Week 4 Worklog (29.01.2025 - 01.02.2025)

Task: Backend Architecture and Database Design

1. Database Schema Finalization

- Assigned to: Santhosh K (7376212IT221)
- Tasks Completed:
 - o Designed the **MongoDB schema** using Mongoose.
 - o Created collections and relationships between documents.
 - o Defined **schema validation** and indexing for optimization.
 - o Created MongoDB Atlas setup for cloud storage.
 - o Wrote initial Mongoose models for CRUD operations.

2. Backend Architecture Planning

- Assigned to: Jayasuriya J (7376212IT160)
- Tasks Completed:
 - Designed Node.js + Express.js backend architecture.
 - o Planned **RESTful API structure** (routes, controllers, middlewares).
 - o Decided on JWT authentication and role-based access control (RBAC).
 - o Defined API endpoints and Swagger API documentation.
 - o Planned microservices or monolithic backend approach.

3. Backend Framework Setup & Initial Commit

- Assigned to: Rakesh M (7376212IT208)
- Tasks Completed:
 - Set up Node.js + Express.js project structure.
 - o Installed **required dependencies** (Express, Mongoose, JWT, CORS, dotenv).
 - o Configured .env files for database credentials & secrets.
 - Created basic API routes for user authentication & consumables management.
 - o GitHub setup & initial commit with backend folder structure.

4. Documentation and Review

- Assigned to: Praveen R (7376212IT201)
- Tasks Completed:
 - o Documented database schema & API structure.
 - o Reviewed backend architecture for best practices.
 - o Created **Postman collection** for API testing.
 - Wrote **README.md** with setup instructions.

Data base Schema:

