



TechnoReady In-Mexico

Challenge 8 – Testing Procedures for Operational Issues

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Tracking Tables

Table 1 – Requirements list

| Sprint | Requirements |
|---|---|
| Sprint 1: Equivalence Class Design (Black-Box Analysis) Focus: Identify valid and invalid value ranges for each input field of the banking application and justify them using the equivalence class technique. | <ul style="list-style-type: none">Analyze the problem description and list all input fields required by the online banking application: bank code, branch code, account number, personal key, order value.Define business rules/assumptions (expected length, numeric/alphanumeric, required fields).Create equivalence classes (valid & invalid) per field, including boundaries and invalid categories.Build a table with class identifier, description, range/category, valid/invalid examples.Prepare PDF executive presentation. |
| Sprint 2: Test Case Design (12 Black-Box Test Cases) Focus: Design 12 detailed test cases derived from equivalence classes. | <ul style="list-style-type: none">Use Sprint 1 equivalence classes to design 12 representative test cases.Each test case must include: ID, description, input data, expected result, initial/final state.Include valid, invalid, and boundary combinations.Add a column to indicate alignment with valid/invalid equivalence classes.Build Excel report with cover page, introduction, and the test case table. |
| Sprint 3: Java Simulation & Input Validation Focus: Implement a Java simulation validating user inputs based on equivalence classes. | <ul style="list-style-type: none">Develop a Java program that simulates bank code, branch code, account number, personal key, and order value inputs.Implement validation logic based on equivalence classes.Include at least 3 representative test case executions (valid, boundary, invalid).Provide clear success/error messages.Deliver a .java file and README.txt explaining how to run the program.Request third-party review and document |

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| | findings. |
| Final Project: Document Analysis & Results for the whole project | <ul style="list-style-type: none"> • Make a video presentation explaining Analysis & Result of the Challenge 6. |

Table 2: Prioritize list

| Requirements | Stages (Steps) | Time Estimation | Deliverables |
|--|---|-----------------|------------------------------|
| Equivalence Class Definition | 1) Identify all input fields 2) Define business rules 3) Create valid/invalid classes 4) Produce examples | 3h | EquivalenceClassesTable.pdf |
| Equivalence Class Documentation (PDF Presentation) | 1) Write introduction 2) Build table 3) Justify decisions 4) Assemble PDF | 2h | Sprint1_Presentation.pdf |
| Test Case Design (12 Cases) | 1) Select combinations 2) Define inputs & expected results 3) Include valid/invalid/boundary 4) Assign IDs | 4h | 12_Test_Cases.xlsx |
| Test Case Documentation (Excel File) | 1) Create cover page 2) Build full test table 3) Add validity column 4) Format file | 1.5h | TestCases_Report.xlsx |
| Java Simulation – Input Validation Logic | 1) Implement validation 2) Handle errors 3) Produce messages 4) Ensure compile/run | 4h | BankSimulation.java |
| Java Simulation – Test Case Execution Examples | 1) Implement examples 2) Print expected vs | 2h | ConsoleExecutionEvidence.txt |

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|--|--|------|--------------------------------|
| | actual 3) Document results | | |
| README for Running Simulation | 1) Requirements 2) Compile/run instructions 3) Explain sample input | 1h | README.txt |
| Third-Party Review | 1) Review Java file 2) Review README 3) Apply corrections | 1h | PeerReviewNotes.txt |
| Findings & Best Practices Report | 1) Summarize errors 2) Describe impact 3) Document lessons | 1h | Findings_Report.md |
| Final Review & Access Config | 1) Ensure Digital NAO access 2) Validate organization and consistency 3) Perform final project check | 1.5h | evidence/README.md, repo ready |

As the User Stories was an exercise already made in Challenge 1, All this backlog was made according to Challenge 8 requirements for All 3 Sprints and Final Project.