PROJECT REPORT

Log-Pose-Dashboard

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ABSTRACT

In the modern digital workspace, productivity tools are often fragmented across multiple applications. This project presents an Interactive Productivity Dashboard that acts as a unified command center. It features a dynamic 16x9 grid layout with draggable widgets and a Habit Matrix module for analytics. The system uses a hybrid architecture with a Java Spring Boot backend and Jakarta EE Servlets, combined with a lightweight HTML, CSS, and JavaScript frontend.

INTRODUCTION

Background: The rise of the Quantified Self movement has increased dependency on multiple productivity tools, leading to cognitive overload.

Problem Statement:

Existing dashboards lack backend support or dynamic customization.

Objectives:

- Centralization of productivity tools

- Interactive drag-and-drop dashboard

- Hybrid backend architecture

- Habit analytics visualization

TECHNOLOGY STACK

Frontend: HTML5, CSS3, JavaScript (ES6), Chart.js

Backend: Java 17, Spring Boot 3.2.0, Jakarta EE Servlets

Build Tool: Maven

SYSTEM ARCHITECTURE

The project follows a Hybrid MVC architecture combining client-side persistence with server-side validation.

FOLDER STRUCTURE

Standard Maven layout with backend logic in src/main/java and frontend assets in

```
Log-Pose-Dashboard/
│
├── .idea/
│
├── src/
│   └── main/
│      ├── java/
│      │   └── com/
│      │      └── project/
```

```
|   |          └── dashboard/
|   |              ├── controller/
|   |              |   └── PageController.java
|   |              |
|   |              ├── servlet/
|   |              |   └── (servlet classes, if any)
|   |              |
|   |              └── DashboardApplication.java
|   |
|   └── resources/
|       ├── static/
|       |   ├── habit_script.js
|       |   ├── habit_style.css
|       |   ├── habit_tracker.html
|       |   ├── index.html
|       |   ├── script.js
|       |   └── style.css
|       |
|       └── application.properties
|
├── target/
|
├── pom.xml
|
└── readme.md
```

CORE MODULES

- Grid Layout Engine

- Habit Matrix

- Backend Servlet Connectivity Test

TESTING & VALIDATION

All major functionalities were tested successfully.

FUTURE SCOPE

- Database Integration

- Authentication

- REST API expansion

CONCLUSION

The project demonstrates effective integration of modern frontend and enterprise Java backend technologies.

GitHub – Link

Log-Pose-Dashboard