Pattern Recognition - Lessons Learned

PR Project Report

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1 Report

1.1 How we organized our group

Three group members who lived in the same location inspired us to gather together and try to solve given tasks. We were sitting in a uni building and discussing implementation details. Afterwards each member went on to with their own piece of functionality. The pieces were put together as soon as possible.

1.2 What was our approach

Our approach was the following for all the tasks: understand the task as a whole process, with its inputs and outputs. Analyze, approximately, how many steps or 'milestones' are needed for the task to be finished. Once the steps are identified, think about how we could split them, in order to make it more efficient for several team members to work in parallel. Them we actually split the task and say what could be a best input and an output for each person's functionality. Finally, everybody contributes into development and integrates their solution to the whole.

1.3 What worked, what did not work

1.3.1 Task 1

We had a very big problem trying to launch suggested framework DeepDiva on different machines. A lot of time was lost debugging and trying to find out how it actually worked instead of focusing on essential task.

1.3.2 Task 2

All worked seamlessly except final output, which definition was a bit opaque. We did not really know the expected output, so we had some discussions about it.

1.3.3 Task 3

Because we were doing the task on recognizing signatures, we could adapt some code from the previous task, therefore solving it faster.

1.3.4 General

What definitely worked:

- splitting the task into a smaller ones
- recognition of amount of work to be done
- good code contribution
- personal contribution of each person is more or less equal

What could have been improved:

- time expectations of each individual task
- writing a small overview of what to be expected in the end of each individual task
- practice in paralleling tasks between team members more efficiently
- sometimes it was hard to imagine what the teaching stuff expected from us in the end of the group task

1.4 What is special about our solution

Our solutions are written in a modular style so that each team member could bring approximately equal contribution of work. Each part of the group tasks is separable and can surely exist as a standalone function or method and be included in further libraries or modules.

2 General Thoughts

The Group exercises were at first challenging. They do not guide you with the process 'do this and then that', rather suggest solving the task the way you see best. That is very applicable in real life, when one has to produce a solution from scratch. Aside from being challenging it also arises interest to try something which you haven't done before.

From the other side, sometimes it was difficult to realize 'what exactly' we needed to produce and therefore mismatched with the expectations of the assistants.