OMNIVEST PUBLIC REPORT – MODULE 2

Inteli – Instituto de Tecnologia e Liderança\ Engenharia da Computação

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DELIVERABLES OF THE SECOND MODULE

Omnivest Project

São Paulo – 2025

ABSTRACT

This document summarizes the outcomes of the second development module of the Omnivest project, covering Sprints 6 to 10. This module focused on transforming the static interface from the first cycle into a functional, secure, and dynamic financial dashboard. Major deliverables included the implementation of protected routes, backend authentication using OAuth2 and JWT, a complete user interface for company metrics, and the restructuring of backend architecture for modularity and testing. This incremental evolution ensures the scalability, security, and usability of the Omnivest solution.

INTRODUCTION

The Omnivest project is a digital platform that assists users in managing and visualizing financial investments. Module 2 was dedicated to building secure authentication systems, dynamic dashboards, and structured backend data pipelines. Covering Sprints 6 through 10, this phase transitioned the project from prototype to an integrated full-stack application. This report outlines the goals, activities, and deliverables of each sprint, aligned with the academic and technical standards of Inteli.

SECOND MODULE DELIVERABLES

Sprint 6 – Planning and Technical Architecture

Sprint 6 established the architectural vision for Module 2. The team prioritized:

- Designing the frontend with modular, reusable components using React and Tailwind CSS
- Selecting FastAPI as the backend framework
- Planning for secure user authentication with JWT
- Creating wireframes for the financial dashboard and authentication flow This sprint concluded with a detailed implementation plan and a GitHub roadmap.

Sprint 7 – User Interface Implementation

In Sprint 7, the UI prototypes were implemented in code:

- Created Dashboard, Portfolio, Transactions, and Settings pages
- Implemented company filtering and data display with dummy JSON
- Integrated Recharts for revenue and asset visualization
- Ensured responsiveness and accessibility using Tailwind CSS Each page used reusable components for cards, charts, and selectors.

Sprint 8 – Authentication API Development

Sprint 8 delivered a complete user authentication backend:

- FastAPI + SQLite database + SQLAlchemy
- Password hashing with bcrypt
- OAuth2-compliant JWT token-based authentication
- Endpoints for register, login, and password update Frontend integration enabled login/logout and protected routes with token validation.

Sprint 9 – Backend Refactoring and JSON Structuring

Sprint 9 refactored the backend into modular components:

- Extracted transformation logic into `transformers.py`
- Grouped data extraction in `extractors.py`
- Standardized JSON export in `JSONWriter.py`
- Improved output JSON structure by indexing company data by name These changes improved code readability, debuggability, and scalability.

Sprint 10 – Test Implementation and Bug Fixes

Sprint 10 focused on testing and final stability improvements:

- Implemented unit tests for backend endpoints
- Validated JWT token flow and route protection
- Resolved bugs related to file parsing and user sessions This sprint ensured readiness for future deployments and integrations.

CONCLUSION

The second module of the Omnivest project achieved a secure, modular, and user-friendly system. Through authentication, dynamic data visualizations, and improved backend design, the team has laid the groundwork for production-ready development. This work represents a significant step forward from the first module, with strong foundations for real-time financial data and user expansion.

REFERENCES

OMNIVEST PUBLIC REPORT – Instituto de Tecnologia e Liderança. Omnivest Methodology Documentation, 2025.