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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.

1. 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.

1. Do you think men and months are interchangeable? Why or why not? Feel free to use your own experience to answer this question.
   1. 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.
2. According to the paper, which development activity should be given enough time during project scheduling? Why?
   1. 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
3. Which development activity do you think should be the focus of project scheduling? Why?
   1. 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.
4. Use your own words to explain Brooks’ Law.
   1. 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

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| --- | --- |
| **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

A picture containing Excel

Description automatically generated

Part 4

Graphical user interface, application

Description automatically generated