

Weekly Project Work Plan and Documentation

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Week Duration: 21st – 25th October 2025

Projects Under Development:

1. AbyBooking

2. AbyRide

3. Desktop Support Management

1. AbyBooking Project

Project Overview

AbyBooking is an innovative **restaurant booking and management platform** developed to make dining reservations more accessible, faster, and fully digital across Rwanda. The system aims to connect customers with restaurants through an interactive web-based experience that enables browsing, viewing, and booking tables online.

For restaurant owners, AbyBooking is not just a booking system — it is a **business management tool**. It allows them to manage reservations, monitor customer engagement, track feedback, and enhance their brand visibility online. By bridging customers and service providers, AbyBooking promotes efficiency, convenience, and transparency in Rwanda's hospitality industry.

The project is currently in its **core development stage**, focusing on implementing foundational features like restaurant registration, authentication, and front-end integration.

Purpose and Goals

The main objective for this development week is to establish the **operational foundation** of the platform.

Specifically:

- Complete and finalize the user interface (UI/UX) for both restaurant owners and clients.
- Build a secure and smooth restaurant registration system.
- Implement authentication logic (sign up, login, logout) for restaurant managers.
- Integrate all registered restaurants dynamically on the front-end for public visibility.

This milestone ensures AbyBooking becomes visually appealing, functionally ready, and technically stable for upcoming booking and payment features.

Detailed Weekly Development Plan

Date Task Detailed Description

21/10/2025 (Tuesday)

Finalize UI/UX Design

The design team will polish the final layout, ensuring the platform is modern, responsive, and easy to navigate. The UI will include dedicated pages for restaurant listings, restaurant detail views, admin dashboards, and a homepage for clients. Accessibility and cross-device responsiveness (desktop, tablet, mobile) will also be tested.

22/10/2025 (Wednesday)

Restaurant Registration Feature

Develop the form and backend logic to allow restaurants to register by submitting details such as name, logo, email, phone, address, service type, and opening hours. The data will be validated on both client and server sides before storage in the database. Error handling and success feedback will be added for better UX.

23/10/2025 (Thursday)

Authentication System Setup

Build a robust authentication system for restaurant owners. Passwords will be hashed using bcrypt, and JWT (JSON Web Tokens) will be used for secure sessions. The goal is to ensure that only verified users can access the restaurant management dashboard. Logout and session expiry will also be implemented for extra protection.

24/10/2025 (Friday)

Restaurant Display Integration

Develop the feature that dynamically fetches and displays all registered restaurants from the

backend. Each restaurant card will include the logo, name, service type, and location. A search and filter functionality may also be introduced to improve user experience.

25/10/2025 (Saturday)

Testing & Review

Conduct full functional testing of the registration, authentication, and display systems. Debug UI inconsistencies, validate backend requests, and ensure smooth performance across devices. Prepare a review report outlining strengths and areas needing improvement for the next sprint.

End-of-Week Objective

By the end of the week, AbyBooking should have:

- A finalized front-end design ready for public testing.
- A fully functional registration and authentication system for restaurants.
- A dynamic and live restaurant display integrated with backend APIs.

This stage lays the groundwork for introducing **table booking**, **notifications**, **and payment processing** in the following sprint.

2. AbyRide Project

Project Overview

AbyRide is a **transportation and ride-booking platform** designed to improve how passengers and drivers connect in Rwanda. It offers ride-hailing functionality combined with **vehicle and driver management** tools that make it more than a typical ride-booking service.

The platform includes features for:

- Driver and vehicle registration.
- Trip and ride reservation management.
- Client and driver authentication.
- Secure data handling and real-time updates.

Most of the core functionalities have already been implemented. This week's development focus is on **refinement**, **optimization**, **and security enhancement** to ensure that AbyRide remains stable, safe, and high-performing.

Purpose and Goals

The AbyRide system is nearing completion, and the goal this week is to **refine and secure** every active feature. That includes improving authentication, optimizing database queries, strengthening encryption, and enhancing user trust.

Security and reliability are now the top priorities, ensuring the platform is production-ready.

Weekly Improvement & Security Schedule

Date Action Detailed Description

21/10/2025 (Tuesday)

Driver & Vehicle Module Refinement

Review existing modules for adding and managing drivers and vehicles. Add advanced validation (e.g., license number format, vehicle plate validation), encrypt sensitive data, and optimize queries for faster API response times. Improve driver detail pages and vehicle management dashboards.

22/10/2025 (Wednesday)

Client Authentication Security Upgrade

Upgrade client authentication by adding multi-layer password hashing, email verification, and JWT refresh tokens. Implement token expiration management and session invalidation to prevent misuse.

23/10/2025 (Thursday)

Driver Authentication Enhancement

Reinforce driver-side login with advanced access control, ensuring drivers only access assigned trips. Improve credential encryption and add two-step verification for added safety.

24/10/2025 (Friday)

Reservation System Optimization

Revisit and refine the booking logic. Ensure that rides cannot overlap and that both clients and drivers receive proper confirmations. Add better error handling for failed bookings and fix latency issues.

25/10/2025 (Saturday)

System Review & Verification

Conduct full-scale testing across all modules. Analyze system performance, test against potential security breaches, and document all fixes made during the week. Generate a verification report for approval.

Expected Outcomes

By the end of the week, AbyRide will achieve:

• A more secure authentication process for both drivers and clients.

- Improved database efficiency and performance optimization.
- A safer and smoother reservation experience for users.
- A fully verified version ready for scaling and deployment testing.

This ensures AbyRide is not just functional — but **trusted**, **safe**, **and user-friendly**, meeting industry standards for transport tech platforms.

3. Desktop Support Management System

Project Overview

The Desktop Support Management System is an advanced **HR and operations management platform** built to assist organizations in handling staff data, department coordination, and recruitment. The system is similar to a Human Resource Management System (HRMS) but customized for internal use.

Although the system was developed earlier, it's now entering an **upgrade and maintenance phase** — aimed at enhancing security, validation accuracy, and data integrity.

Purpose and Goals

This week's focus is to strengthen the system's **security**, **validation logic**, **and operational efficiency**. The team will refine key modules like authentication, employee management, and recruitment to ensure smoother performance, cleaner design, and more reliable data handling.

Weekly Development Plan

Date Task Detailed Description

21/10/2025 (Tuesday)

Authentication System Upgrade

Integrate advanced password hashing (bcrypt), role-based access control (RBAC), and secure session management. The goal is to ensure each user (admin, HR, employee) has proper permissions and restricted access.

22/10/2025 (Wednesday)

Employee Management Enhancement

Rebuild the employee management module with better input validation, improved CRUD operations, and a more intuitive user interface. Add pagination and search features to help HR staff manage large employee datasets easily.

23/10/2025 (Thursday)

Recruitment Management Module

Refactor the recruitment process to include vacancy posting, applicant tracking, and interview scheduling. Add filtering and status tracking features for HR convenience.

24/10/2025 (Friday)

System Security & Validation Review

Conduct a comprehensive review of all system inputs and authentication routes. Fix vulnerabilities, prevent SQL injections, and add CSRF protection to all sensitive forms.

25/10/2025 (Saturday)

Testing & Final Adjustments

Perform end-to-end testing for the entire system. Verify all modules (authentication, employee, recruitment) for accuracy and security. Prepare documentation and deployment notes for the next release.

End-of-Week Goals

By week's end, the Desktop Support Management System will:

- Have a modernized and secure authentication layer.
- Provide a more polished and user-friendly employee management module.
- Offer an efficient recruitment management workflow ready for integration.

This sets the stage for future modules like payroll, attendance, and performance tracking.

Overall Weekly Summary

The week of 21st–25th October 2025 focuses on stability, improvement, and system reliability across three ongoing projects — AbyBooking, AbyRide, and Desktop Support Management.

- AbyBooking will finalize UI design, registration, and authentication.
- AbyRide will undergo a strong round of system optimization and security hardening.
- **Desktop Support Management** will receive refined HR functionalities and higher data protection.

By the end of this week, all three systems should be at a **stable and production-ready stage**, paving the way for deployment testing and the next sprint's integration phase.