

# **Deliverable 4**

## **Team 10**

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## Tools for the project:

1. Tools for task board: Trello  
<https://trello.com/b/wOCrfemm/oec-updater>
2. Tools for burndown chart: Google Sheets  
[https://docs.google.com/spreadsheets/d/1D8aoThgJHv\\_h17ntJQxgFOzt2-ed\\_At3tg32SqxydJg/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1D8aoThgJHv_h17ntJQxgFOzt2-ed_At3tg32SqxydJg/edit?usp=sharing)

# Sprint Backlog

For the second sprint, we decided to select user stories complete the remaining of user story 1, 2, (just testing) and the rest of user 3

User story 1: As Hanz Hanson (Exoplanet research professor), I want to be able to initiate an update at any time which prompts the program to accumulate planet statistics information from the Open Exoplanet Catalogue on a planet-by-planet basis as one data set. Priority: 1, sp: 8

1. Unit test downloader class (sp: 0.5)
2. Test option parsing of the main method. (sp: 0.5)

User story 2: As Hanz Hanson (Exoplanet research professor), during the update I want the program to also accumulate planet statistics from the target catalogues (NASA, exoplanet.eu) as other separate data sets, including only the information fields that are present in Open Exoplanet Catalogue and omitting information not present there. Priority: 1, sp: 8

1. Test parser for NASA. (sp: 1)
2. Test parser for exoplanet.eu (sp: 1)

User story 3: As Hanz Hanson (Exoplanet research professor), I want to be able to prompt the program to show all the differences between the two data sets compiled during the last update; for every difference I want to see the following relevant information: name of the planet, name of the star system, name of the catalogue the difference originated from (NASA or exoplanet.eu), name of the field that have been modified (ex: mass), the value of that field according to the origin catalogue (NASA or exoplanet.eu), the value of that field on the Open Exoplanet Catalogue. Priority: 1, sp: 20

1. Implement "Comparator" class that will process the datasets from Open Exoplanet Catalogue and outputs a list of Proposed Change objects. (sp: 12)
2. Implement "show changes" mode of operation. (sp: 2)
3. Test the Comparator class (sp: 3)

User story 5: As Hanz Hanson (Exoplanet research professor), when viewing proposed changes, I want to see them in a numbered list. Priority: 1, sp: 3

1. Implement sorting algorithm for a list of Proposed changes. (sp: 2)
2. Implement sorting of Proposed changes list before displaying it. (sp: 1)

User story 17: As David Davidson (PhD Candidate), I want an option to see any single proposed change by itself, referring to it by its number in the list, omitting all other proposed changes, so that I do not get confused. Priority: 2, sp: 2

1. Implement --show\_number=# option in driver.py (sp: 1)
2. Implement functionality to display a single proposed change from a list (sp: 1)

## Product Backlog: (Updated)

### Priority Scale:

- 1 - Most Important
- 2 -
- 3 -
- 4 -
- 5 - Least Important

1 Story Point (sp) == 1 Developer Hour

### USER STORIES: (Some priorities have changed)

1. As Hanz Hanson (Exoplanet research professor), I want to be able to initiate an update at any time which prompts the program to accumulate planet statistics information from the Open Exoplanet Catalogue on a planet-by-planet basis as one data set.  
Priority: 1, sp: 8
2. As Hanz Hanson (Exoplanet research professor), during the update I want the program to also accumulate planet statistics from the target catalogues (NASA, exoplanet.eu) as other separate data sets, including only the information fields that are present in Open Exoplanet Catalogue and omitting information not present there.  
Priority: 1, sp: 8
3. As Hanz Hanson (Exoplanet research professor), I want to be able to prompt the program to show all the differences between the two data sets compiled during the last update; for every difference I want to see the following relevant information: name of the planet, name of the star system, name of the catalogue the difference originated from (NASA or exoplanet.eu), name of the field that have been modified (ex: mass), the value of that field according to the origin catalogue (NASA or exoplanet.eu), the value of that field on the Open Exoplanet Catalogue.  
Priority: 1, sp: 20

4. As Hanz Hanson (Exoplanet research professor), I want the program to convert all units in other catalogues to the units used in Open Exoplanet Catalogue when comparing and presenting numerical values.  
Priority: 2 sp: 10
5. As Hanz Hanson (Exoplanet research professor), when viewing proposed changes, I want to see them in a numbered list.  
Priority: 1, sp: 3
6. As Hanz Hanson (Exoplanet research professor), if one of the updates discovers a planet entry in the target catalogue, while a planet with the same name is not present in the Open Source Exoplanet Catalogue, I want the program to present it to me as a newly discovered planet with the rest of the proposed changes, providing the following information: planet name, star system name, name of the catalogue and the date the entry is posted.  
Priority: 1, sp: 4
7. As Hanz Hanson (Exoplanet research professor), if I suspect that a newly discovered planet is in fact an alternative name of an existing one, I want an option to associate this planet with an existing entry in Open Exoplanet Catalogue for the future updates; the proposed addition will be postponed for the current session.  
Priority: 3, sp: 5
8. As Hanz Hanson (Exoplanet research professor), I want to be able to “accept” any single proposed change presented (including added planets), prompting the program to update the information in the Open Exoplanet Catalogue by sending a single pull request to the OEC github database, containing the modified version of that same planet entry, with the field modified containing the updated value (the value that was different in the target catalogue), and all other fields remaining unchanged (after change has been accepted, it is deleted and not presented again).  
Priority: 1, sp: 15
9. As Hanz Hanson (Exoplanet research professor), I want to be able to “decline” any single change presented (including added planets), prompting the program to delete this single change after adding it to the “blacklist”, meaning same exact change will not be presented to me after future updates.  
Priority: 1, sp: 8
10. As Hanz Hanson (Exoplanet research professor), I want to be able to “postpone” any single change (including added planets), causing the program to delete this change but not add it to the “blacklist”, so that this same exact change will show up after a future update.  
Priority: 2, sp: 4

11. As Hanz Hanson (Exoplanet research professor), I want an option to clear the “blacklist”, which would cause the program to forget that some changes were previously declined and present them again in the future updates.  
Priority: 2, sp: 2
12. As Hanz Hanson (Exoplanet research professor), If I don't prompt to see the proposed changes immediately after the update, I want the program to store them for me to access at a later time.  
Priority: 4, sp: 4
13. As Hanz Hanson (Exoplanet research professor), I want to be able to set the program to update automatically and set the time interval between updates.  
Priority: 2, sp: 5
14. As Hanz Hanson (Exoplanet research professor), I want to be able to prompt the program for its current status and get the following information: time of the last update, current auto-update settings, number of changes pending to be reviewed.  
Priority: 2, sp: 3
15. As Hanz Hanson (Exoplanet research professor), if there are changes pending to be reviewed by the time of the next update, I want the program to automatically postpone all of them.  
Priority: 2, sp: 2
16. As David Davidson (PhD Candidate), I want an option to accept or decline or postpone all currently pending changes at once.  
Priority: 4, sp: 2
17. As David Davidson (PhD Candidate), I want an option to see any single proposed change by itself, referring to it by its number in the list, omitting all other proposed changes, so that I do not get confused.  
Priority: 2, sp: 2
18. As David Davidson (PhD Candidate), I want an option to see a specific number of proposed changes at a time (for example 10 at a time), so I do not have to scroll through a lot of extra information to find what I need.  
Priority: 3, sp: 3
19. As David Davidson (PhD Candidate), I want an option to see a detailed user manual, describing the operation of the program.  
Priority: 5, sp: 4

20. As David Davidson (PhD Candidate), while I am reviewing the list of proposed changes I want an option to provide a name for a certain planet and to view / accept / decline / postpone all changes for that planet at once.  
Priority: 5, sp: 3
21. As David Davidson (PhD Candidate), while I am reviewing the list of proposed changes I want an option to view / accept / decline / postpone all changes to a certain star system, whose name I provide, at once.  
Priority: 5, sp: 3
22. As David Davidson (PhD Candidate), while I am reviewing the list of proposed changes I want an option to view / accept / decline / postpone all changes originating from one of the catalogues, whose name I provide, at once.  
Priority: 5, sp: 3
23. As Hanz Hanson (Exoplanet research professor), I want the program to ignore minor discrepancies between the numeric values across different catalogues, given the difference is within a set percentage tolerance, present by default.  
Priority: 2, sp: 9
24. As Hanz Hanson (Exoplanet research professor), I want to be able to set the tolerance of every numeric field present in the planet entries in the Open Exoplanet Catalogue to the value that I choose, on a field-by-field basis, so that the program uses the tolerance entered by me, as opposed to default one.  
Priority: 4, sp: 8
25. As Hanz Hanson (Exoplanet research professor), I want to be able to clear all tolerances added by me, so that the program reverts to the default tolerance value for every field.  
Priority: 5, sp: 2
26. As Hanz Hanson (Exoplanet research professor), if any single planet in the Open Exoplanet Catalogue database has more than one name associated with it (more than one name field in the planet entry), I want the program to recognize that the alternative name in a different catalogue (either NASA or exoplanet.eu) refers to an existing planet in the Open Exoplanet Catalogue, as opposed to a separate planet, so that the user(me) is not prompted to create duplicate entries for planets with alternative names.  
Priority: 3, sp: 5
27. As Hanz Hanson (Exoplanet research professor), I want the program to ignore minor differences in spelling of the names of planets and stars across the different catalogues, which includes case-insensitivity as well as any discrepancies in the punctuation or whitespace(number of spaces and tabs) in the planet name.  
Priority: 3, sp: 5



# Rough Plan of Who Does What and When:

During sprint 2:

(Approximately 5 story points per person per sprint)

Each user story is broken down into multiple tasks.

## TASKS:

Vasili: finish proposed change class / start on comparator with Jerry

Eric: update XML parsing to comply with new data storage standards / test XML parsing / comment his code

Albion: finish NASA / eu parsing, test it

Jerry: start on comparator with V

Tony: test option parsing in driver.py / implement --show\_all and --show\_number=# options

# Snapshots:

**OEC Updater** CSCC01 ChainCoders ☆ Team Visible

**Product Backlog Priority (1 High - 5 Low) 1 Story Point == 1 Dev. Hour**

4. As Hanz Hanson (Exoplanet research professor), I want the program to convert all units in other catalogues to the units used in Open Exoplanet Catalogue when comparing and presenting numerical values. Priority: 2 sp: 10

6. As Hanz Hanson (Exoplanet research professor), if one of the updates discovers a planet entry in the target catalogue, while a planet with the same name is not present in the Open Source Exoplanet Catalogue, I want the program to present it to me as a newly discovered planet with the rest of the proposed changes, providing the following information: planet name, star system name, name of the catalogue and the date the entry is posted. Priority: 3, sp: 4

7. As Hanz Hanson (Exoplanet research professor), if I suspect that a newly discovered planet is in fact an alternative name of an existing one, I want an option to associate this planet with an existing entry in Open Exoplanet Catalogue for the future updates; the proposed addition will be postponed for the current session. Priority: 3, sp: 5

**Sprint 1 Backlog**

Add a card...

**In Progress**

3. As Hanz Hanson (Exoplanet research professor), I want to be able to prompt the program to show all the differences between the two data sets compiled during the last update; for every difference I want to see the following relevant information: name of the planet, name of the star system, name of the catalogue the difference originated from (NASA or exoplanet.eu), name of the field that have been modified (ex: mass), the value of that field according to the origin catalogue (NASA or exoplanet.eu), the value of that field on the Open Exoplanet Catalogue. Priority: 1, sp: 20

5. As Hanz Hanson (Exoplanet research professor), when viewing proposed changes, I want to see them in a numbered list. Priority: 3, sp: 3

Add a card...

**Done**

1. As Hanz Hanson (Exoplanet research professor), I want to be able to initiate an update at any time which prompts the program to accumulate planet statistics information from the Open Exoplanet Catalogue on a planet-by-planet basis as one data set. Priority: 1, sp: 8

2. As Hanz Hanson (Exoplanet research professor), during the update I want the program to also accumulate planet statistics from the target catalogues (NASA, exoplanet.eu) as other separate data sets, including only the information fields that are present in Open Exoplanet Catalogue and omitting information not present there. Priority: 1, sp: 8

17. As David Davidson (PhD Candidate), I want an option to see any single proposed change by itself, referring to it by its number in the list, omitting all other proposed changes, so that I do not get confused. Priority: 2, sp: 2

Add a card...

