**Team Jelly: Deliverable 4**



**CSCC01**

**November 13th, 2016**

**Team 25**

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**Overview of progress from deliverable 3 to deliverable 4**

At the end of deliverable 3 we had completed stories 1-3. Deliverable 4 had the team commence on User story 4. We were able to complete story 4 and 5, and are almost done implementing story 6,7,8. We saw improvements into a more detailed system design showing various components and how they interacted with each other.

Our team did not follow our original plan. While working on our original story 8, displaying changes in planetary systems/planets in an html page and allowing the user to click a button to select if they want that change implemented or not, we noticed that browsers had certain security restrictions which did not allow us to modify files on the local disk. This forced us to rethink our approach. Upon discussing with Hanno, we established that he was satisfied just seeing the changes via pull requests. Thus, the original story 8 was removed and story 9 was renamed story 8. We also had to re-plan as story 7 took substantially more time than expected as we decided to compare two xml files as oppose to two csv files.

The work done during deliverable 4 was different from deliverable 3 as we focused on improving our system design and really trying to design components that were able to work together. The work done in deliverable 3 focused more on connecting to various databases whereas work done in this deliverable focused on working with these datasets obtained.

**System Design**

C:\Users\henry\Downloads\System Components (1).png

**System Design Overview**

1. Extraction: accesses and extracts records from external sources and stores them in XML format in a directory for updated systems
2. Git Component: Syncs and pushes changes from remote repository and local repository
3. Compare: Retrieves files from local repository and updated systems directory , compares differences in systems and modifies XML files in the local repository with the updates
4. Interface: Parses user input commands and runs Extraction, Git, Compare functions accordingly
5. Display: This was a functionality to have visual display of differences in compare stage but was removed because product owner prefers seeing difference via GitHub.

**Product Backlog – Sprint 2,3,4**

At the beginning of sprint 2, we had originally planned to compare using CSV files, but decided to change the comparison to two XML files as oppose to two CSV files. As a result, we saw a dramatic increase in story points needed for story 7 from the original value of 3 story points to 24 story points used.

Note:

-Changed Values represented by (OLD -> NEW)

-1 Story point = 0.5 developer hours = 30 minutes

|  |  |
| --- | --- |
| Priority: P  Story points: SP  Developer Hours: H | User Story |
| **P**: 4  **SP**: 4 -> 12  **H**: 5 | Story #4: As Hanno (an admin), I want to be able to open a file, stored on my computer to see the information of a system that has been updated from another catalogue |
| **P**: 5  **SP**: 10 -> 4  **H**: 2 | Story 5: As Hanno, I want to pull a XML file of the updated system corresponding to the table columns of my repository |
| **P**: 6  **SP**: 4  **H**: 2 | Story #6: As Hanno, I want to push an XML file |
| **P**: 7  **SP**: 3 -> 32  **H**: 12 | Story #7: As Hanno, I want to be able to compare two XML files representing the initial catalogue information versus the updated one. |
| **P**: 8  **SP**: 4 -> 5  **H**: 2.5 | Story 8: As Hanno (an admin), I want to change the units of measurements that updates from other catalogues should be converted into before committing to my repository. |

Our original Story 8 has been removed. While working on our story, we noticed that we would be unable to modify existing files on disk to track changes due to security issues. After consulting with Hano, we established that he wants to see the changes via pull request on git.

|  |  |
| --- | --- |
| Priority: P  Story points: SP  Developer Hours: H | User Story |
| **P**: 8 (Now removed)  **SP**: 8 ->10  **H**: 5 | Story 8(Removed): As Hanno, I want to be able to view the description of a system that has been updated from another catalogue in a table format in an html page |

**Sprint Plan – Sprint Backlog for Sprint 2 ,3 ,4**

We saw significant changes to our Sprint plan. The most notable coming from a removal of a user story. Our original user story 8 was removed as we realized we would be unable to modify existing files on disk using this method due to browser security issues. The second change we observed with our sprint plan was the increase in story points needed for certain stories. Story 7 saw the biggest increase in story points needed as research and development took longer than expected

Dennis -D

Henry – H

Kris Lai – KL

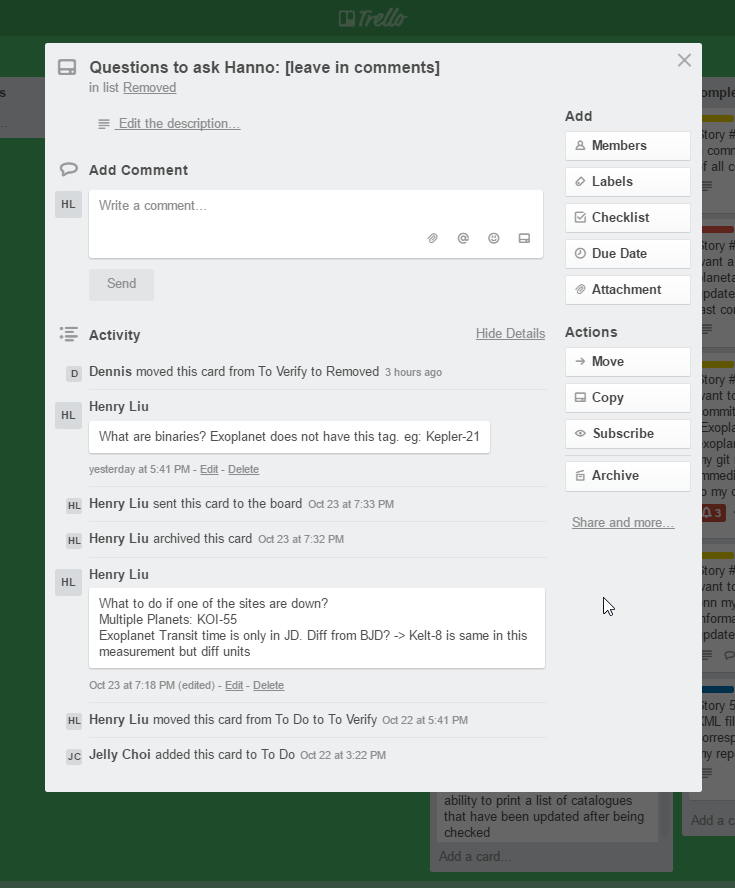
Kelly Mo – KM

Angelina - A

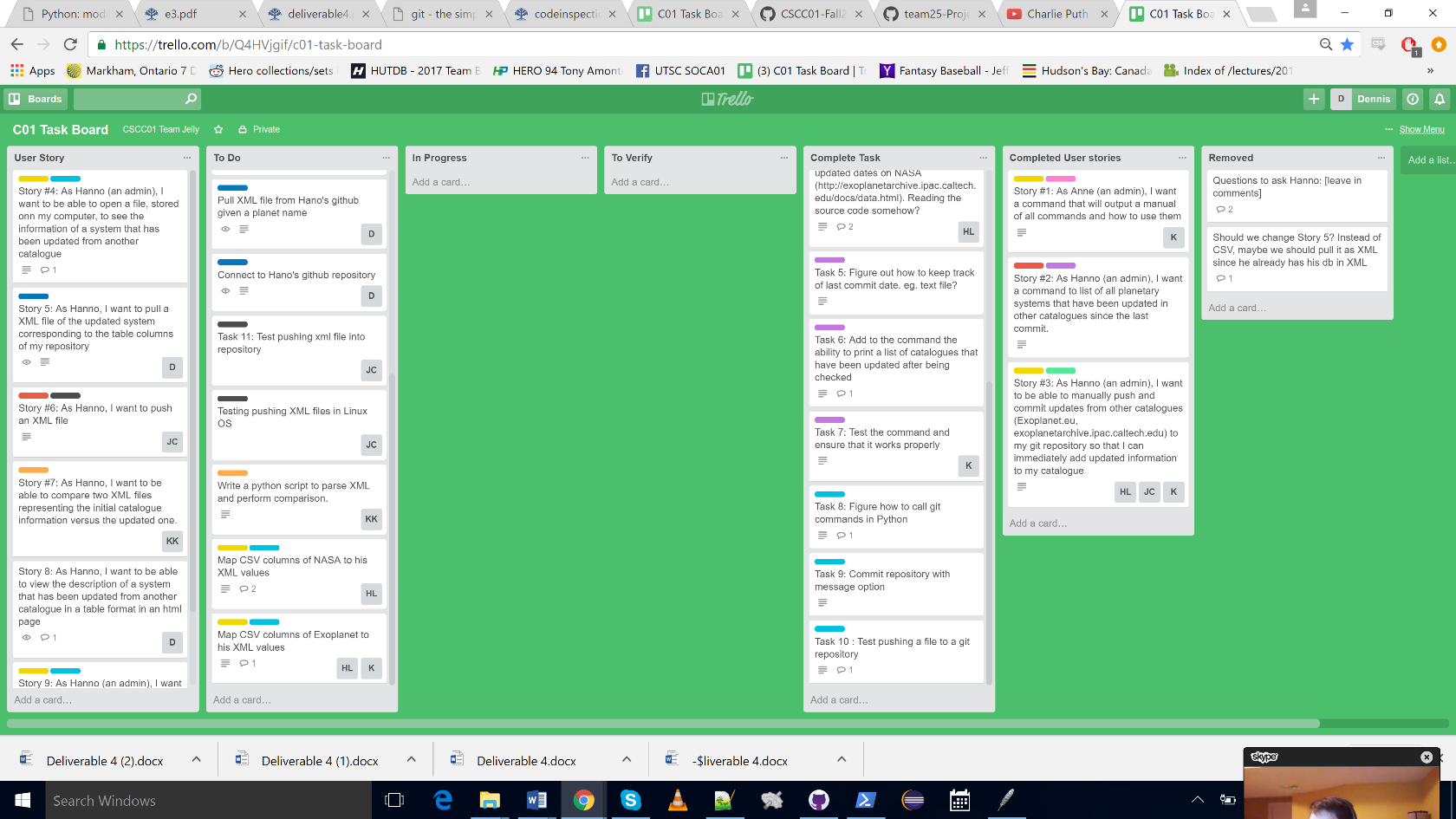
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| User Story | Task | Sprint 2 | Sprint 3 | Sprint 4 |
| Story #4: As Hanno (an admin), I want to be able to open a file, stored onn my computer, to see the information of a system that has been updated from another catalogue | Map CSV columns of NASA to his XML values | H4 |  |  |
| Map CSV columns of Exoplanet to his XML values | KM2 | H4 | H2 |
| Story 5: As Hanno, I want to pull a XML file of the updated system corresponding to the table columns of my repository | Connect to Hano's github repository | D2 |  |  |
| Pull XML file from Hano's github given a planet name | D2 |  |  |
|
|
|
| Story #6: As Hanno, I want to push an XML file | Push xml file into repository | A2 |  |  |
| Testing pushing XML files in Linux OS | A1 |  |  |
| Test pushing all files into master repository. | A1 |  |  |
| Story #7: As Hanno, I want to be able to compare two XML files representing the initial catalogue information versus the updated one. | Write a python script to parse XML and perform comparison. | KL10 | KL6  KM4 | KM4 |
| Output the difference between the two XML files to a csv file |  | KL3 | KL4 |
| Designing output of the csv file |  |  | KL1 |
| Story 8(Removed): As Hanno, I want to be able to view the description of a system that has been updated from another catalogue in a table format in an html page | Create html page with a table from python script |  | D7 |  |
| Populate data from file on disk |  | D1 |  |
| Write to disk from a click to track changes |  | D1 | D1 |
| Story 8: As Hanno (an admin), I want to change the units of measurements that updates from other catalogues should be converted into before committing to my repository. | Change units of measurement prior to commit |  |  | A5 |

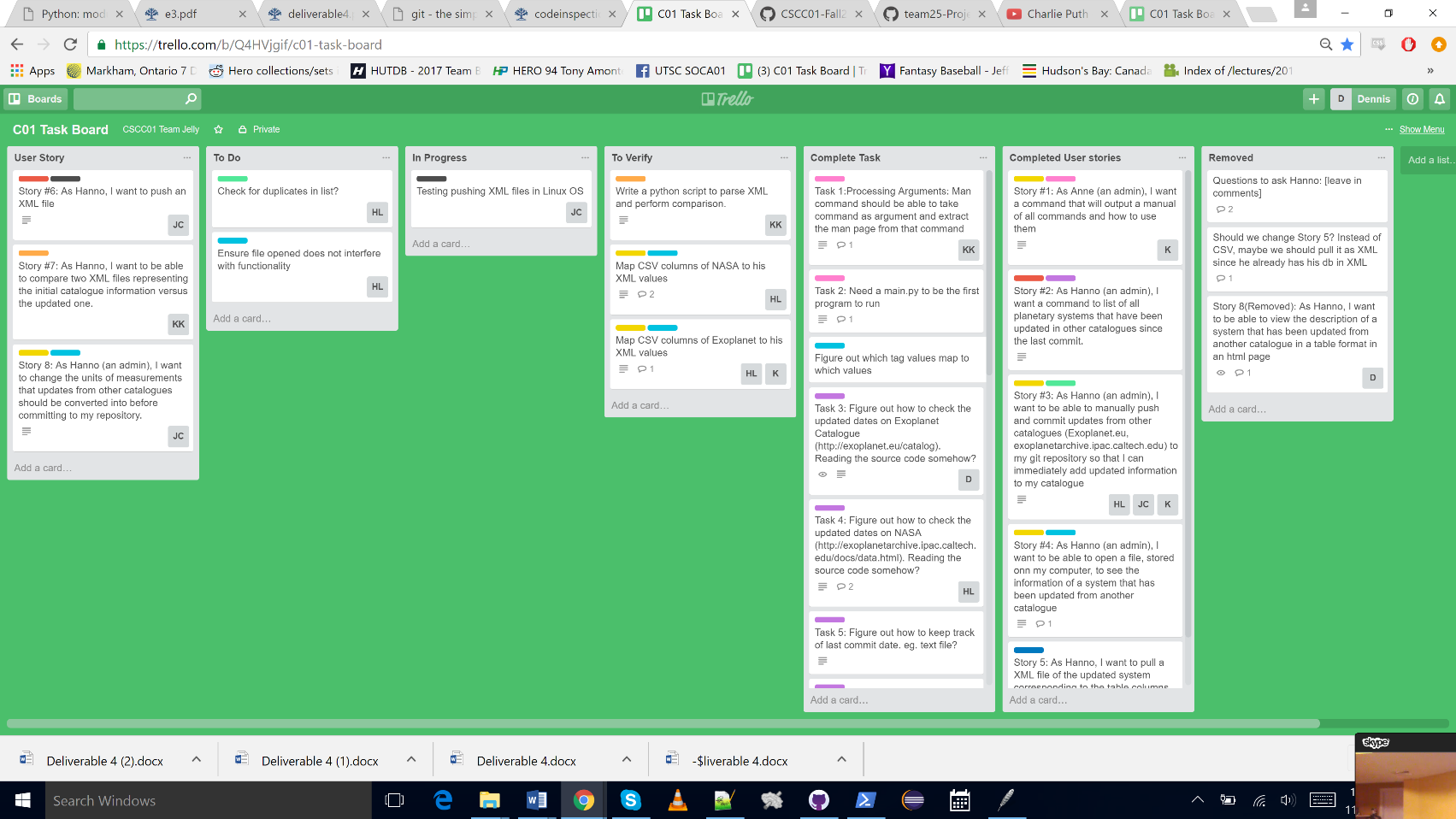
**System Validation**

Throughout our sprints, we had to consult with the Product Owner Hanno about many functionalities of the application. Most of the questions were pertaining to the measurement and data validity of XML files, such as when two systems can be considered the same even though they have different names, when do we detect measurements are different, units of measurements for different astronomy categories, etc. The most challenges were presented in trying to getting a technical understanding of comparing astrophysics. Our questions were recorded as a note in Trello so that everyone can see what needs to be clarified. Example shown below:



**Task Board**

Task Board at the beginning our deliverable.

Task board at the end of our deliverable.

Sprint 2

Sprint 3

User story completion NOT ACCOMPLISHED IN THIS SPRINT, to be accomplished in next sprint

All tasks delayed

Heavy course load for some members, burndown negligible this sprint

due to clarification with client:

Story 7 taking an extremely unexpectedly long amount of time

Sprint 4

Story point reassignment becoming major issue

due to clarification with client:

Story 7 took an extremely unexpectedly long amount of time

Story 8 removed

Story 4,7,8 (formerly 9) complete

Code freeze on the 12th for code review session

Summary:

The estimated project velocity for deliverable 4 was 75 in total, with 25 per sprint. The actual being 14 with sprint 2, 0 with sprint 3, and 49 with sprint 4. On average the actual project velocity was 21.