User Personas

Professor Jack Astor

- 44-year-old astrophysicist, male.
- Part time professor at the University of Paris. Teaches 2 times a week; it's a 2-hour commute from his house to the University. To use his time wisely, professor studies and researches during his commute
- Not very good with computers: mostly reads books to do research. However, if he's shown how to traverse through a website for instance, he can remember the process and repeat the action
- Has experience using software such as excel to record data
- Has a Nokia cell phone, but is embarrassed to pull out his phone in public. Mostly uses phone for calling or texting. Doesn't use applications.
- Researches exoplanets and other celestial objects
- Likes to share his research discoveries with his students and other astronomers

Professor Jim Neutron (Creator of exoplanet catalogue)

- 37 year old, physics and astronomy professor at UofT
- Always in a rush due to his extremely busy schedule
- Hates using software applications that slow him down
- Involved in multiple research projects with graduate students including those of high performance computing and numerical simulations
- Created an open source exoplanet catalogue where he is currently the main contributor. He expects other astronomers and other graduate students to make contributions to it in the future.
- Interested in researching and tracking planets and other celestial objects.
- Self taught programmer, created an exoplanet app to go alongside his catalogue
- Comfortable with using the command line and git. Most of his projects are on github
- Has strong preferences towards unix systems. Uses a Macbook
- Takes the subway to work. Often uses his laptop to make offline changes to his open exoplanet catalogue

Amateur Stargazer Nick Trumpton



- 25 year old male, recently completed undergraduate in Physics and Mathematics
- Very spontaneous, rarely sticks to schedules, has an explorative personality
- Detailed oriented, likes to triple check all his work
- Uses this iPad pro as an alternative to a desktop/laptop, and owns an iPhone 7
- Amateur tech savvy stargazer
- Heavily relies on video tutorials and trusted planet catalogues to expand knowledge of new hobby
- Works a 9AM 5PM job and stargazes during long weekends
- Huge fan of social media

- Sometimes during normal weekends he will randomly meet up with other amateur stargazers and stargaze together
- Dislikes complicated applications that take a prolonged time to master

Graduate Student Jane Doe

- 22-year-old astrophysicist, female.
- Part time TA and a student at the University of Chicago. On campus 4 days out of 5, has 2 hours of teaching and 2 office hours per semester. Has a long commute time and a lot of classes, takes the bus and does not take the subway.
- Very fluent with English
- Has a data plan and has access to the internet when commuting, on campus and on at home
- Has a good general knowledge with how to use computers although not very fluent in using stuff with an UI or GUI. Not experienced with using shell, has a IPhone and a Windows computer.
- Likes to multitask and work on the go.
- Very organized and detail oriented, usually likes to individually check stuff over before submitting anything.
- Prefers to work with Web programs over other desktop applications
- Enjoys creating instrumentals and music using complicated computer software

Astronomer Alison Singer



- 47 year old Astronomer at The University of Texas researching planetary systems and Stars
- Enthusiastic about her job, often works late at her own will
- Owns an iphone, but mainly uses it for calling and texting
- Her research requires her to use advanced computer software which she has been working with for many years
- Does not own a laptop, but is on her work desktop computer for 8+ hours every day
- Often loses track of time while working and misses important events due to this
- Puts effort into her work and ensures her data is accurate and reliable before publishing
- Prefers sharing data with colleagues and wants to stay updated on their findings
- Stays updated on global astronomical discoveries and follows news closely

User Stories

As Jack Astor (Astronomy Professor), when the open exoplanet catalogue is updated, I want the categories that are left blank to automatically be populated with "N/A".

As Jack Astor (Professor), when updates are found in the other catalogues, I should be allowed to edit the information in the update table to my liking and use it in the merge instead.

As Jack Astor (Professor), once a merge is successfully completed, I should have the option to send a pull request to the open exoplanet catalogue on Git.

As Jack Astor (Professor), after the merge, I want to see a summary of the data that was changed in the open exoplanet catalogue in a table.

As Jane Doe (Graduate Student), I should be able to specify how often the system automatically checks for updates in the Exoplanet.eu and NASA Exoplanet catalogues.

As Jim Neutron (Creator of exoplanet catalogue), I want the system to check for new planet additions and changes in existing planet information in the other catalogues when requested.

As Jim Neutron (Creator of exoplanet catalogue), if there are updates found in the Exoplanet.eu or NASA Exoplanets catalogues, I want to be notified with a prompt telling me to select the updates that I want to merge in to the open exoplanet catalogue.

As Jim Neutron (Creator of exoplanet catalogue), when there are updates in the other catalogues, I should be able to select the updates that I want to merge in the open exoplanet catalogue. The remaining updates should be discarded automatically.

As Jim Neutron (Creator of exoplanet catalogue), when there are updates to the existing data in the other catalogues, I want to see in a table format, the data that will be replaced in the open exoplanet catalogue if I were to approve the merge.

As Jim Neutron (Creator of exoplanet catalogue), when data from the other catalogues is merged into the open exoplanet catalogue, I want the system to automatically add references to them.

As Jim Neutron (Creator of exoplanet catalogue), when a planet's data in the open exoplanet catalogue is updated via a merge from the other catalogues, I want the last updated date attribute for the planet to automatically change..

As Jim Neutron (Creator of exoplanet catalogue), when there are merge conflicts, I should have the option to enter custom data in a table to resolve the conflict.

As Jim Neutron (Creator of exoplanet catalogue), I should have the option to replace my local copy of the open exoplanet catalogue with the most recently updated one on github.

As Jim Neutron (Creator of exoplanet catalogue), while checking for updates in the other catalogues, I want the system to never show me ones where existing data is replaced with N/A.

As Jim Neutron (Creator of exoplanet catalogue), during the merge, I want the system to never replace existing data with N/A in the open exoplanet catalogue.

As Jim Neutron (Creator of exoplanet catalogue), when merging the updates found in the other catalogues into open exoplanet, the data should be converted to the same units as the Open Exoplanet Catalogue.

As Jim Neutron (Creator of exoplanet catalogue), while checking for updates in the other catalogues, I want the system to ignore columns found in the other catalogues that do not exist in the open exoplanet catalogue.

As Jim Neutron (Creator of exoplanet catalogue), when the system is first used, I want it to detect and show me planets in the other two catalogues which do not exist in open exoplanet catalogue.

As Jim Neutron (Creator of exoplanet catalogue), when the system is first used and new planets are found, I should be able to select which ones I want to add to the open exoplanet catalogue.

As Jim Neutron (Creator of exoplanet catalogue), when the system is first used, I want the system to fill in the blank slots (N/A) in the open exoplanet catalogue with the data from the other catalogues if it exists.

As Alison Singer(Astronomer), I want to see a summary of changes in table format when there are updates in the Exoplanet.eu and Nasa Exoplanet catalogues. I would like new planet additions and changes to existing planet information to be color coded.

As Alison Singer (Astronomer), when there are changes to the existing data in the other catalogues, I want to be able to view further details of the previous and updated information side by side in a table.

As Alison Singer (Astronomer), when there are merge conflicts, I should have the option to select one of the conflicting pieces of data to resolve the conflict.

As Alison Singer (Astronomer), if there are merge conflicts (such as when both Exoplanet.eu and Nasa Exoplanets have updates for the same planet but with conflicting data), I should be able to view the conflicting data side by side in table format.

As Alison Singer (Astronomer), I want the system to recognize when the other catalogues are using an alternative name for a planet in the open exoplanet catalogue so that during the merge, the system does not add it as a new planet.