Reflective Essay Tinlab Machine Learning

A. de Ridder
0937558

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1   Introduction

I am going to talk about my personal progression regarding the 5 activities: manage, analyze, design, advise and realize. This tinlab focuses primarily on reporting and research.

2   Reflection

As a student, participated in this course, I started without any knowledge about Machine Learning. My primary focus was gaining more experience in this field, this experience came from the following classes, book clubs and doing personal research. My personal report contains a summary of all the information learned about Machine Learning in this class. After I understood basis principles, I started looking for information about neural networks. Since this is specific information for our group assignment, Thomas and I have chosen to conduct a preliminary investigation, see the group report. After we finished this investigation, we can start designing some neural networks.

In this project, designing didnt take long, after we choose Encog (Java) as a library. The given datasets gave us little choice for the design. It was difficult for us to know what the best institutions would be without practical knowledge. That is why we started realizing as quickly as possible. I dont regret that we started realizing and testing early in the project. We gained practical experience and finished the product, something that probably wasnt achieved if we took more time designing.

This project contains no stakeholders and therefore no advice needs to be given. I cant reflect on this skill.

Advising and realizing is one of the skills we needed to achieve the final product, a working, well-presented controller. To achieve this result, many neural networks have been trained and tested. This is one of the first projects were the main focus is on testing. We have set up the test plan too late in the project, so we have not efficiently distributed our time. After making our test plan, the quality of the trained neural networks increased. Mostly due to documenting the scoreboard data from Torcs. The test plan was in our planning, but we didnt expect that we could create and train a neural network so early in the project. After the test plan was written, we started testing and choosing a network that meets all the predefined requirements. I am happy with the end result.

We have managed the project using git and scrum techniques. Scrum was the best choice for this project because we both had to do some other school projects. Using daily meetings we could see the progress we both made and help each other if someone was in need of help.