Space station agency

**User Requirements**

New users

* Register to the system
* Choose the type of users for the account

Travelers/Tourists

* Pay for the trip
* Have a payment account in the application

Scientist

* Manage (Publish, remove, update) a research
* Download another scientist’s research
* Manage (download, update, remove) scientific data from the database
* View the work progress of his own project
* Rate another Scientist’s research
* View another Scientist’s research

Admin

* Manage (Add, Delete, Update) accounts
* Manage (Add, Delete, Update) space ships
* Manage (Add, Delete, Update) trips
* Manage (Add, Delete, Update) researches
* View salary
* Print trip reports
* Generate bill
* Manage (create, view) report accident
* Print space ship reports
* Evaluate the space ship condition
* Registered a space ship into the system
* Print the rating of the trip
* Enter the schedule of the month for the Astronauts

Astronauts

* View the schedule of the month
* View the space ship states
* Rate the space ship crew
* Rate the space ship condition
* Register for training course

Common requirements

* Login/logout
* Book a trip
* Mange (Cancel, Change) trip
* View the trip that’s available
* Rate the trip

**System requirement**

**New user**

Register to the system

|  |  |
| --- | --- |
| Input | Put the ID and the password |
| Output | Go to the home page |
| Pre-Condition | Accept the term and condition |

Choose the type of users for the account

|  |  |
| --- | --- |
| Input | Display a menu to choose a user from and type the code for the user |
| Output | Display if he is a qualify to be this user or not |
| Pre-Condition | The system must approve for upgrading to the user |

**Travelers/** **Tourists**

Pay for the trip

|  |  |
| --- | --- |
| Input | Put the amount of money to complete the payment |
| Output | The system display that “the payment was done successfully” |
| Pre-Condition | The money must be equal for the price of the trip |

Check the payment account in the application

|  |  |
| --- | --- |
| Input |  |
| Output | Display the Balance at the account |
| Pre-Condition | Must be a user |

**Scientist**

Publish a research

|  |  |
| --- | --- |
| Input | Scientist’s name, Research name |
| Output | The system display: “The process was done successfully” |
| Pre-Condition | Research doesn’t exist |

Remove a research

|  |  |
| --- | --- |
| Input | ID of the research |
| Output | The system display: “The process was done successfully” |
| Pre-Condition | Research exists |

Update a research

|  |  |
| --- | --- |
| Input | ID of the research |
| Output | The system display: “The process was done successfully” |
| Pre-Condition | Research exists |

Download another scientific research

|  |  |
| --- | --- |
| Input | Enter the ID of the research |
| Output | The system print: “Download was done successfully” |
| Pre-Condition | Research exists |

Download scientific data from the database

|  |  |
| --- | --- |
| Input | Choose the data type |
| Output | Download was done successfully |
| Pre-Condition | Data exists |

Update scientific data from the database

|  |  |
| --- | --- |
| Input | Choose the data type |
| Output | The modify was done successfully |
| Pre-Condition | Data exists |

Remove scientific data from the database

|  |  |
| --- | --- |
| Input | Choose the data type |
| Output | The modify was done successfully |
| Pre-Condition | Data exists |

View the work progress of his own project

|  |  |
| --- | --- |
| Input |  |
| Output | Display the work progress by from 0 to 100 percentage |
| Pre-Condition | Project exists |

Rate another Scientist’s research

|  |  |
| --- | --- |
| Input | ID research number rate it from 0 to 5 |
| Output | A rating was done successfully |
| Pre-Condition | Research exists |

View another Scientist’s research

|  |  |
| --- | --- |
| Input | ID research number |
| Output | The system displays the research |
| Pre-Condition | Research exists |

**Admin**

Delete an account

|  |  |
| --- | --- |
| Input | Enter the ID of the account |
| Output | The operation was done successfully |
| Pre-Condition | Account exists |

Update an account

|  |  |
| --- | --- |
| Input | Enter the ID of the account and the modify one or more than one field |
| Output | The operation was done successfully |
| Pre-Condition | Account exists |

Add a space ship

|  |  |
| --- | --- |
| Input | Enter the ID, name, crew, model, state |
| Output | The operation was done successfully |
| Pre-Condition | Ship doesn’t exist |

Delete a space ship

|  |  |
| --- | --- |
| Input | Enter the ID of the ship |
| Output | The operation was done successfully |
| Pre-Condition | Ship exists |

Update a space ship

|  |  |
| --- | --- |
| Input | Update one or more than one of the fields |
| Output | The operation was done successfully |
| Pre-Condition | Ship exists |

View salary

|  |  |
| --- | --- |
| Input |  |
| Output | The system displays the Salary for all Admins |
| Pre-Condition |  |

Print trip reports

|  |  |
| --- | --- |
| Input |  |
| Output | The system display upload was done successfully |
| Pre-Condition |  |

Generate bill

|  |  |
| --- | --- |
| Input | The id number of the trip |
| Output | The system print:” The bill was generated successfully |
| Pre-Condition |  |

Create report accident

|  |  |
| --- | --- |
| Input | The user print creates report accident then put the ID of the trip and damage description |
| Output | The system prints the report was done successfully |
| Condition | There must be a trip on the system |

Print space ship reports

|  |  |
| --- | --- |
| Input | The id of the ship |
| Output | The system prints report and the state of the ship |
| Pre-Condition | The space ship must be registered to the system |

Evaluate the space ship condition

|  |  |
| --- | --- |
| Input | The id of the ship |
| Output | Display a menu of what the user wants to do |
| Pre-Condition | The space ship must be registered to the system |

Registered a space ship into the system

|  |  |
| --- | --- |
| Input | Enter a registered space ship on the command and print the name of the ship |
| Output | The system prints the spaceship was registered successfully |
| Pre-Condition |  |

Print the rating of the trip

|  |  |
| --- | --- |
| Input | The ID of the trip |
| Output | The system displays the rating of the trip and the Astronaut of the ship |
| Pre-Condition | The ID of the trip must be valid |

Enter the schedule of the month for the Astronauts

|  |  |
| --- | --- |
| Input | Id of the crew, date of the trips, destination, ID of the ship |
| Output | The system displays the schedule and print the schedule was successfully registered |
| Pre-Condition |  |

**Astronauts**

View the schedule of the month

|  |  |
| --- | --- |
| Input | Date |
| Output | The system displays the schedule |
| Pre-Condition |  |

View the space ship states

|  |  |
| --- | --- |
| Input | The ID of the space ship |
| Output | The system displays the state of the space ship |
| Pre-Condition | The ID must be valid |

Rate the space ship crew

|  |  |
| --- | --- |
| Input | The ID of the crew member then rate from 1 to 10 |
| Output | The system prints rate was done successfully and go to home page |
| Pre-Condition |  |

Rate the space ship condition

|  |  |
| --- | --- |
| Input | Choose rates the space ship condition and rate it from 0 to 10 |
| Output | The system prints rate was done successfully and go to the home page |
| Pre-Condition |  |

Register for training courses

|  |  |
| --- | --- |
| Input | ID of the course |
| Output | The operation was done successfully |
| Pre-Condition |  |

**Common requirements**

Login

|  |  |
| --- | --- |
| Input | Enter the ID and the password |
| Output | Go to home page |
| Pre-Condition |  |

Logout

|  |  |
| --- | --- |
| Input |  |
| Output | Go to login page |
| Pre-Condition | The user must be login in the system |

Book a trip

|  |  |
| --- | --- |
| Input | Trip number, ID of the user, name |
| Output | Book was done successfully |
| Pre-Condition | The trip must be available |

Manage (Cancel, Change) trip

|  |  |
| --- | --- |
| Input | Choose the trip number that the user wants to edit and then press enter |
| Output | The system print “the process has been successfully done” |
| Pre-Condition | The trip must be available if the user wants to change the trip |

View the trip that’s available

|  |  |
| --- | --- |
| Input |  |
| Output | Display the trip ID, name, start/arrival date and destination. |
| Pre-Condition |  |

Rate the trip

|  |  |
| --- | --- |
| Input | Trip ID then rate it from 0 to 5 |
| Output | Rate was done successfully |
| Pre-Condition | The user must be on that trip |

Non-functional requirements are:

1. Easy to use interface.
2. 2- Available 24/7
3. Accessibility by many users with high performance.
4. Dependable.