



TechnoReady In-Mexico

Challenge 7 – Java and JavaScript. Programming Procedures

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Roadmap Planning - Challenge 7

Java and JavaScript. Programming Procedures

Description

The project consists of creating unit tests for two modules developed in Java and JavaScript for the BookingMx website, with the aim of improving the reliability and performance of the booking system.

General Objective: Face a real-world problem solving them by completing the deliverables for each Sprint

Specific Objectives: Learn & use new technologies for accomplish sprints applying new knowledge.

People

- Pinned
 - Eduardo Gutierrez
 - Kaleb Torres
- Placeholder

Challenge 7 Backlog - TechnoRe

#	Title	Assignee	Status	# Estimate	Priority	Description	Start Date	End Date	Color
1	Sprint 1	Kaleb...	In-progress	6	High	Create unit tests with JUnit for the reservations module in Java. You will configure the environment, implement the tests, verify code coverage, and ensure that the entire testing system works correctly.	Nov 6, 2025	Nov 9, 2025	Yellow
2	Sprint 2	Eduardo...	To do	24	Medium	Create unit tests with Jest for the graph visualization module in JavaScript. You will configure the working environment, develop the unit tests, verify code coverage, and ensure that all tests pass successfully.	Oct 10, 2025	Oct 10, 2025	Green
3	Sprint 3	Kaleb...	To do	15	Low	Create complete project documentation and update the GitHub repository. You will develop clear documentation that includes installation instructions, the implemented unit tests, comments within the code, and system diagrams.	Oct 11, 2025	Oct 11, 2025	Orange
4	Final Project	Eduardo...	To do	6	High	Integration of the three Sprint deliverables that constitutes the final project, which must be present to the Digital NAO evaluators in two formats: An analysis and results presentation in PDF format and a video in MP4 format.	Nov 12, 2025	Nov 13, 2025	Blue

Backlog 2 ...	Current sprint 9 ...	Next sprint 11 ...	Closed Sprints 8 ...	Next steps	Deliverables
<p>Final Project</p> <p>+ Make a video presentation explaining Analysis & Result of the Challenge 5</p>	<p>Sprint 2</p> <p>Configure the working environment to use Jest with JavaScript</p> <p>Implement unit tests for the graph functionality, such as displaying nearby cities and the distances between them.</p> <p>Include tests that validate edge cases and error handling in the graph visualization, ensuring its resilience against unexpected, empty, or inconsistent data.</p> <p>Ensure that coverage is at least 90%. Use Jest to run the tests and generate a coverage report.</p> <p>Run the unit tests, verify that all tests pass, and adjust any part of the code that fails during testing.</p> <p>Take screenshots showing the coverage achieved by the tests.</p> <p>Add a file with comments on the main technical difficulties encountered and the strategies used to solve them, thus promoting reflection and documentation of technical learning.</p> <p>If possible, perform a quick cross-review with another team member to receive external feedback on the quality and clarity of the tests.</p> <p>+ </p>	<p>Sprint 3</p> <p>General project description: Briefly explain what the project is about, its purpose, and the key functionalities it offers (reservations module, city graph, etc.).</p> <p>Installation instructions: Provide clear steps on how to set up the development environment, install dependencies, and run the project.</p> <p>Description of the tests: Include a section explaining the unit tests implemented in the two previous Sprints and how to execute them.</p> <p>Add examples of test execution and snippets of expected results, making the process easily replicable by other developers.</p> <p>Add clear and complete comments in the code so that developers can understand the logic behind the implementations.</p> <p>Make sure to document important functions and methods, as well as any key decisions made during development.</p> <p>Use a standard format for comments in functions and modules (e.g., Javadoc/JSDoc), ensuring consistency and clarity for anyone reviewing the code.</p> <p>Review all documentation to ensure it is complete and well-structured. Confirm that all code is properly commented and that diagrams are clear and easy to understand.</p> <p>Configure the necessary access permissions so the Digital NAO team can easily access the repository.</p> <p>Create diagrams that explain the</p> <p>+ </p>	<p>Sprint 1</p> <p>Configure the development environment to work with JUnit in Java; verify that all required dependencies and tools are installed.</p> <p>Create a suite of unit tests for the reservations module. The tests should cover the main functionalities, such as creating, editing, and canceling reservations, as well as any other critical functions of the module.</p> <p>Define test cases that include both positive and negative scenarios (errors and exceptions) to ensure the robustness of the module.</p> <p>Use tools such as JaCoCo—or any other tool that allows you to verify code coverage. The goal is to achieve at least 90% code coverage.</p> <p>Run the unit tests and ensure that all of them pass successfully. If any test fails, make the necessary adjustments to the code or the tests.</p> <p>Briefly document, in a file (this may be part of the README or a dedicated log), the issues found and how they were resolved, to facilitate learning and continuous improvement.</p> <p>Take screenshots showing the achieved coverage percentage and that the tests have been executed correctly.</p> <p>+ </p>	<p>Next steps</p>	<p>Deliverables</p> <p>Sprint 1</p> <p>ZIP folder with:</p> <ul style="list-style-type: none"> - Backlog (PDF) - Roadmap (PDF) - Project documentation in PDF format - GitHub Repository link in PDF format <p>Sprint 2</p> <p>ZIP folder with:</p> <ul style="list-style-type: none"> - Backlog (PDF) - GitHub repository link in PDF format <p>Sprint 3</p> <p>ZIP folder with:</p> <ul style="list-style-type: none"> - Backlog (PDF) - GitHub repository link in PDF format <p>Final Project</p> <p>ZIP folder with:</p> <ul style="list-style-type: none"> - Analysis and Results Presentation of the Proposed Solution - Video Recording

Para una mejor visualización, visitar:

miro.com/app/board/uXjVJttJzoo=/