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| Use Case Name: Create a science plan | ID: 1 | Importance Level: High |
| Primary Actor: Astronomer | | Use Case Type: Essential |
| Brief Description: The astronomer creates the science plan to make a test via  the virtual telescope and interactive observing mode | | |
| Trigger: An astronomer wants to study the new astronomical phenomenon  Type: External | | |
| Preconditions:   1. The Astronomer (user) is authenticated by logging in to his/her account | | |
| Normal Flow of Events:   1. The Astronomer selects the “Create Science Plan” button from the menu. 2. The system brings the Astronomer to the Science Plan Creation Page. 3. The Astronomer inputs details of the Plan Creator in a placeholder. 4. The Astronomer inputs details of the Plan Submitter in a placeholder. 5. The Astronomer inputs the amount of Funding for the operation in a placeholder. 6. The system displays a list of Stars system for the Selected Stars System 7. The Astronomer selects the Stars System option. 8. The Astronomer inputs the Objective of this Science plan in a placeholder 9. The system displays a calendar for the Schedule (date, time) 10. The Astronomer selects the date and time to schedule the operation. 11. The Astronomer input the Data Processing Requirements as follow: 12. Select the Telescope Location, File Type, File Quality, and Color Type options. 13. Input the Contrast, Brightness, Saturation, Highlights, Exposure, Shadows, Blacks, Whites. Luminance, and Hue. 14. The Astronomer clicks the submit button to create the science plan. 15. The system displays the state of the science plan (valid/invalid). If it’s invalid, return to step 3. | | |
| Postcondition:   1. Completed plans are saved in the Science Plan datastore | | |