

PLEASE WORK IN GROUPS OF TWO (NOT MORE)!

Creating a new project:

- 1- Create a new Eclipse Java project and name it `YOUR_LINUX_USERNAMES_JUNIT`
- 2- Copy package `edu.csbsju.ntc` from this folder and paste it into the `src` folder
- 3- Note that class `NewTelephoneCompany` includes a main method that tries out different input/output combinations on method `computeCharge`

Creating a separate "tests" source folder to place JUnit test classes:

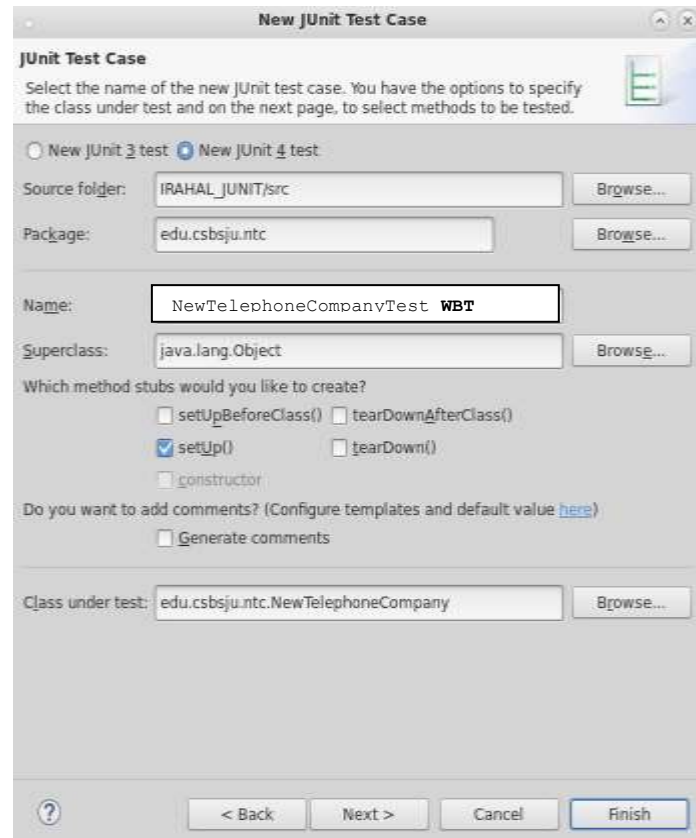
- 4- Right-click on your project, select `New > Other > Java > Source Folder`, press `Next`, name the folder `tests` and press `Finish`
- 5- Create package `edu.csbsju.ntc` inside the `tests` folder
- 6- Copy file `NewTelephoneCompanyTest_BBT.java` from this folder and paste it into package `edu.csbsju.ntc` in folder `tests`

Adding JUnit 4 library to the build path:

- 7- If you get an error on line `import static org.junit.Assert.*`, place your mouse over the error and choose `Fix project setup`
- 8- Agree to `Add JUnit 4 library to build path` which should fix the problem

Creating your own JUnit 4 test class:

- 9- Right-click on `NewTelephoneCompany.java`, select `New > Other > Java > JUnit > JUnit Test Case` and press `Next`
- 10- You should see a window like the one on the right:
 - Make sure `New JUnit 4 test` is selected
 - Press the `Browse` button next to the `Source folder` field and select your `tests` folder created earlier
 - Rename class to `NewTelephoneCompanyTest_WBT`
 - Press `Next`, select `NewTelephoneCompany`
 - Press `Finish`
- 11- Following my examples in `NewTelephoneCompanyTest_BBT`, create test methods for the test cases shown in the table on the right; give your test methods meaningful names based on their paths. Create a separate test method *for each test case*.



Creating a JUnit test suite:

- 12- Right-click on your project, select `New > Other > Java > JUnit > JUnit Test Suite`
 - Press `Next`
 - Make sure `New JUnit 4 test` is selected
 - Press the `Browse` button next to the `Source folder` field
 - Select your `tests` folder
 - Press the `Browse` button next to the `Package` field
 - Select package `edu.csbsju.ntc`
 - The two test classes should now appear under `Test classes to include in suite`, make sure they are selected before pressing `Finish`

PATH DESCRIPTION	INPUT ST	INPUT LENGTH	EXPECTED OUTPUT
PATH 1: INVALID STARTTIME	-5	10	<code>UnsupportedOperationException("Invalid START TIME");</code>
	-1	10	<code>UnsupportedOperationException("Invalid START TIME");</code>
	2544	10	<code>UnsupportedOperationException("Invalid START TIME");</code>
	2400	10	<code>UnsupportedOperationException("Invalid START TIME");</code>
	2401	10	<code>UnsupportedOperationException("Invalid START TIME");</code>
	1578	10	<code>UnsupportedOperationException("Invalid START TIME");</code>
	1160	10	<code>UnsupportedOperationException("Invalid START TIME");</code>
	1161	10	<code>UnsupportedOperationException("Invalid START TIME");</code>
PATH 2: INVALID DURATION	799	-5	<code>UnsupportedOperationException("Invalid START TIME");</code>
	1800	0	<code>UnsupportedOperationException("Invalid LENGTH");</code>
PATH 3: DISCOUNTED STARTTIME & DISCOUNTED DURATION	1801	-1	<code>UnsupportedOperationException("Invalid LENGTH");</code>
	500	100	1768.0
PATH 4: DISCOUNTED STARTTIME ONLY	759	61	1078.48
	1959	61	1078.48
	2359	65	1149.2
	0	60	1248.0
	400	59	1227.2
	759	1	20.8
	1800	10	208.0
	1801	10	208.0
PATH 5: DISCOUNTED DURATION ONLY	2359	10	208.0
	800	65	2298.4
PATH 6: NO DISCOUNTS	900	61	2156.96
	1000	40	1664.0
	800	1	41.6
	801	59	2454.4
	1759	60	2456.0

Submitting your work:

- 13- When your test classes and suite are complete and run correctly, push your project to a new GitHub repository
 - Place in our *handins* folder a clearly named text file containing: (1) your *github.com* account username and password & (2) repository name & (3) names of students who worked on this exercise
 - This is due by start of next class