**Sprint 4 Documentation – Fit-Track Pro**

**4th Sprint Backlog Items**

**Sprint Duration:** April 20 – May 3, 2025  
**Total Story Points:** 20

1. **Advanced React Features Integration**
   * Reusable components for charts, forms
   * Improved routing and state management
2. **Diet Tracker with Calorie Insights**
   * Calorie input with meal type classification
   * Display daily intake totals
3. **Sleep Data Logging**
   * UI to log and view sleep hours
   * Weekly sleep pattern chart
4. **Workout Logger Final Touches**
   * Add workout history view
   * Duration-based calorie calculation
5. **Project Integration and Testing**
   * Connect frontend (React/HTML/CSS) to Flask backend with MySQL
   * End-to-end testing of full app features
   * Push final version to GitHub with documentation

**Definition of Done (DoD) Report**

**Criteria for Sprint 4 Stories:**

* Code committed and pushed to GitHub main branch
* All routes connected and functioning
* UI fully responsive
* React components modular and reusable
* MySQL connected and data flow tested
* Manual tests completed

**Completion Summary:**

* All core backlog items completed
* CICD integration planned but full automation with Docker remains for final exam

**Test Report**

**Test Type:** Manual and Functional Testing

|  |  |  |  |
| --- | --- | --- | --- |
| Feature | Type | Tool | Result |
| React Component Reusability | Manual | Browser | Verified |
| Calorie Intake Summary | UI/Manual | Browser | Passed |
| Sleep Data Log | Manual | Browser | Verified |
| Workout History Display | Functional | Postman, Browser | Passed |
| Full Stack Connectivity | Integration Test | Browser | Passed |

**Pending:**

* Docker-based testing (Final Sprint)
* System test automation via GitHub Actions

**CICD DevOps Integration – Part 2 (Planned)**

**Stage:** In Progress – To be completed in final evaluation

**Goals for Final Sprint/Exam:**

* Complete Dockerfile configuration for backend and frontend
* Push final Docker images to Docker Hub
* Configure GitHub Actions to:
  + Build Docker images on commit
  + Run system tests on containers
  + Push production images to Docker Hub with tags

**Final Work:**