Group I

RETROSPECTIVE

Stories

- Number of total stories: 8
- Number of stories committed in sprint: 5
- Number of stories implemented: 4

Points

- Number of total points: 27
- Number of points committed in sprint: 17
- Number of points implemented: 16

Tasks

- Hours per task: 2 hours on average

Number of tasks per story

- Story #1: 9 tasks
- Story #2: 5 tasks
- Story #3: 3 tasks
- Story #4: 4 tasks

Estimated Hours

- Story #1: 23 hours
- Story #2: 9 hours
- Story #3: 1.5 hours
- Story #4: 2 hours
- Story #5: 1.5 hours

- Overall: 37 hours (~7.5 person hours)

Actual Hours

- Story #1: 24 hours
- Story #2: 12 hours
- Story #3: 2 hours
- Story #4: 2 hours
- Story #5: /

- Overall: 40 hours (8 person hours)

Task estimation error ratio

- Actual = 21 tasks, Estimated = 24 tasks
- Estimated hours = 37
- Actual hours = 40
- EER for tasks = 21/24 = 0.87
- EER for hours = 40/37 = 1.081

Size-Time spent ratio

- We divided the number of points in each pair of stories, this is ratio R1
- Then, we divided the number of actual hours for each pair of stories, this is ratio R2
- Finally we divided R2 by R1, the result obtained is fine if it's near to 1 (the weight gap between stories of different points sc correct), otherwise it means we gave a wrong weight, in terms of point, to a certain story with respect to the others

Size-Time spent ratio

Points	1	2	5	8
1	1	0.5	1.2	1.25
2	0.5	1	2.4	2.5
5	1.2	2.4	1	1.04
8	1.25	2.5	1.04	1

Size-Time spent ratio

- We correctly selected 8 and 5 points for story #1 and #2 since the ratio of work hours is pretty similar to the ratio between 8 and 5.
- We wrognly gave 2 points to the story #4, in fact it required the same amount of work of the story #3 that was estimated 1 point. For this reason also the ratio with stories of 8 and 5 points is far from the correct value of 1.

Size-Time estimated ratio

Points	1	2	5	8
1	1	0.66	1.2	1.66
2	0.66	1	1.8	2.5
5	1.2	1.8	1	1.38
8	1.66	2.5	1.38	1

Size-Time estimated ratio

- We could have realized that 2 points were too much for the story #4 also by the estimated hours, in fact the ratio between 5 points and 2 points is different from the ratio between the estimated hours for that stories.

Error in estimation

- We wrongly estimated the story #5, thinking that we could have managed it in a short time (only 1.5 hours). During the development of other stories, indeed, we realized that the story #5 would have taken much more time than expected due to implementation problems.
- We also wrongly estimated the story #4 weight because we initially thougth it would have been more difficult than what it actually was.

Definition of Done

- Unit Test (JUnit) ✓
- Code review ✓
- VCS code (GitHub) ✓
- E2E Test (EyeAutomate) ✓

Learnt Lessons

- It's quite difficult to manage the work to do day by day during the sprint.
- It's almost unfeasible to perform a precise estimation.
- Dividing the work according to teams skills helps in achieving goals efficiently.
- We have understood our pace and the amount of tasks we can commit on average during a sprint

Improvements

- Estimation of stories to commit, trying to avoid underestimation.
- Pay more attention in recording time spent on the project work.
- Show the queue of served clients in the monitor window, highlighting who is the currently served one for each counter.

We are proud of…

Our capabilities of working as a team, in particular to adapt to new tools quite quickly (e.g. Swing and WindowBuilder plugin)