System Requirements Specification Index

For

String Manipulation with Numbers

Version 1.0

IIHT Pvt. Ltd.
fullstack@iiht.com

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USE CASE DESCRIPTION

System Requirements Specification

1 Project Abstract

This project focuses on manipulating strings that contain numbers. You need to convert numbers to strings, parse numbers from strings, and perform mathematical operations on numbers embedded within strings.

2 Assessment Tasks

1. **Declare a variable:**
   - A variable named `str1` of `String` datatype, initialized with the value `"The total cost is 150 dollars."`.
2. **Convert a Number to a String:**
   - Convert an integer `250` into a string using `String.valueOf(250)`.
   - Store the result in a variable named `numToStr` of `String` datatype.
3. **Parse a Number from a String:**
   - Declare and initialize a string variable named `str2` with the value `"100"`.
   - Convert `str2` into an integer using `Integer.parseInt(str2)`.
   - Store the result in a variable named `parsedNumber` of `integer` datatype.
4. **Perform Arithmetic Operation:**
   - Add `50` to `parsedNumber` to calculate the total cost.
   - Store the result in a variable named `totalCost` of `integer` datatype.
5. **Check if the String Contains a Number:**
   - Check if `str1` contains a number using the regular expression `matches(".*\\d+.*")`.
   - Store the result in a variable named `containsNumber` of `boolean` datatype.

Print the Results:

- Print the results of each operation i.e, `numToStr`, `parsedNumber`, `totalCost` and `containsNumber` with appropriate labels in separate lines as shown in the expected output.

Expected Output:

```
Converted Number to String: 250
Parsed Number: 100
Total Cost: 150
Contains Number: true
```

3 Template Code Structure

3.1 Package: com.yaksha.assignment.StringWithNumbersAssignment

Resources

Class/Interface	Description	Status
StringWithNumbersAssignment (class)	• Main class demonstrating operations with strings and numbers, including converting numbers to strings, parsing numbers from strings, performing arithmetic operations on the parsed number, and checking if a string contains numbers.	Need to be implemented.

4 Execution Steps to Follow

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 Application menu (Three horizontal lines at left top) Terminal New Terminal.**
3. **This editor Auto Saves the code.**
4. **If you want to exit(logout) and continue the coding later anytime (using Save & Exit option on Assessment Landing Page) then you need to use CTRL+Shift+B-command compulsorily on code IDE. This will push or save the updated contents in the internal git/repository. Else the code will not be available in the next login.**
5. **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.**
6. **To run your project use command:**
   mvn compile exec:java
   -Dexec.mainClass="com.yaksha.assignment.StringWithNumbersAssignment"

7. **To test your project test cases, use the command**
   mvn test

8. **You need to use CTRL+Shift+B - command compulsorily on code IDE, before final submission as well. This will push or save the updated contents in the internal git/repository, and will be used to evaluate the code quality.**