Ryan Ringer

SE-481

Assignment 1

Part 1

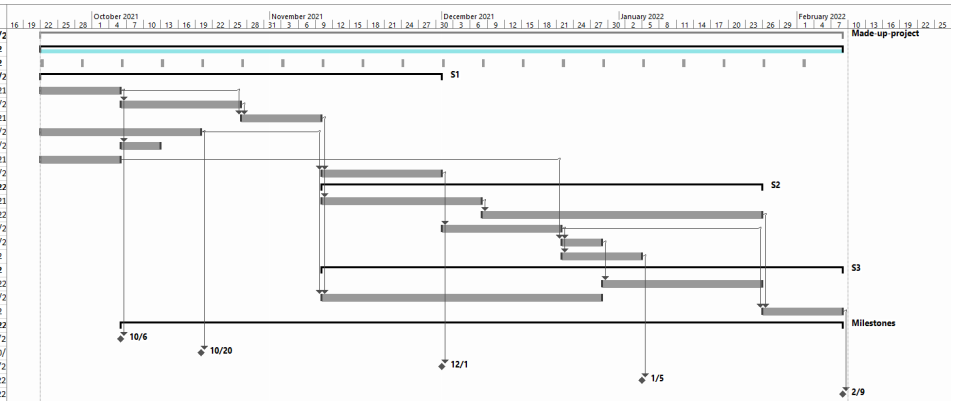
1. According to the paper, what is the main reason that many software projects failed?
   The paper states that the main reason projects fail is due to a lack of calendar time.
2. According to the paper, why are men and months not interchangeable?
   Men and months are not interchangeable because not all projects are partitionable and adding more people doesn't decrease the time needed to complete the task. In some cases, due to training and setup time, adding more men to compensate for more months makes the addition of more men completely unnecessary.
3. Do you think men and months are interchangeable? Why or why not? Feel free to use your own experience to answer this question.
   a. I believe that there are some cases where men and months are interchangeable. However, I think that these cases are only in planning for projects that are partitionable, and that do not have major communication dependencies between subtasks. And this value in using men month estimation ends after resource allocation.
4. According to the paper, which development activity should be given enough time during project scheduling? Why?
   a. Testing. Developers will often expect a minimum number of bugs, and will respectively not schedule enough testing time leading to delays in delivery, which at a stage as late as testing will be very costly
5. Which development activity do you think should be the focus of project scheduling? Why?
   a. I would focus on testing in scheduling for the same reasons stated in the paper. Allowing extra time to test will allow for resolution in any discrepancies between the requirements and the delivered product.
6. Use your own words to explain Brooks' Law.
   a. By adding more people to a job after it has begun, the amount of work increases due to the amount of training and catch-up required to get the new people up to speed. Time which needs to be taken from people already assigned to a project and who know what they're doing, decreasing productivity during training, and ultimately extending the time needed to complete the project, nullifying the addition of more people.

Part 2

KLOC	**FP**
- Fast - Easy - Not good early on - Inaccurate	- Can be made early on - Can use system requirements - Can be skewed by input/output operations - Biased towards data processing systems

Part 3

ID	WBS	Task Mode	Task Name	Duration	Start	Finish
0	**0**		**Made-up-project**	**100 days**	**Wed 9/22/2**	**Wed 2/9/2**
1	**1**		**S0**	**100 days**	**Wed 9/22/2**	**Tue 2/8/22**
2	**1.1**		**T0**	**100 days**	**Wed 9/22/2**	**Tue 2/8/22**
23	**2**		**S1**	**50 days**	**Wed 9/22/2**	**Tue 11/30/2**
24	2.1		T1	10 days	Wed 9/22/2	Tue 10/5/21
25	2.2		T2	15 days	Wed 10/6/2	Tue 10/26/2
26	2.3		T3	10 days	Wed 10/27/	Tue 11/9/21
27	2.4		T4	20 days	Wed 9/22/2	Tue 10/19/2
28	2.5		T5	5 days	Wed 10/6/2	Tue 10/12/2
29	2.6		T6	10 days	Wed 9/22/2	Tue 10/5/21
30	2.7		T7	15 days	Wed 11/10/	Tue 11/30/2
31	**3**		**S2**	**55 days**	**Wed 11/10/**	**Tue 1/25/22**
32	3.1		T8	20 days	Wed 11/10/	Tue 12/7/21
33	3.2		T9	35 days	Wed 12/8/2	Tue 1/25/22
34	3.3		T10	15 days	Wed 12/1/2	Tue 12/21/2
35	3.4		T11	5 days	Wed 12/22/	Tue 12/28/2
36	3.5		T12	10 days	Wed 12/22/	Tue 1/4/22
37	**4**		**S3**	**65 days**	**Wed 11/10/**	**Tue 2/8/22**
38	4.1		T13	20 days	Wed 12/29/	Tue 1/25/22
39	4.2		T14	35 days	Wed 11/10/	Tue 12/28/2
40	4.3		T15	10 days	Wed 1/26/2	Tue 2/8/22
41	**5**		**Milestones**	**90 days**	**Wed 10/6/2**	**Wed 2/9/22**
42	5.1		M1	0 days	Wed 10/6/2	Wed 10/6/2
43	5.2		M2	0 days	Wed 10/20/	Wed 10/20/
44	5.3		M3	0 days	Wed 12/1/2	Wed 12/1/2
45	5.4		M4	0 days	Wed 1/5/22	Wed 1/5/22
46	5.5		M5	0 days	Wed 2/9/22	Wed 2/9/22



Part 4

ID	WBS	Task Name	Start	Finish
0	**0**	**Project Plan**	**Wed 9/1/2**	**Thu 9/25/2**
1	**1**	**Recurring Tasks**	**Wed 9/1/21**	**Thu 9/18/25**
2	**1.1**	**Group Meetings**	**Mon 9/13/2**	**Wed 9/17/2**
213	**1.2**	**Progress Reports**	**Wed 9/1/21**	**Wed 9/17/2**
263	**2**	**YEAR 1: POTENTIAL**	**Thu 9/9/21**	**Thu 9/8/22**
264	2.1	Technology Development	Thu 9/9/21	Thu 6/9/22
265	2.2	Demonstrate/ evaluate potential	Fri 6/10/22	Thu 9/8/22
266	**3**	**YEAR 2: VIABILITY**	**Fri 9/9/22**	**Thu 9/7/23**
267	3.1	Continuing enhancment	Fri 9/9/22	Thu 9/7/23
268	3.2	Demonstrate/ evaluate vivability	Fri 9/9/22	Thu 9/7/23
269	**4**	**YEAR 3: SCOPE**	**Fri 9/8/23**	**Thu 9/12/24**
270	4.1	Continuing enhancment	Fri 9/8/23	Thu 9/12/24
271	4.2	Develop integration technology	Fri 9/8/23	Thu 3/7/24
272	4.3	Integration and assessment	Fri 3/8/24	Thu 9/12/24
273	**5**	**YEAR 4: DEPTH**	**Fri 9/13/24**	**Thu 9/18/25**
274	5.1	Continuing enhancment	Fri 9/13/24	Thu 9/18/25
275	5.2	Deepen support	Fri 9/13/24	Thu 3/13/25
276	5.3	Support demos and evals	Fri 3/14/25	Thu 9/18/25
277	**6**	**Milestones**	**Fri 9/9/22**	**Thu 9/25/25**
278	6.1	System Development Plan (SDP) 1	Fri 9/9/22	Fri 9/9/22
279	6.2	System Development Plan (SDP) 2	Fri 9/8/23	Fri 9/8/23
280	6.3	System Documentation (SD) 1	Fri 9/13/24	Fri 9/13/24
281	6.4	System Documentation (SD) 2	Thu 9/25/25	Thu 9/25/25
282	6.5	Final Report	Thu 9/25/25	Thu 9/25/25