



TechnoReady In-Mexico

Challenge 8 – Testing Procedures for Operational Issues

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Planning - Challenge 8

Testing Procedures for Operational Issues

Description

The project consists of designing and executing tests to validate the quality and functionality of a banking application, implementing equivalence class techniques and test cases, and culminating with a Java simulation that automates the validation of user input data.

Challenge 8 - TechnoReady

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.

Challenge 8 Backlog - TechnoRe

#	Title	Assignee	Status	# Estimate	Priority	Description	Start Date	End Date	Color
1	Sprint 1	Kaleb... (Kaleb Torres)	In-progress	6	High	Design equivalence classes based on the data required by the banking application, identifying valid and invalid ranges and explaining decisions in an executive presentation in PDF format.	Nov 14, 2025	Nov 18, 2025	Yellow
2	Sprint 2		To do	24	Medium	Create 12 detailed test cases using the equivalence classes from Sprint 1, documenting them in an Excel report with all necessary specifications.	Nov 19, 2025	Nov 23, 2025	Green
3	Sprint 3	Kaleb... (Kaleb Torres)	To do	15	Low	Implement a basic Java simulation that validates input data according to the developed test cases, delivering a .java file with the project script and a .txt README file with execution instructions.	Nov 24, 2025	Nov 26, 2025	Orange
4	Final Project		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 27, 2025	Nov 28, 2025	Blue

Backlog | 2

- Final Project (Nov 27 — Nov 28)
- Make a video presentation explaining Analysis & Result of the Challenge 8

Current sprint | 4

- Sprint 2 (Nov 19 — Nov 23)
 - Create 12 detailed test cases to verify the functionality of the banking application
 - Prepare a report of the 12 test cases:
 - Cover page
 - Brief introduction to the test cases
 - Detailed table with the 12 test cases
 - Include a column in your table to indicate whether the test case is aligned with a valid or invalid equivalence class, facilitating subsequent analysis.
 - In Excel format
 - Design 12 test cases, ensuring you include valid and invalid values and that the variations cover different data combinations. Define for each test case:
 - Unique identifier
 - Case description
 - Input data
 - Expected result
 - Initial and final state of the application

Next sprint | 8

- Sprint 3 (Nov 24 — Nov 26)
 - Develop a java script that simulates user input (bank code, branch code, account number, personal key, and order value).
 - Include in the code execution examples for at least three representative test cases (one valid, one boundary, and one invalid), providing the expected output for each situation.
 - Validate the input data based on the equivalence classes and test cases created in the previous Sprints.
 - Provide clear success or error messages depending on the validation results.
 - Produce a .java file containing the full simulation script for the complete project. Be sure to include a README in .txt format explaining how to run the script and any required configuration.
 - Request a third-party review of both the script and the README to ensure they are understandable and executable by someone not involved in the original development.
 - Record the main findings and best practices identified during the implementation and validation of the simulation.

Next steps

- Sprint 1 (Nov 14 — Nov 18)
 - Design equivalence classes based on the problem described in the Project Context section
 - Analyze the described problem, focusing on the data required by the banking application: bank code, branch code, account number, personal key, and order value.
 - Identify possible ranges or categories for each data field and apply the concept of equivalence classes.
 - Design a set of equivalence classes, ensuring that both valid and invalid values are covered.
 - Include concrete examples (at least one valid and one invalid) for each defined equivalence class, to facilitate later interpretation and application.
 - Prepare an executive presentation that includes:
 - Cover page
 - Introduction to the concept of equivalence classes
 - Table with the equivalence classes defined for each data field
 - Explanation of why those classes were selected
 - In PDF format

Deliverables

- Sprint 1
 - ZIP folder with:
 - Backlog (PDF)
 - Roadmap (PDF)
 - Executive presentation in PDF format
- Sprint 2
 - ZIP folder with:
 - Backlog (PDF)
 - Report of the 12 test cases in Excel format
- Sprint 3
 - ZIP folder with:
 - Backlog (PDF)
 - .java file containing the simulation script for the complete project
- Final Project
 - ZIP folder with:
 - Analysis and Results Presentation of the Proposed Solution
 - Video Recording

Para una mejor visualización, visitar:

<https://miro.com/app/board/uXjVJpPHXtY=/>

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