Retrospective Report (RR): Group 17 ETSF01

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Deviations from original plan

"I've found from past experiences that the tighter your plan, the more likely you are to run into something unpredictable." - Angus MacGyver

In other words, it is good to have a project plan but following it even when it does not make sense because of unforeseen circumstances would create obstacles.

Role assignment

Whilst the role assignment looked good on paper unforeseen circumstances surrounding the project and work not related to the project made people available at different times for different tasks.

The roles of User and User representative were those which were affected the most and in the end did not follow the project plan. But this did not cause any particular problems as we all were flexible in taking roles as needed.

Effort estimation

As the course material said 45 hours per person and we were six people we multiplied 45 by 6 to get to our project total estimation of 270 hours. This is of course not the way it would have been done in a real working environment. What happened was that we ended up with far more time than we needed and completed all project tasks within the planned time.

However regarding the actual programming tasks within TV1 and TV2 we underestimated more than a few tasks. This did not affect the overall estimation of TV1 and TV2 as we overestimated other programming tasks. Also several new tasks was added under the iteration as we realized their needs.

Looking at Burndown Chart 1 we can see that achieved the planned tasks in time. Burndown CHart 2 is more interesting since we here can see that we were not on schedule in the middle of the iteration but we recovered in the end.

Summary of things that went well and what did not

Went well

- We completed all project tasks fairly easy and in time.
- Our program works perfectly.
- Every team member felt that they learned something valuable.
- A text based UI worked very well for the task.
- We had a good contact with our advisor and out partner group.
- We successfully applied pair-programming techniques developing the software.
- Team spirit was on the top!
- We applied knowledge from the course in practice (CoCoMo)
- We learned how to read and create burndown charts.

What did not

- Understanding the requirements FR01/FR02 was very difficult.
- Implementing FR01/FR02 was a pain since we misunderstood them first and this caused us to change our existing implementation.

- QR03 was impossible for us to achieve.
- At first it was hard to find what similarity function we should use.
- Planning poker did not always work so well.
- Standing up during standup meeting, we always sat down.

What the group would have done differently next time

As our biggest problems were FR01/FR02 and QR03 we would have spent more time trying to understand these requirements better before beginning the implementation. We could have asked our supervisor more about this in the beginning.

We would have tried to estimate the full project time in a different way. Maybe with CoCoMo.

Characterisation of the project with COCOMO cost drivers

Cost driver (attribute)	Short cost driver	Rating
Required software reliability	RELY	Low
Size of application database	DATA	Low
Complexity of the product	CPLX	Low
Run-time performance constraints	TIME	Nominal
Memory constraints	STOR	Nominal
Volatility of the virtual machine environment	VIRT	Low
Required turnabout time	TURN	Low
Analyst capability	ACAP	Nominal
Applications experience	AEXP	Nominal
Software engineer capability	PCAP	High
Virtual machine experience	VEXP	Nominal
Programming language experience	LEXP	High
Application of software engineering methods	MODP	High
Use of software tools	TOOL	High
Required development schedule	SCED	Nominal
Lines of code	LOC	0.78 KLOC
Actual effort	ACT_EFFORT	0.39 person months

Comparison of actual effort to effort prediction

Task	Estimation	Reality	Percentage (Reality/ Estimation)
TV1	62 hours	22 hours	35%
TV2	62 hours	44 hours	71%
TOTAL	124 hours	66 hours	53%

Estimation by analogy using our software estimated 3.31 person months or 556.22 person hours. The actual effort was 0.39 person months or 66 person hours.

The large difference is most likely due to the small size of our project compared to the projects in the database. Larger projects usually have more people involved which could lead to more time consuming tasks.