

Deliverable 5

Team 10

Vasili Skurdydin
Eric Papagiannis
Albion Fung
Tony Wu
Jerry Cheng

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Words go here	2
And a few other ones here	
2	

Product Backlog:(Current version: 3)

For brief overview of project progress see page 15

Priority Scale:

1 - Most Important

2 -

3 -

4 -

5 - Least Important

1 Story Point (sp) == 1 Developer Hour

~~Crossed Out~~ = Removed

USER STORIES: (Some priorities have changed since Del. 3)

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 to 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

NEW STORIES

28. As Hanz Hanson (Exoplanet research professor), I want the date of last update on the system xml file on the OEC github database to be updated whenever I accept a proposed change corresponding to that file.
Priority: 2, sp: 5
29. As Hanz Hanson (Exoplanet research professor), I want the error tolerance limits in XML files on OEC github database to be updated when the numerical field it corresponds to is also updated.
Priority: 2: sp: 7
30. As Hanz Hanson (Exoplanet research professor), I want to be able to prompt the program to see a specified number of most recent proposed changes, according to the last update date in the respective exoplanet catalogues.Priority: 2, sp: 5
31. As Hanz Hanson (Exoplanet research professor), I want to be able to change the default url address of Open Exoplanet Catalogue github repository to any url address I enter, enabling the program to send pull requests to that new address.
Priority: 5, sp: 2
32. As Hanz Hanson (Exoplanet research professor), I want to be able to give a range argument to --accept, --postpone, --deny command, resulting in changes in the given range being affected.
Priority 5, sp: 4

Updated Release Plan (TODO)

Sprint 5 Backlog: (Program Version: 3)

Please see the burndown chart document for the breakdown of tasks between team members.

User Story 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

- Implement “Black List” for proposed changes in driver.py (sp: 4)
- Implement “equals” method for proposed change (sp: 2)
- Implement checking every proposed change whether it is in the black list or not on update. (sp: 2)

User Story 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

- Implement parsing of “clearblacklist” command. (sp: 1)
- Implement clearing blacklist in driver.py when “clearblacklist” command is given by the user. (sp: 1)

User Story 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

- Create callable skeleton daemon (sp: 1)
- Modify driver to allow asynchronously calling of daemon (sp: 1)
- Integrate ability for daemon to call driver’s update every set interval (sp: 2)
- Modify driver to allow killing of daemon (sp: 1)

User Story 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

- In driver.py implement checking whether the list of proposed changes is empty on update. (sp: 1)

- In driver.py implement clearing the list of proposed changes on update. (sp: 1)

User Story 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

- Implement parsing --acceptall / --declineall / --postponeall commands to driver.py (sp: 1)
- Implement accepting / declining / postponing all changes in the list (sp: 1)

User Story 28:

As Hanz Hanson (Exoplanet research professor), I want the date of last update on the system xml file on the OEC github database to be updated whenever I accept a proposed change corresponding to that file.

Priority: 2, sp: 5

- Retrieve system's current date when xml is being modified (sp: 1)
- Modify XML lastupdate tag when any XML file is being written to (sp: 3)
- Ensure field is modified when accept is done and ensure on pull request the modification to lastupdate went through (sp: 1)

User Story 29:

As Hanz Hanson (Exoplanet research professor), I want the error tolerance limits in XML files on OEC github database to be updated when the numerical field it corresponds to is also updated.

Priority: 2: sp: 7

- Parse OEC XML for errors in every numerical field (sp: 3)
- Parse nasa and eu CSV's for errors in every numerical field present in OEC (sp: 2)
- Modify planetary objects to store the errors separately so they don't create proposed changes when comparator handles them (sp: 1)
- Modify the XML when applying proposed change to also update the error bounds (sp: 1)

User Story 30:

As Hanz Hanson (Exoplanet research professor), I want to be able to prompt the program to see a specified number of most recent proposed changes, according to the last update date in the respective exoplanet catalogues.

Priority: 2, sp: 5

- Implement parsing --showlatest # command in driver.py (sp: 1)
- Implement sorting proposed changes by the time of last update in the respective catalogue (sp: 2)
- Implement showing n latest proposed changes in driver.py as a result of --showlatest n command, preserving the original indices in the list of proposed changes. (sp: 2)

Changes since last sprint:

Since Sprint 4, our team has made minor change to the product backlog one last time, incorporating the feedback we received from the client during the short demonstration of our product's main functionality. Firstly, we decided to add a command to show a given number of most recent discovered changes, as suggested by the client (User story 30). Apart from that we have decided that it is extremely important to update "tolerance" values in the XML files in client's github database which we added as a separate user story (Story 29), as well as the "lastupdate" field in these files (Story 28). We decided to scrap some user stories concerning some convenience features, Stories 23, 24, 25 dealing with minor discrepancies in numeric fields, Stories 20, 21 dealing with viewing all proposed changes for a single Planet, Star, System; Story 7 dealing with entering an alternative name for a known planet (something the client would be easily able to do even without our application) - we decided that these are not extremely important. Instead, we decided to focus on more crucial things: ability to deny a proposed change and never see it again, as well as autoupdate settings.

Sprint 6 Backlog: (Program Version: 3)

Please see the burndown chart document for the breakdown of tasks between team members.

User Story 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

- Implement functionality to display user manual. (sp: 0.5)
- Create user manual. (sp: 3)
- Implement displaying usage string on invalid input (sp: 0.5)

User Story 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

- When parsing names, clean the whitespace, formatting, any any other non alphanumerical characters as an alternative name (sp: 3)
- Add alternative name in alternative name dictionary that includes the name with minimal formatting (sp: 2)

User Story 31:

As Hanz Hanson (Exoplanet research professor), I want to be able to change the default url address of Open Exoplanet Catalogue github repository to any url address I enter, enabling the program to send pull requests to that new address.

Priority: 5, sp: 2

- Implement parsing --setrepo / --clearrepo commands. (sp: 1)
- Implement storing the repo address entered by the user in memory (sp: 0.5)
- Implement resetting address to default value. (sp: 0.5)

User Story 32:

As Hanz Hanson (Exoplanet research professor), I want to be able to give a range argument to --accept, --postpone, --deny command, resulting in changes in the given range being affected.

Priority 5, sp: 4

- Implement accepting changes with the given range (sp: 1)
- Implement declining changes with the given range (sp: 1)
- Implement postponing changes with the given range (sp: 1)
- Test range operation from shell (sp: 1)

Updated System Component Design (TODO)

Snapshots:

References:

Taskboard:

Please go to this link if the Trello is unclear

<https://trello.com/invite/b/wOCrfemm/7f4c47d9e326865948a20e594ae288f8/oec-updater>

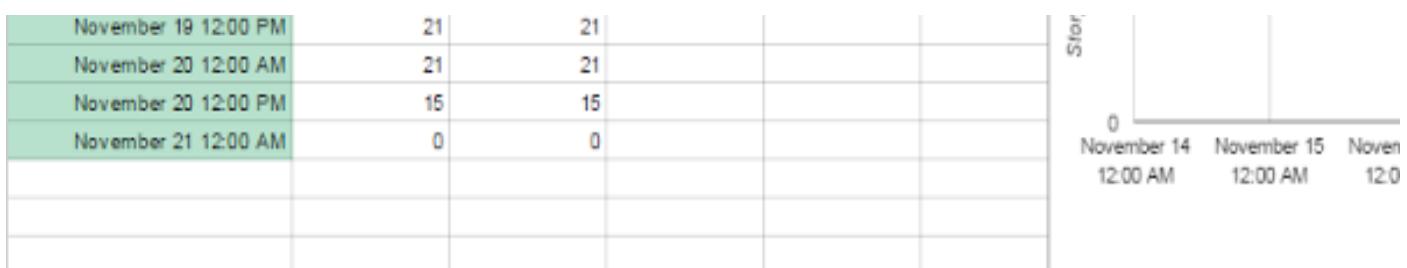
Burndown Chart and Iteration Plans:

Please go to this link if burndown chart is unclear

https://docs.google.com/spreadsheets/d/1D8aoThgJHv_h17ntJQxgFOzt2-ed_At3tg32SqxydJg/edit?usp=sharing

Sprint 5:





OEC Updater CSCC01 ChainCoders Team Visible

Product Backlog Priority (1 High - 5 Low) 1 Story Point == 1 Dev. Hour	In Progress (Sprint 5 Backlog)	Done	Deleted Stories
<p>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</p> <p>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</p> <p>Add a card...</p>	<p>Add a card...</p>	<p>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 <input checked="" type="checkbox"/> 8/8</p> <p>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 <input checked="" type="checkbox"/> 6/6</p> <p>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 <input checked="" type="checkbox"/> 4/4</p> <p>Add a card...</p>	<p>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</p> <p>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</p> <p>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</p> <p>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</p> <p>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</p> <p>Add a card...</p>

Sprint 6:

Start:

OEC Updater CSCC01 ChainCoders ⚡ Team Visible

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

Add a card...

In Progress (Sprint 5 Backlog)

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
☒ 0/3

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
☒ 0/2

As Hanz Hanson (Exoplanet research professor), I want to be able to change the default url address of Open Exoplanet Catalogue github repository to any url address I enter, enabling the program to send pull requests to that new address. Priority: 5, sp: 2
☒ 0/3

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
☒ 8/8

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
☒ 1 ☒ 6/6

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
☒ 4/4

Add a card...

Deleted Stories

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

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

Add a card...

trello.com/.../1-1-as-hanz-hanson-exoplanet-research-professor-i-want-to-be-able-to-initiate-an-update-at-any-time...

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
in list [In Progress \(Sprint 5 Backlog\)](#)

[Edit the description...](#)

Checklist [Delete...](#)

0%

- Implement functionality to display user manual. (sp: 0.5)
- Create user manual. (sp: 3)
- Implement displaying usage string on invalid input (sp: 0.5)

[Add an item...](#)

Add

- [Members](#)
- [Labels](#)
- [Checklist](#)
- [Due Date](#)
- [Attachment](#)

Actions

- [Move](#)
- [Copy](#)
- [Subscribe](#)
- [Archive](#)

Add Comment

Write a comment...

[Send](#)

Activity [Show Details](#) [Share and more...](#)

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
in list [In Progress \(Sprint 5 Backlog\)](#)

[Edit the description...](#)

Tasks [Delete...](#)

0%

- When parsing names, clean the whitespace, formatting, any any other non alphanumerical characters as an alternative name (sp: 3)
- Add alternative name in alternative name dictionary that includes the name with minimal formatting (sp: 2)

[Add an item...](#)

Add Comment

Write a comment...

[Send](#)

Activity [Show Details](#) [Share and more...](#)

31. As Hanz Hanson (Exoplanet research professor), I want to be able to change the default url address of Open Exoplanet Catalogue github repository to any url address I enter, enabling the program to send pull requests to that new address. Priority: 5, sp: 2
in list [In Progress \(Sprint 5 Backlog\)](#)

[Edit the description...](#)

Tasks [Delete...](#)

0%
 Implement parsing --setrepo / --clearrepo commands. (sp: 1)
 Implement storing the repo address entered by the user in memory (sp: 0.5)
 Implement resetting address to default value. (sp: 0.5)

Add an item...

Add

Members
 Labels
 Checklist
 Due Date
 Attachment

Actions

Move
 Copy
 Subscribe
 Archive

Add Comment
 Write a comment...
[Send](#)

Activity [Show Details](#) [Share and more...](#)

32. As Hanz Hanson (Exoplanet research professor), I want to be able to give a range argument to --accept, --postpone, --deny command, resulting in changes in the given range being affected. Priority 5, sp: 4
in list [In Progress \(Sprint 5 Backlog\)](#)

[Edit the description...](#)

Checklist [Delete...](#)

0%
 Implement accepting changes with the given range (sp: 1)
 Implement declining changes with the given range (sp: 1)
 Implement postponing changes with the given range (sp: 1)
 Test range operation from shell (sp: 1)

Add an item...

Add

Members
 Labels
 Checklist
 Due Date
 Attachment

Actions

Move
 Copy
 Subscribe
 Archive

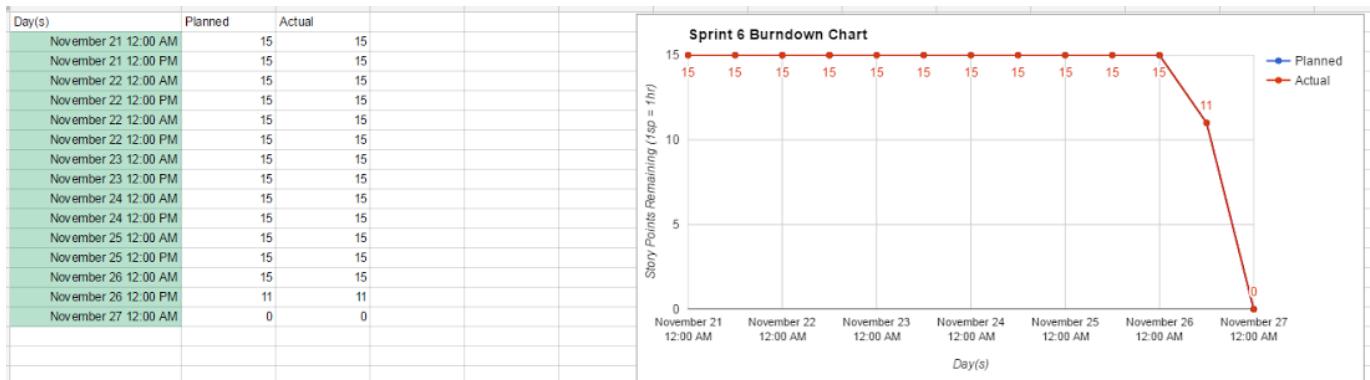
Add Comment
 Write a comment...
[Send](#)

Activity [Show Details](#) [Share and more...](#)

End:

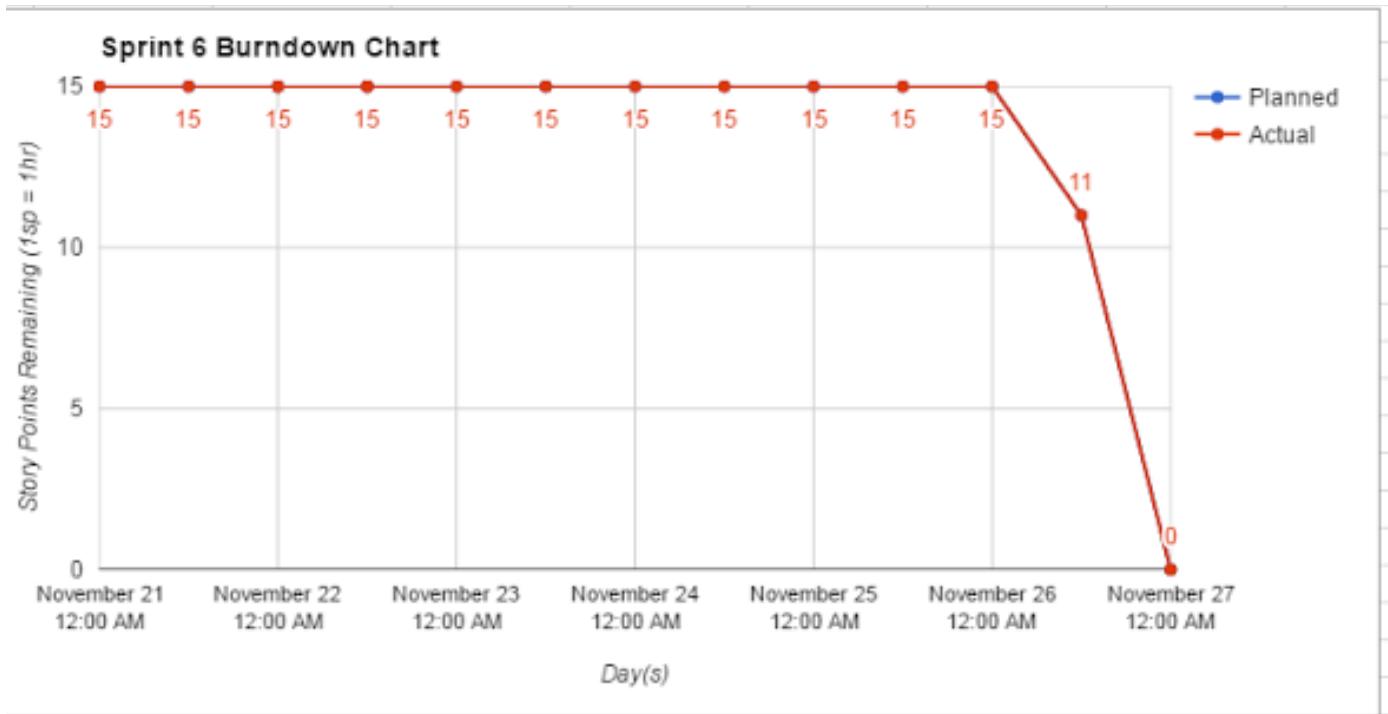
The Trello board has the following structure:

- Product Backlog Priority (1)**:
 - High - 5 Low 1 Story Point == 1
 - Dev. Hour
 - Add a card...
- In Progress (Sprint 6 Backlog)**:
 - 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
8/8
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1/6
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4/4
- Deleted Stories**:
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S6		PLANNED						
Story		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
19		0	0	0	0	0	0	0 1T + 3E
27		0	0	0	0	0	0	0 5E
31		0	0	0	0	0	0	0 2V
32		0	0	0	0	0	0	0 1T + 3E

S6		ACTUAL						
Story		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
19		0	0	0	0	0	0	0 4T
27		0	0	0	0	0	0	0 5E
31		0	0	0	0	0	0	0 2V
32		0	0	0	0	0	0	0 1T + 3E



Brief Overview of the Project Saga

Throughout the project the design of the program has gone through a lot of changes. The project began with utilizing mostly UNIX software tools to complete tasks and using Python as an overlay; specifically, the team had originally planned to use mostly subprocess calls from the Python library in order to complete the required tasks. However, the software tools proved to be a poor fit for Python in the team's collective opinion, and was quickly changed to a more object oriented approach. Throughout the course of the project and development, the team was calm and collected in resolving difference of ideas such as the one mentioned previously. While the team was unfortunately usually busy during the week, the team was still able to gather for meetings every Wednesdays where important design decisions and planning happens, and the team works very hard on the weekends, usually while on Discord communicating, to complete the required stories and sub-tasks for the sprint. While the first sprint was more or less on schedule, the second sprint was behind schedule. However, by the fourth sprint not only was the team caught back up to schedule, but in fact ahead. Since the last week nears the end of school and the month of final exams, the last sprints are easier on the team and can allow for more flexibility in completion of the task.

Project Velocity

The team had set a estimated project velocity of 25 story points per sprint, which translates to an average of 5 story points per person on the team, where each point is approximately one hour of work. On the first two sprints, the performance did not meet the estimated project velocity, where the team was severely behind on the second week due to midterms. However, on the third and fourth sprint, the team exceeded the estimated project velocity and completed more work than that was estimated can be completed. In terms of deliverables, sprint one was the first software deliverable, sprint two, three contributed to the second software deliverable, and sprint four, five and six contributed to the third software deliverable.

Planning and Replanning

The team had to replan some of the workload in order to meet the desired overall project velocity and complete all user stories and tasks as well as to accommodate for midterms and school work. This happened during sprint two where three midterms happened in the same sprint, and in sprint three in order to have the team catch up back to schedule.

In terms of software design and planning, the design was changed multiple times to accommodate what the client desired as well as the team discovers better solutions towards problems the team had encountered. This happened across first three sprints as the team

discussed problems such as how to retrieve data from the databases, the methodology in which difference in data will be compared, etc; planning also changed as the team better understood what the client wanted on the software, such as the visual design of the software and very specific behaviours after a combination of actions. The team ensured all its members understood and agreed to the changes in the plan.

Progress and Result of Deliverable 5

Paperwork and planning is definitely more solid compared to the earlier deliverables. The product backlog has become more specific, while the iteration plan and burndown chart has become more accurate and correct. Since the heaviest workload had already been completed in the previous sprints, the sprints in deliverable 5 are relatively less productive due to the lack of tasks to complete. However, work has still been completed as required and is working at the end of each sprint. Quality remained high throughout all sprints.