Testing

Edge Cases

JavaDocs Link for test

You can click the following ling to access:
Star_Wars_Challenge_JavaDocs_Test

User Input

We have 2 moments along the run of the application when the user needs to interact with the console interface, when the user need to input the function and when it will have to required the distance on MGLT.

1. When user selects function, for the basic functionality has only the option to quit or start the process any other string ore character will be ignored. When some extra functionality will be implemented we will have to change eventually the 'start' command to something else such has 'repo'.
2. On the case of inputing MGLT the only valid inputs are Integers, all the rest type of characters are invalid.
   Also we have to take in consideration the following:
   - MGLT cannot be minor than 0 (Negative values are excluded)
   - MGLT cannot be superior than Integer.MAX to avoid overflow
   - MGLT cannot be inferior than Integer.MIN to avoid overflow, this one is the same than the first one but with a different parameter.

Calculation Results

The Edges cases in relation of the calculation are the followings:

- When we request a calculation we expect a quantity of space ships which are 37, eventually if they change the qty on the API this test will fail.
- Each space ship will have an expected calculation depending on their entries registered on the son file.
  - Some of the space ships won't have one of the fields required for the calculation, then the expected result will be defined as 'unknown'.
  - If any of the jSon in relation of the calculation are changed this edge case will also fail.

Calculation Formula

This the formal we have used to calculate the QTY of reposition a spaceship will need to do to cover a distance:

result Repo =(Input Distance on MGLT/ space ship MGLT(hour))/ Consumable in hrs)

The result it is rounded down.

Due that we have already validated the user input to be sure that the function won't break down and we are sure that hour result are correct is not much to test here.

We will create test cases just to be sure our formula works correctly.