Estimation Accuracy

Individual credit task 64C

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Tutorial: Tuesday 12:30 Hawthorn EN310

Selected backlog item

No.	Item	Dependencies	Business Value (1 least – 10 most)	Release Schedule (Sprint 1 | 2)
F1	Add a new member (remake in PHP)	-	10	Sprint 2

Evidence of completion of backlog item

Day 2 (3/5/22)

Backlog item F1 for sprint one was completed in one day, on Day two of the second sprint in a 4 hour period between two developers. However, it was never confirmed and finalised by the project manager and moved to the done column of the Trello board but was still completed coding and developing. It simply needed to be documented as done which was not done by the project manager.

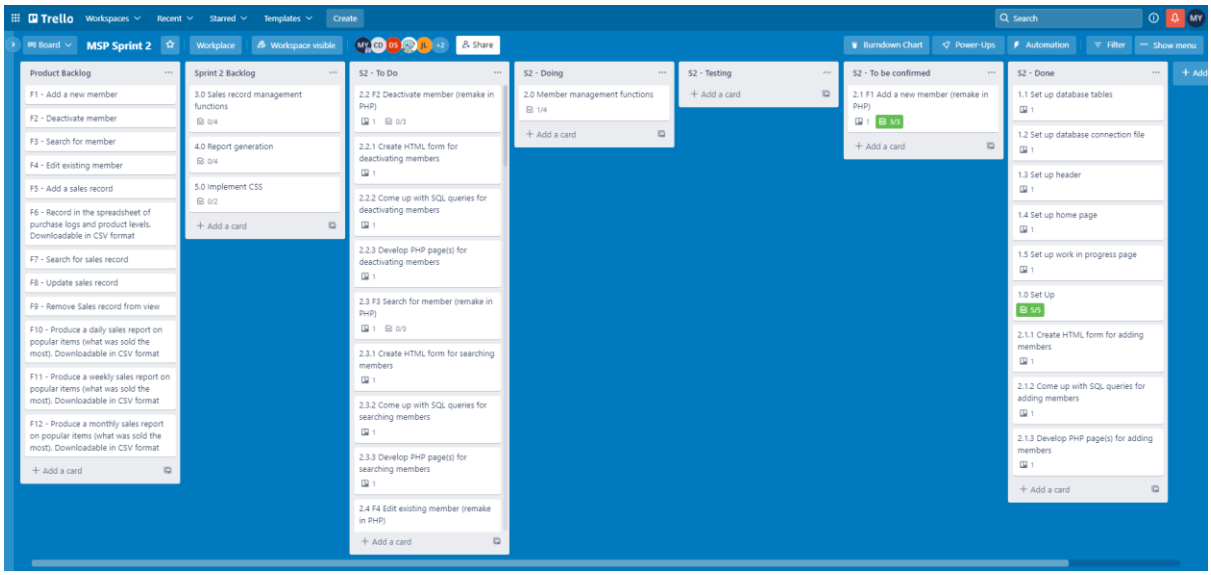

Figure 1

Evidence of estimation by size comparison VS Measured completion time

Estimation by size comparison	Measured time
30 minutes 10%+ = 33 minutes 10% - = 27 minutes	Day 2 4 hours total 2 developers 2 hours total

Margin of error

Estimation by size comparison
% error = 30 - 240 / 240 x 100 = -87.5 %

Reflection

As seen in the accuracy analysis it is demonstrated the measured effort of 240 minutes which is divided between 2 developers,120 minutes each. Therefore the effort estimation doesn't fall into the 10% estimation range, as the estimated time using size comparison is 30 minutes approx. which has a difference of 210 minutes from the measured time needed to complete the task. Therefore, this gives a significantly large margin of error of -87.5%.

Consequently, this large margin of error may be accounted for due to when doing estimation it was not taken into consideration as a phase of development. Testing took 30 minutes for each developer working to validate the PHP code, hence 60 minutes in total to do the testing. This was in addition to another 60 minutes each developer spent on coding the PHP for the previously mentioned backlog item F1 from sprint 2. In addition to this, another reason why the accuracy of estimation had a large margin of error was due to not including the time needed for developers to redo some of the design diagrams as they didn't correspond to the PHP code, such as the sequence diagram was not useable and a new block diagram had to be created to accommodate the PHP. Henceforth this took another 60 minutes, 30 minutes for each of the developers to complete before starting on implementing the PHP code. For reference, this backlog item was all completed and waiting to be confirmed by the project manager on Day 2. The development and testing in total were completed in a 4-hour time block, split

between two developers working two hours each, as stated before. This is depicted in *figure 1* showing the Sprint 2 Trello board of having backlog task F1 Add new member (remake in PHP), with additionally a green block with 3/3 ticks. Hence demonstrating that all sub-task of HTML, PHP and SQL has been completed as well.

To improve the estimation outline that testing is a phase in the development of the backlog item. As well tests are not easily completed errors will emerge and have to be fixed and re-test until passing. Also, it has to be noted that maybe diagrams used in sprint 1 won't work out if different languages. Thus to save time during development have a time planned out to revisit any reused design documentation for the software so the developers can gauge what can be reused. Therefore time doesn't have to be wasted during the development to redo and try and model the new PHP code to the java design diagrams.

Note: I saw your feedback for the 63C and now I realise I mistakenly interpreted the task brief to say that I should include both estimation methods of using the estimation formula and the estimation by size comparison or analogy and using the Delphi technique or planning poker. Henceforth in 64C, I am going to reflect on the estimation by size method which I did in 63C and compare it to the measured value. As that is what is stated in the document for 63C as one of the options of estimation method, to use.

Image citation:

Services, I., 2022. Professional Estimating Services | Industrial Engineering | Vista Projects. [online] Vista Projects. Available at: <https://www.vistaprojects.com/engineering/professional-estimating/> [Accessed 9 May 2022].