

Akshaya Resorts – Room Monitoring

1. Abstract

This project titled “**Akshaya Resorts – Room Monitor**” is a web-based application developed to monitor and manage room-related activities in a hospitality environment. The system helps track work status such as pending, partial, and completed tasks for each room. It also supports role-based access, data backup, and report export features to improve efficiency and organization.

2. Introduction

In hotels and resorts, managing room maintenance and work status manually can be time-consuming and error-prone. This project introduces a digital solution that allows staff and administrators to monitor room work in real time. The application provides an interactive dashboard to view, update, and manage room tasks efficiently.

3. Objective of the Project

The main objectives of this project are:

- To monitor room work status digitally
- To reduce manual record-keeping
- To provide a simple and user-friendly dashboard
- To allow easy filtering and tracking of room activities
- To support data backup and report generation

4. Scope of the Project

This project is mainly useful for:

- Resorts and hotels
- Room maintenance staff
- Administrators who manage room activities

The system can be expanded in the future to include mobile access, real-time notifications, and database connectivity.

5. Functionality Summary (Detailed)

Function/Element	What it does	For Your Report
Viewer / Staff / Admin Roles	Lets different users log in or view different sections	Explain user access roles
Toggle Theme	Switch UI colors (light/dark)	UI customization
Jump / Clear	Quick navigation / reset filters	User interaction improves ease
Backup / Restore JSON	Save or load app data	Data management
Export .xlsx	Saves reports in Excel format	Reporting & analysis
Activity Log	Displays recent actions	Audit trail feature
Quick Filters	Filters tasks by status	Helps view important tasks
Add Work / Mark Completed	Edit room tasks	Task management panel

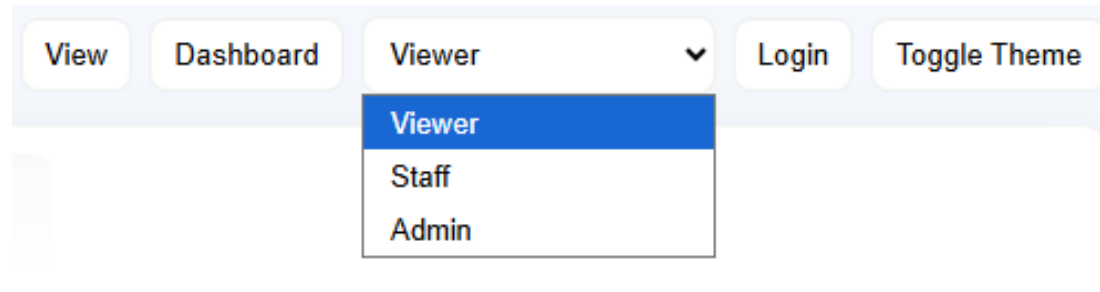
6. System Overview

The **Akshaya Resorts – Room Monitor** is a web application consisting of multiple panels such as a header section, dashboard, activity log, and room management panel. Each panel plays a specific role in displaying and managing room-related data.

7. Description of Modules

7.1 Header Module

- Displays the application title
- Provides role selection (Viewer / Staff / Admin)
- Includes theme toggle option



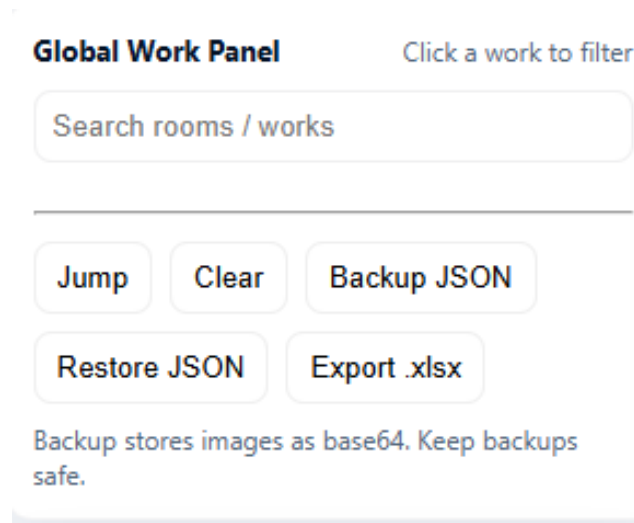
7.2 Dashboard Module

- Shows overall room status
- Allows quick filtering of tasks
- Displays completed, pending, and partial works



7.3 Global Work Panel

- Displays all work types
- Allows filtering based on selected work
- Provides backup and export options



7.4 Activity Log Module

- Records all actions performed
- Shows recent updates and changes
- Helps in tracking work history

Activity LogRecent actions

11/26/2025, 5:54:44 PM — Admin
authenticated for Dashboard

Clear Log

7.5 Room Management Module

- Add or update room work
- Mark tasks as completed
- Apply changes to multiple rooms

Room A1Close
ID: A1

New Work (e.g., Electrical)+ Add WorkApply to ALL

Electrical (1)No image+ Sub WorkRenameDelete

SwitchesPurposeRemarksNo image

SaveMark All CompletedCopy From...

8. Functional Requirements

- User login and role-based access
- Room work status update
- Filtering and search functionality
- Data backup and restore
- Export data to Excel

9. Non-Functional Requirements

- Easy to use interface
- Fast response time
- Secure data handling
- Browser compatibility

10. Technologies Used

- **HTML** – Structure of the website
- **CSS** – Styling and layout
- **JavaScript** – Functionality and interactivity
- **Netlify** – Hosting platform

11. Advantages of the System

- Saves time and effort
- Reduces paperwork
- Easy monitoring of room status
- Accurate record management

12. Limitations / Known Issues

- No server-side — all data is stored/exported manually; no real-time multi-user sync.
- Role-based access is superficial (since no real authentication system).
- JSON backups (especially with images as base64) could become large and may not scale for many rooms or long-term use.
- UI/UX could be improved: design is functional but basic.
- No user-management, no undo/redo, no official database — not suitable yet for a large-scale production resort.

13. Challenges & How They Were Addressed

- **Data persistence without a backend:** Since this project is a front-end only (hosted via static hosting), there is no server-side database. To work around this, I implemented **JSON-based backup & restore** and **.xlsx export**, so data can be saved offline or moved between sessions.
- **Handling images / media in backups:** Backup stores images as base64 inside JSON — this ensures no external dependencies for assets, but increases JSON size. I added a warning in the UI: “*Keep backups safe.*”
- **Role-based access on static site:** Without a real authentication backend, login/role toggle may be simplistic (e.g. selecting role manually). This is a limitation — but acceptable for demo/portfolio purposes.
- **Responsive UI / Cross-browser compatibility:** Ensuring layout, filters, and export features work across different devices and browsers required testing.

14. Future Enhancements

- Database integration
- Mobile application support
- Real-time notifications
- User authentication system

15. Conclusion

This project, *Akshaya Resorts — Room Monitor*, demonstrates a functional, front-end only web application that can serve as a basic room/work tracking dashboard for small hospitality setups. While currently limited by the lack of backend or true authentication, it can act as a prototype and a demonstration of fundamental web development skills (HTML / CSS / JS). With further enhancements (backend, better UI, authentication, persistent storage), it can evolve into a more robust application suitable for real-world deployment.

<https://akshayaresorts/>