

Sprint Reflection 6

Context Project: Health Informatics

Group: HI4

| User Story | Task | Task Assigned To | Estimated Effort per Task | Actual effort per task | Done (yes/no) | Notes |
|--|--|--|---|--|--|---|
| The user wants to use the tool to answer questions about the behavior of patients | <p>Extend the language construct for the following questions specifically, make sure that they can be answered and include an example script in the user manual:</p> <ul style="list-style-type: none"> - What time of the day and on what day do people measure themselves? - What time of the day and on what day do they enter the measurement? - What is the difference in time between measurement device and entering data in Mijnnierinzicht? - Is there a difference between StatSensor measurement and what patients enter into Mijnnierinzicht - How often do patients measure themselves before they enter data into Mijnnierinzicht? - If a patient did measure multiple times, what measure does he/she eventually enter into Mijnnierinzicht? - Do patient follow up advice given by Mijnnierinzicht? - How well do patients follow up advice of Mijnnierinzicht to re-measure again? - Is the value of creatine, blood pressure, HR effecting the patient's measurement routine? | <p>Sven</p> <p>Remi</p> <p>Hans & Sven</p> <p>Elvan</p> <p>Matthijs</p> <p>Remi</p> <p>Hans</p> <p>Elvan</p> <p>Sven</p> | <p>2 Hours</p> <p>5 Hours</p> <p>3 Hours p.p.</p> <p>5 Hours</p> <p>4 Hours</p> <p>5 Hours</p> <p>5 Hours</p> <p>4 Hours</p> <p>5 Hours</p> | <p>2 Hours</p> <p>5 Hours</p> <p>3 Hours p.p</p> <p>5 Hours</p> <p>4 Hours</p> <p>3 Hours</p> <p>5 Hours</p> <p>4 Hours</p> <p>5 Hours</p> | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>Shown at demo</p> <p>Shown at demo</p> <p>Shown at demo</p> <p></p> <p>Could be analyzed with a difference between second measurement and lastly entered value (in the next sprint)</p> <p>Shown at demo</p> <p>Shown at demo</p> <p>Partially answered by line charts</p> |
| The user wants to visualize the analysed data with line charts to explore the variation of certain data events | <ul style="list-style-type: none"> - Create an option to show line charts of data - Let the user specify the event that needs to be visualized - Implement line charts | <p>Matthijs</p> <p>Matthijs</p> <p>Matthijs</p> | <p>1 Hour</p> <p>1 Hour</p> <p>3 Hours</p> | <p>10 Hours</p> <p>2 Hours</p> <p>1 Hour</p> | <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>Also created other graphs, like boxplot, barchart, stem and leave and more.</p> |
| The user wants to have a timeline that visualises all the events happened during a period of time to explore the data visually | <ul style="list-style-type: none"> - Let the user specify a particular period of time - Create a timeline that shows all the events that happened during that period of time | <p>Sven</p> <p>Sven</p> | <p>2 Hours</p> <p>3 Hours</p> | <p>-</p> <p>-</p> | <p>No</p> <p>No</p> | <p>This will be moved to the next sprint</p> |

| | | | | | | |
|---|---|----------|---------|---------|-----|------------------------------------|
| The user wants to visualize the analysed data with frequency bars to explore the frequency of specific events in the data. | - Create an option to show frequency bars of data | Elvan | 1 Hour | 2 Hours | Yes | |
| | - Let the user specify the event that needs to be visualized | Elvan | 1 Hour | 1 Hours | Yes | |
| | - Implement frequency bars | Elvan | 3 Hours | 3 Hours | Yes | |
| The user wants to be able to do a projection in order to exclude some columns from the output | - Add the option in the GUI to exclude columns | Matthijs | 2 Hours | 2 Hours | Yes | This was not necessary in the end. |
| | - Add this option also to the XML configuration | Matthijs | 2 Hours | - | No | |
| | - Implement the exclusion of columns | Matthijs | 3 Hours | 3 Hours | Yes | |
| The user wants to label particular data events and be able to filter on those so that dependency between events can be identified | - Add labels as a column to the records | Hans | 3 Hours | 4 Hours | Yes | This was not necessary in the end. |
| | - Add this option to the XML configuration | Hans | 2 Hours | - | No | |
| The user wants to view, sort and modify the output in a table | - Improve the table in the GUI to sort and modify the output data | Remi | 5 Hours | 5 Hours | Yes | |
| The client wants an up to date emergent architecture document | - Update the architecture document | Elvan | 2 Hours | 2 Hours | Yes | |

Main problems encountered

Problem 1: New language constructs to answer questions

Description: We needed new language constructs to answer some of the questions.

Reaction: It took some extra time to design and implement those new language constructs. But fortunately we had planned enough time for each question so that we could do that without a lot of time issues.

Problem 2: Failing branches

Description: In the middle of the week a dependency exception was removed from the master branch, causing all other (remote) branches to fail their Travis build.

Reaction: This caused a delay in our planning because first we needed to sort out what caused the problem and then we had to solve it. In the mean time tasks which were building on the programming work of other group members had to be delayed. We decided to continue with tasks which were not dependent on other branches in the mean time. Eventually this was solved quickly and we finished all of our tasks in time.

Adjustments for the next Sprint Plan

This week went really well! We finished all of our tasks and we implemented all the questions that the user wants to answer. Even a few extra visualization forms were added to the program. Since the next sprint is the last one, the planning for the next sprint will be adjusted in the following ways:

- We are going to focus on the functionality that still has to be added or improved. This involves a few questions which are not sufficiently answered yet and the last two forms of visualization (time series and markov chain graphs). We will also perform usability testing with Wenxin Wang for the last time and with five other people (master students).
- We will also spend some time on the user guide: we will add tooltips to the Help tab and we will complete the user manual with script examples on how to perform data transformations.
- There will also be time left for refactoring of the codebase: to improve the code quality and test coverage we will write extra tests (especially on the Import Controller) and fix the issues from PMD, Checkstyle and FindBugs. Long methods should also be shortened to make the code more maintainable.
- We will plan some extra free time this week, so that things that are not planned are taken into consideration.

