



TechnoReady In-Mexico

Challenge 4 – Non-Relational Databases for Storing JSON Data

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Tracking Tables

Table 1 – Requirements list

Sprint	Requirements
Sprint 1: MongoDB Database Configuration and Development	<ol style="list-style-type: none">1. Create and configure a GitHub repository including README (description, usage, structure).2. Upload MongoDB backup file (collections and indexes).3. Include scripts for importing CSV data.4. Add screenshots of database and collections.5. Configure access permissions for Digital NAO team.
Sprint 2: RESTful API Development (Express.js + MongoDB)	<ol style="list-style-type: none">1. Create GitHub repository with README (description, usage, structure).2. Develop RESTful API using Express.js and MongoDB.3. Implement peer reviews and document fixes.4. Add Postman/Insomnia tests with screenshots.5. Document and organize code according to versioning.6. Configure access permissions for Digital NAO team.
Sprint 3: New Features – Search & Filtering for RESTful API	<ol style="list-style-type: none">1. Extend RESTful API with search/filter endpoints.2. Update README with new features.3. Add Postman/Insomnia tests for new endpoints.4. Maintain access permissions for Digital NAO team.
Final Project: Document Analysis & Results for the whole project	Make a video presentation explaining Analysis & Result of the Challenge 4.

Table 2: Prioritize list – Challenge 2

Requirements	Stages (Steps)	Time Estimation	Deliverables
GitHub Repo Setup (Initial)	Create repo, add README (description, usage, structure), configure access	2h	GitHub repository with initial README
MongoDB Database Setup	Create collections and indexes, export and upload backup file	4h	MongoDB .bak file with collections
CSV Import Scripts	Write import scripts using mongoimport or Node.js, test data upload	3h	Import scripts + verified imports
Documentation & Screenshots	Capture database setup evidence, upload images to repository	2h	Screenshot folder in repo
Version Control Guidelines	Apply versioning (1.0.0, 1.1.0), document version updates in README	1h	Version log in README
Express.js RESTful API	Initialize Node project, connect API to MongoDB, define CRUD routes	6h	Functional API connected to DB
Peer Review & Fixes	Perform code review, document issues and fixes	2h	Review report / fixes log
Postman/Insomnia Testing (Sprint 2)	Create tests for endpoints, add screenshots to repo	3h	Postman collection + screenshots
API Documentation Update	Document endpoints, add changelog and usage guide	2h	Updated README
API Search & Filtering Features	Implement query parameters for search, add sorting filters	4h	Enhanced API with search/filter
Testing New Features (Sprint 3)	Postman tests for new endpoints, upload screenshots	2h	Updated test evidence
Final Versioning & Permissions	Update README with final version (e.g., v1.3.4), confirm Digital NAO access	1h	Final GitHub repository release

As the User Stories was an exercise already made in Challenge 1, All this backlog was made according to Challenge 4 requirements for All 3 Sprints and Final Project.

