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# System Requirements Specification Index

For

**EBill-Junit**

Version 1.0



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### 1 PROJECT ABSTRACT

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In the world of business billing, a new challenge arises: ensuring the reliability and accuracy of the billing system. The Java-E-Bill project presents developers with a unique task: to design and implement comprehensive test cases using JUnit to validate the functionality of the billing system.

Your task is to develop a robust set of test cases that thoroughly evaluate the billing system's behavior and ensure its correctness under various scenarios.

The **Java-E-Bill** test suite should promise to provide confidence in the reliability and accuracy of the billing system, ensuring smooth operations and customer satisfaction.

### 2 CODE STRUCTURE

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#### 2.1 PACKAGE: COM.EBILL.SERVICE

##### Resources

Class/Interface	Description	Status
EbillService(class)	<ul style="list-style-type: none"><li>• This class represents a service for calculating electricity bills based on the consumed units.</li><li>• It takes the consumed units as input and calculates the bill amount according to predefined rates.</li><li>• Don't modify any in this class as this is already implemented.</li></ul>	Already implemented.

## 2.2 PACKAGE: COM.EBILL.TEST

### Resources

Class/Interface	Description	Status
EbillTest(class)	<ul style="list-style-type: none"><li>• This class should contain JUnit test cases to verify the correctness of the calculateBillAmount() method in the EbillService class.</li><li>• These test cases should ensure that the billing logic implemented in the EbillService class produces accurate results for different scenarios of consumed units.</li><li>• Make sure the test cases you write achieve 100% code coverage.</li><li>• Make sure you write the test case for Invalid Data type for initValue.</li><li>• Make sure your test class has @Parameters method that should return test data. The test data must contain init value (Value used to initialize EBillService object) and expected value. Use the same in your test methods.</li><li>• “Before” Lifecycle method must create and initialize the EBillService object using initValue.</li><li>• “After” lifecycle method must make EbillService class object as null to release the resources.</li><li>• Make sure you create ‘BeforeClass’ and ‘AfterClass’ lifecycle methods and print a log message in them.</li></ul>	To be implemented.

### 3 EXECUTION STEPS TO FOLLOW

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1. All actions like build, compile, running application, running test cases will be through Command Terminal.
2. To open the command terminal the test takers, need to go to the Application menu (Three horizontal lines at left top) Terminal New Terminal.
3. This editor Auto Saves the code.
4. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
5. To execute and run test cases:  
`mvn clean install exec:java -Dexec.mainClass="mainapp.MyApp" -DskipTests=true`