13,SE47

Analysis/Design Document

Write DD:SE8,SE12,SE13, SE47
Review DD
Preparation for DD: DE43,PE22,RE17,TE34

Review Meeting: DE43,PE22,RE17,TE34,SE12
Rework:SE13,SE47

Coding and Unit Test
Write Code:PE1,PE4,PE6,PE22,PE37,PE43
Unit Testing
Prepare/Execute Test CaseS:PE1,PE4,PE6,PE22,PE37
Fix Found Defects: PE4,PE6,PE22,PE37,PE43
Test Fixed Defects: PE4,PE6,PE22,PE37,PE43
Code Inspection
Preparation for Code Inspection:PE18,PM7,RE4,SE12
Code Inspection Meeting: PE18,PM7,RE4,SE12,PE1
Rework:PE1,PE4,PE6

Testing
Write Test Plan (TP):TE6,TE19,TE25,TE51
Review TP
Preparation for TP:DE1,PE78,RE1,SE1
Review TP Meeting: PE1,PM1,RE1,SE1,TE6
Rework:TE6,TE19,TE25
Execute TP(test cases): TE1,TE6,TE19,TE25,TE34,TE49,TE1
Fix Found Defects: PE22,PE37,PE43,PE78

Documenation
User Documentation:DE36,DE37,DE42,DE43,DE46
Review UD
Preparation for UD:PE18, RE4, SE8,TE49
Review UD Meeting:DE36, PE18, RE4, SE8,TE49
Rework:DE36,DE37,DE42

Project 3
Project Plan
Write plan: PM9
Preparation for review: PE22, RE15, RE17, TE25
Review meeting: PE22, RE15, RE17, TE25, PM9
Rework: PM9

Documented Software Development Process Updates
Process change
Preparation for review
Review meeting
Rework

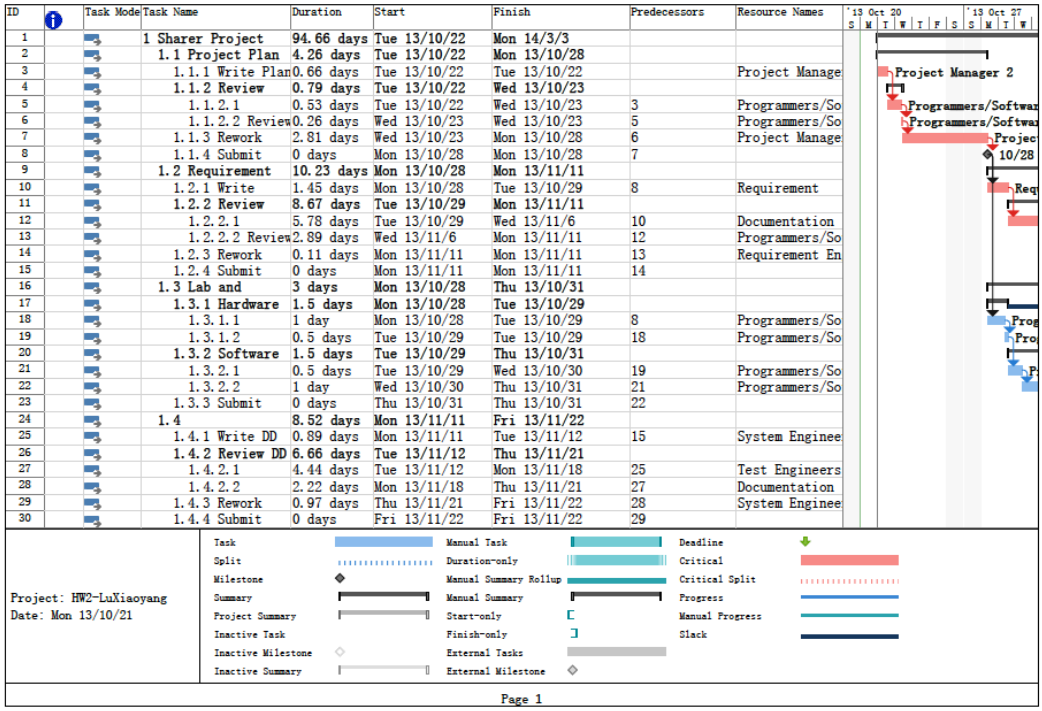
Question 7

The earliest finish date for project 3 if it scheduled to start on 10/28/13 is 3/12/14.

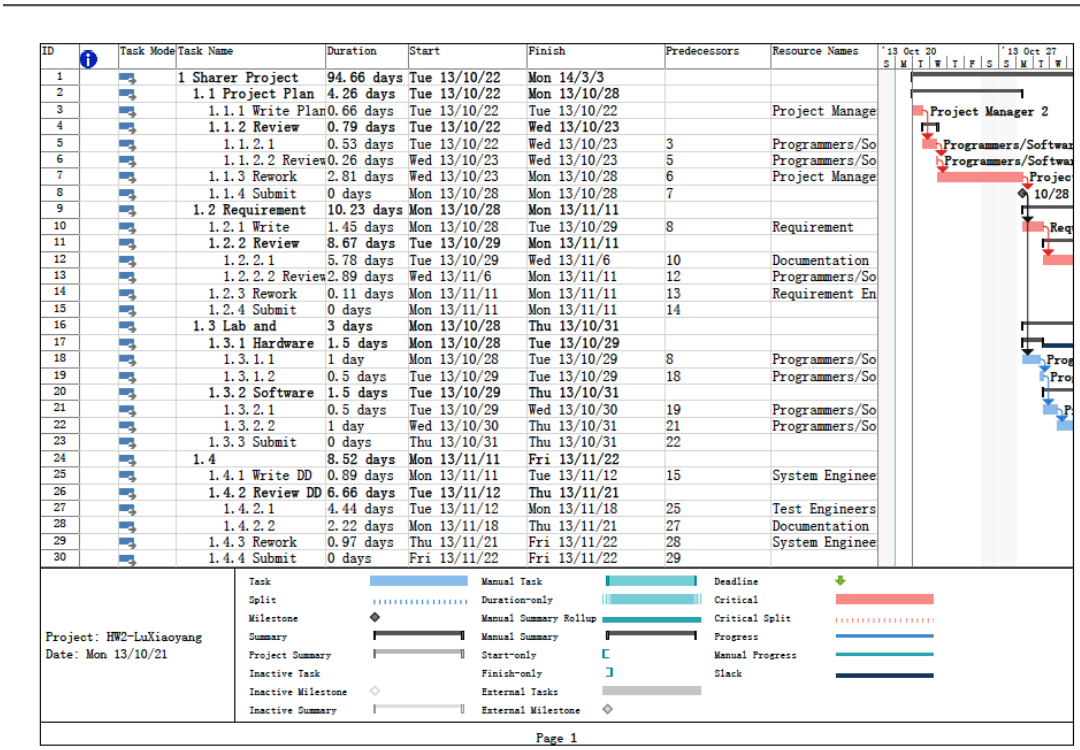
Question 8

In my opinion the project cannot complete 3 months after it starts. The work size of project 3 is similar to project 1, without other projects sharing the resources; the project 1 cannot finish 3 months after its starts date. So with sharing resources with two other projects, there is little probability of project 3 to finish 3 months after it started. And in my project, when I met conflicts I delayed the tasks time for project 3, but I do not think I delayed too much time. So even project 3 use some same resources with project 1 or project 2 at the same time, and it may uses 30% or 40% of the resource, the finish date would be similar with that no sharing resources. In conclusion, in my view, project 3 cannot be completed 3 months after it starts.

Question10

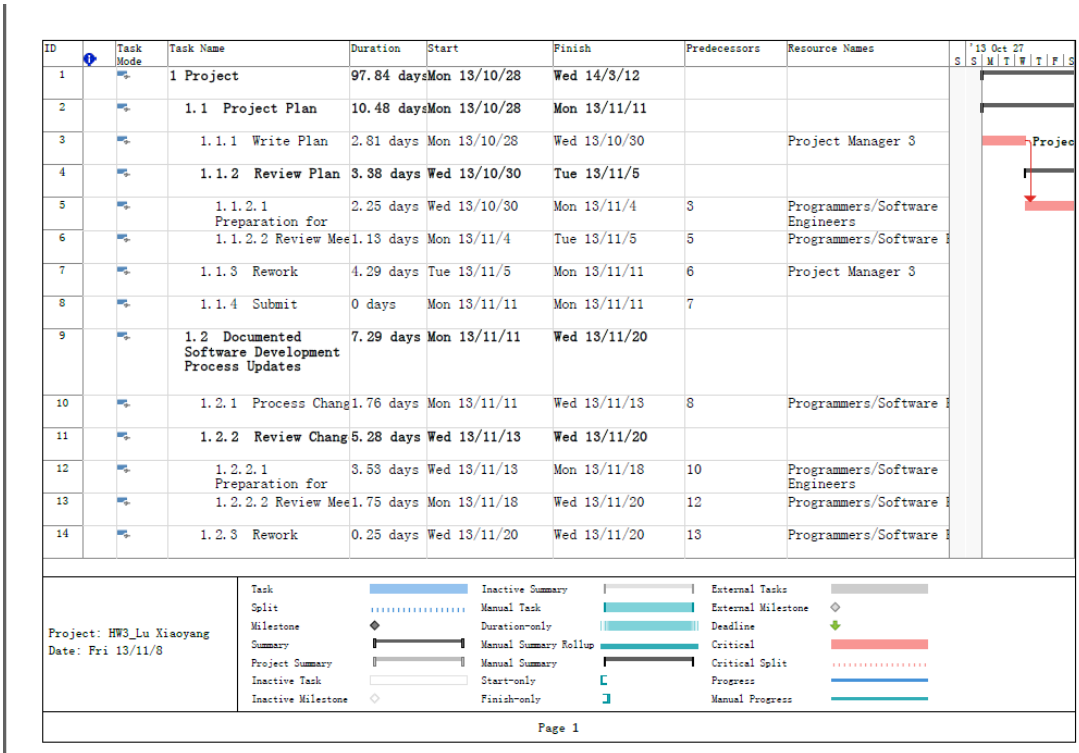


ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		1 Sharer Project	94.66 days	Tue 13/10/22	Mon 14/3/3		
2		1.1 Project Plan	4.26 days	Tue 13/10/22	Mon 13/10/28		
3		1.1.1 Write Plan	0.66 days	Tue 13/10/22	Tue 13/10/22		Project Manage
4		1.1.2 Review	0.79 days	Tue 13/10/22	Wed 13/10/23		
5		1.1.2.1	0.53 days	Tue 13/10/22	Wed 13/10/23	3	Programmers/So
6		1.1.2.2 Review	0.26 days	Wed 13/10/23	Wed 13/10/23	5	Programmers/So
7		1.1.3 Rework	2.81 days	Wed 13/10/23	Mon 13/10/28	6	Project Manage
8		1.1.4 Submit	0 days	Mon 13/10/28	Mon 13/10/28	7	
9		1.2 Requirement	10.23 days	Mon 13/10/28	Mon 13/11/11		
10		1.2.1 Write	1.45 days	Mon 13/10/28	Tue 13/10/29	8	Requirement
11		1.2.2 Review	8.67 days	Tue 13/10/29	Mon 13/11/11		
12		1.2.2.1	5.78 days	Tue 13/10/29	Wed 13/11/6	10	Documentation
13		1.2.2.2 Review	2.89 days	Wed 13/11/6	Mon 13/11/11	12	Programmers/So
14		1.2.3 Rework	0.11 days	Mon 13/11/11	Mon 13/11/11	13	Requirement En
15		1.2.4 Submit	0 days	Mon 13/11/11	Mon 13/11/11	14	
16		1.3 Lab and	3 days	Mon 13/10/28	Thu 13/10/31		
17		1.3.1 Hardware	1.5 days	Mon 13/10/28	Tue 13/10/29		
18		1.3.1.1	1 day	Mon 13/10/28	Tue 13/10/29	8	Programmers/So
19		1.3.1.2	0.5 days	Tue 13/10/29	Tue 13/10/29	18	Programmers/So
20		1.3.2 Software	1.5 days	Tue 13/10/29	Thu 13/10/31		
21		1.3.2.1	0.5 days	Tue 13/10/29	Wed 13/10/30	19	Programmers/So
22		1.3.2.2	1 day	Wed 13/10/30	Thu 13/10/31	21	Programmers/So
23		1.3.3 Submit	0 days	Thu 13/10/31	Thu 13/10/31	22	
24		1.4	8.52 days	Mon 13/11/11	Fri 13/11/22		
25		1.4.1 Write DD	0.89 days	Mon 13/11/11	Tue 13/11/12	15	System Enginee
26		1.4.2 Review DD	6.66 days	Tue 13/11/12	Thu 13/11/21		
27		1.4.2.1	4.44 days	Tue 13/11/12	Mon 13/11/18	25	Test Engineers
28		1.4.2.2	2.22 days	Mon 13/11/18	Thu 13/11/21	27	Documentation
29		1.4.3 Rework	0.97 days	Thu 13/11/21	Fri 13/11/22	28	System Enginee
30		1.4.4 Submit	0 days	Fri 13/11/22	Fri 13/11/22	29	



ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		1 Sharer Project	94.66 days	Tue 13/10/22	Mon 14/3/3		
2		1.1 Project Plan	4.26 days	Tue 13/10/22	Mon 13/10/28		
3		1.1.1 Write Plan	0.66 days	Tue 13/10/22	Tue 13/10/22		Project Manage
4		1.1.2 Review	0.79 days	Tue 13/10/22	Wed 13/10/23		
5		1.1.2.1	0.53 days	Tue 13/10/22	Wed 13/10/23	3	Programmers/So
6		1.1.2.2 Review	0.26 days	Wed 13/10/23	Wed 13/10/23	5	Programmers/So
7		1.1.3 Rework	2.81 days	Wed 13/10/23	Mon 13/10/28	6	Project Manage
8		1.1.4 Submit	0 days	Mon 13/10/28	Mon 13/10/28	7	
9		1.2 Requirement	10.23 days	Mon 13/10/28	Mon 13/11/11		
10		1.2.1 Write	1.45 days	Mon 13/10/28	Tue 13/10/29	8	Requirement
11		1.2.2 Review	8.67 days	Tue 13/10/29	Mon 13/11/11		
12		1.2.2.1	5.78 days	Tue 13/10/29	Wed 13/11/6	10	Documentation
13		1.2.2.2 Review	2.89 days	Wed 13/11/6	Mon 13/11/11	12	Programmers/So
14		1.2.3 Rework	0.11 days	Mon 13/11/11	Mon 13/11/11	13	Requirement En
15		1.2.4 Submit	0 days	Mon 13/11/11	Mon 13/11/11	14	
16		1.3 Lab and	3 days	Mon 13/10/28	Thu 13/10/31		
17		1.3.1 Hardware	1.5 days	Mon 13/10/28	Tue 13/10/29		
18		1.3.1.1	1 day	Mon 13/10/28	Tue 13/10/29	8	Programmers/So
19		1.3.1.2	0.5 days	Tue 13/10/29	Tue 13/10/29	18	Programmers/So
20		1.3.2 Software	1.5 days	Tue 13/10/29	Thu 13/10/31		
21		1.3.2.1	0.5 days	Tue 13/10/29	Wed 13/10/30	19	Programmers/So
22		1.3.2.2	1 day	Wed 13/10/30	Thu 13/10/31	21	Programmers/So
23		1.3.3 Submit	0 days	Thu 13/10/31	Thu 13/10/31	22	
24		1.4	8.52 days	Mon 13/11/11	Fri 13/11/22		
25		1.4.1 Write DD	0.89 days	Mon 13/11/11	Tue 13/11/12	15	System Enginee
26		1.4.2 Review DD	6.66 days	Tue 13/11/12	Thu 13/11/21		
27		1.4.2.1	4.44 days	Tue 13/11/12	Mon 13/11/18	25	Test Engineers
28		1.4.2.2	2.22 days	Mon 13/11/18	Thu 13/11/21	27	Documentation
29		1.4.3 Rework	0.97 days	Thu 13/11/21	Fri 13/11/22	28	System Enginee
30		1.4.4 Submit	0 days	Fri 13/11/22	Fri 13/11/22	29	

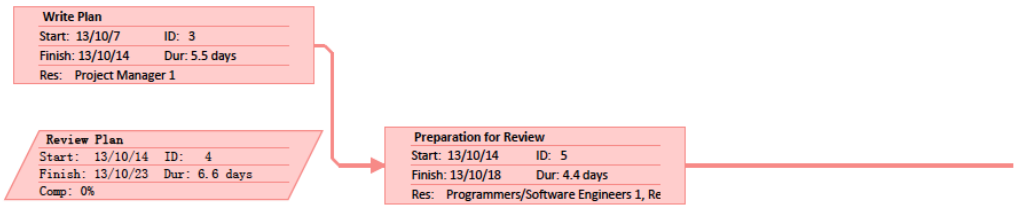
Page 1

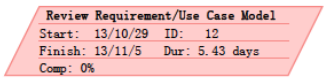


ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1		1 Project	97.84 days	Mon 13/10/28	Wed 14/3/12		
2		1.1 Project Plan	10.48 days	Mon 13/10/28	Mon 13/11/11		
3		1.1.1 Write Plan	2.81 days	Mon 13/10/28	Wed 13/10/30		Project Manager 3
4		1.1.2 Review Plan	3.38 days	Wed 13/10/30	Tue 13/11/5		
5		1.1.2.1 Preparation for	2.25 days	Wed 13/10/30	Mon 13/11/4	3	Programmers/Software Engineers
6		1.1.2.2 Review Mee	1.13 days	Mon 13/11/4	Tue 13/11/5	5	Programmers/Software
7		1.1.3 Rework	4.29 days	Tue 13/11/5	Mon 13/11/11	6	Project Manager 3
8		1.1.4 Submit	0 days	Mon 13/11/11	Mon 13/11/11	7	
9		1.2 Documented Software Development Process Updates	7.29 days	Mon 13/11/11	Wed 13/11/20		
10		1.2.1 Process Chang	1.76 days	Mon 13/11/11	Wed 13/11/13	8	Programmers/Software
11		1.2.2 Review Chang	5.28 days	Wed 13/11/13	Wed 13/11/20		
12		1.2.2.1 Preparation for	3.53 days	Wed 13/11/13	Mon 13/11/18	10	Programmers/Software Engineers
13		1.2.2.2 Review Mee	1.75 days	Mon 13/11/18	Wed 13/11/20	12	Programmers/Software
14		1.2.3 Rework	0.25 days	Wed 13/11/20	Wed 13/11/20	13	Programmers/Software

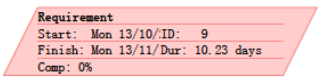
Page 1

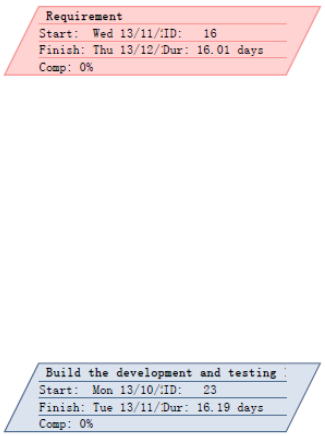
Here are some examples of WBS for project 1,2,3. In the picture we could see each task directly and besides the tasks, it show a colored time line said the start and finish time of each task and show the relationships between tasks. At the bottom, it also tells us which color or different lines' meaning. It helps us to know the whole project much better than just looking and the .mpp file. We can use it analysis the whole project more quickly.


Write Plan
Start: 13/10/7 ID: 3
Finish: 13/10/14 Dur: 5.5 days
Res: Project Manager 1
Review Plan
Start: 13/10/14 ID: 4
Finish: 13/10/23 Dur: 6.6 days
Comp: 0%
Preparation for Review
Start: 13/10/14 ID: 5
Finish: 13/10/18 Dur: 4.4 days
Res: Programmers/Software Engineers 1, Re


Review Requirement/Use Case Model
Start: 13/10/29 ID: 12
Finish: 13/11/5 Dur: 5.43 days
Comp: 0%

Sharer Project
Start: Tue 13/10/ ID: 1
Finish: Mon 14/3/3 Dur: 94.66 days
Comp: 0%
Project Plan
Start: Tue 13/10/ ID: 2
Finish: Mon 13/10/ Dur: 4.26 days
Comp: 0%


Requirement
Start: Mon 13/10/ ID: 9
Finish: Mon 13/11/ Dur: 10.23 days
Comp: 0%



Here are some examples of ND of project 1,2 and 3. We can easily see that different tasks are in different shapes with tow colors, and it also uses lines to connect the relationship with related tasks. In the shape, it has the start and finish time, name, copm of the task as well. So it will help us look at the tasks more visually and we could easily see the relationship between different tasks.

For resource pool utilization of my projects, I all used 100% of each resource at one time. I never use a same resource for 2 or 3 tasks at the same time. And I used 100% of resource except 70% of SE(I did not use SE71, SE89 SE90 in the project).