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- Date: September 17th, 2025
- Name of the pathway in which you are enrolled: Bécalos Techno Ready
- Title of the Challenge: **Challenge 2 – Back End Java for Information Processing**

Tracking Tables

Table 1 – Requirements list

Sprint	Requirements
Sprint 1: **Start planning the project for Challenge 2**	1. Constructing a Backlog for Challenge 2. 2. Build a Roadmap integrating all the requirements, dates, participants and Sprints for Challenge 2. 3. Create a presentation that documents: • The basic concepts of the SCRUM methodology • The characteristics of a JSON and a CSV file • Include descriptive comments in the code to explain the basic functionality of each developed component
Sprint 2: **Develop the desktop program using Java For Challenge 2**	1. Implement in Java using a popular JSON manipulation library. 2. Create a Java class with a function to **read JSON files** (open, parse, handle exceptions, test in isolation). 3. Use a library to **write CSV files** in Java. 4. Create a Java class with a function to **write data into CSV** (configure delimiters, handle exceptions). 5. Add **JavaDoc documentation** for all classes and functions (purpose, parameters, return values). 6. Create a **GitHub repository** with: 4. Organized code and documentation 5. README.md (project description + setup/run instructions) 6. Proper access permissions for reviewers

Sprint 3: **Develop a desktop Java program**	1. Develop a desktop Java program to **convert JSON into CSV**. 2. Implement functionality: • JSON file reading (reuse Sprint 2 function). • Data transformation (map JSON into CSV structure). • CSV file writing (reuse Sprint 2 function). • Transformation algorithm (document mapping/validation logic). • Parameter configuration (filenames, delimiters via CLI or config file). 3. Add **JavaDoc documentation** (purpose, parameters, return values, usage examples). 4. Use a **verification checklist** to confirm required functionality and quality. 5. Ensure all **documentation is complete and clear**. 6. Update **GitHub repository** with Sprint deliverables (organized files, updated docs).
Final Project: **Document Analysis & Results for Challenge 2**	Make a video presentation explaning Analysis & Result of the Challenge 2

Table 2: Prioritize list – Challenge 2

Requirements	Stages (Steps)	Time Estimation	Deliverables
Constructing a backlog for Challenge 2	1. Identify tasks 2. Prioritize tasks 3. Document backlog	3h	Backlog document
Build a roadmap integrating requirements, dates, participants, and sprints	1. Define timeline 2. Assign participants 3. Organize sprints	4h	Roadmap file (timeline)
Create a presentation: SCRUM, JSON, CSV, with code comments	1. Collect content 2. Design slides 3. Export presentation	5h	Presentation (PDF/Word/Slides)
Implement in Java using a JSON library	1. Choose library 2. Add dependency	2h	Java project setup with JSON dependency
Create a function to read JSON files (open, parse, handle exceptions, test in isolation)	1. Open JSON file 2. Parse into object/list 3. Handle exceptions	6h	Java class JsonReader.java with tests
Use a library to write CSV files	1. Add CSV library 2. Verify configuration	2h	Configured CSV writing dependency
Create a function to write data into CSV (configure delimiters, handle exceptions)	1. Define CSV structure 2. Write rows 3. Handle exceptions	6h	Java class CsvWriter.java with tests
Add JavaDoc documentation for all classes and functions	1. Write comments 2. Generate docs	3h	JavaDoc comments in code
Create GitHub repository with structured code & documentation	1. Create repo 2. Push files	1h	GitHub repo link
Add README.md (description + setup/run instructions)	1. Create file 2. Add description 3. Add setup steps	2h	README.md file
Provide access permissions for reviewers	1. Open repo settings 2. Add reviewers	0.5h	Repo access granted

Develop desktop Java program to convert JSON into CSV	1. Integrate reader/writer 2. Run program 3. Debug issues	8h	Main program file
Data transformation: map JSON into CSV structure	1. Define mapping rules 2. Implement transformation 3. Validate output	5h	Transformation algorithm implemented
Parameter configuration (filenames, delimiters via CLI/config file)	1. Define parameters 2. Implement parser 3. Test options	3h	Config options added
Document mapping/validation logic in algorithm	1. Write explanation 2. Add validation details	2h	Documentation updates
Add JavaDoc (purpose, parameters, usage examples)	1. Write comments 2. Add usage examples 3. Generate docs	3h	Updated JavaDoc
Use verification checklist to confirm functionality & quality	1. Create checklist 2. Validate items	2h	Completed checklist
Ensure all documentation is clear and complete	1. Review files 2. Correct issues 3. Finalize docs	2h	Updated documentation set
Update GitHub repo with Sprint 3 deliverables	1. Commit changes 2. Push to repo	1h	Updated repo
Make a video presentation explaining analysis & results	1. Prepare script 2. Record video 3. Edit final file	6h	Video presentation file

As the User Stories was an exercise already made in Challenge 1, All this backlog was made according to Challenge 2 requirements for All 3 Sprints and Final Project.