**SIT 725**

**Applied Software Engineering**

**Task 5.1P**

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**Project Management: Task Decomposition**

**User Story**

**As a** drone researcher and UAV flight enthusiast, **I want to** upload experimental UAV flight data and visualize 3D flight trajectories with network quality overlays, **so that** I can analyse the correlation between network degradation and UAV flight performance accuracy.

**Sprint Backlog Tasks**

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| Task # | Task Description | Estimated Hours |
| 1 | **Set up database and create data storage structure for UAV flight data** | **4** |
| 2 | **Create user registration and login system with secure password protection** | **7** |
| 3 | **Build file upload page for UAV data files (supports CSV, JSON, TXT formats)** | **5** |
| 4 | **Create system to read and process uploaded flight data files** | **4** |
| 5 | **Build user homepage showing personal flight history and management tools** | **6** |
| 6 | **Create 3D flight path visualization using Three.js graphics library** | **8** |
| 7 | **Design database structure for saving user flight data and analysis results** | **5** |
| 8 | **Build features for users to view, edit, and delete their flight analysis data** | **6** |
| 9 | **Create analysis tools to calculate flight accuracy and network performance** | **5** |
| 10 | **Design responsive website layout that works on mobile phones and computers** | **6** |
| 11 | **Add user login session management and page access security protection** | **4** |
| 12 | **Create dashboard showing user's flight statistics and performance trends** | **7** |
| 13 | **Build detailed flight analysis view with downloadable report generation** | **5** |
| 14 | **Add error handling and user-friendly feedback messages throughout the website** | **3** |
| 15 | **Create user profile settings page for account management and preferences** | **3** |

**Total Estimated Hours: 83 hours**