

SWEN.732 - Collaborative Software Dev.

Avinash Amudala | Sushanth Nayak | Jagrat Rao | Galekwan Sango

1. Project Proposal:

Title: Hotel Management System

Objective: To develop a comprehensive hotel management system that streamlines room booking, guest check-in and check-out, staff communication, and task management.

Scope: The system will include the following features:

- Online room booking with real-time availability
- Guest check-in and check-out automation
- Guest profiles and preferences management
- Housekeeping task management and scheduling
- Reporting and analytics for management

Timeline: 4 months

2. Stakeholder List:

Stakeholder	Role
Hotel Owners	Decision Makers
Managers	System Administrators
Receptionists	Front Desk Staff
Housekeepers	Housekeeping Staff
Guests	End Users

3. Meeting Minutes:

- | Feb 2, 2023 | 7:00 PM | All team members | Review Iteration 1 progress | All members to provide progress updates by Feb 3rd | Majority of Iteration 1 tasks on track; some minor issues with UI design |
- | Feb 8, 2023 | 7:30 PM | All team members | Demo of Iteration 1 features | Implement feedback on UI design by Feb 11th | Room booking UI needs improvements; real-time availability working well |
- | Feb 15, 2023 | 7:00 PM | All team members | Review Iteration 2 progress | Backend team to fix issues with check-in feature | Some bugs found in check-in automation; working on fixes |

- | Feb 22, 2023 | 8:00 PM | All team members | Demo of Iteration 2 features | Address remaining bugs in check-in feature | Check-in automation mostly working; a few minor bugs remain |
- | Mar 1, 2023 | 7:00 PM | All team members | Review Iteration 3 progress | Frontend team to finalize guest profile UI | Guest profile management implementation in progress |
- | Mar 8, 2023 | 7:15 PM | All team members | Demo of Iteration 3 features | Implement changes to guest profile management | Feedback on guest profile management; needs better navigation |
- | Mar 12, 2023 | 7:00 PM | All team members | Review Iteration 4 progress | Backend team to address housekeeping task issues | Housekeeping task management feature development in progress |
- | Mar 19, 2023 | 7:45 PM | All team members | Demo of Iteration 4 features | Make improvements to housekeeping module | Housekeeping task management UI needs better clarity; minor bugs found|
- | Mar 21, 2023 | 7:00 PM | All team members | Review Iteration 5 progress | Data Analyst to finalize analytics features | Reporting and analytics feature development underway |
- | Mar 23, 2023 | 8:30 PM | All team members | Overall project status update | Prepare for upcoming integration and testing | Iteration 5 nearing completion; planning for integration and testing |

4. Requirements Document:

Hotel Management System Requirements

Online room booking with real-time availability:

1.1. The system shall allow guests to search for room availability based on date, room type, and number of guests.

1.2. The system shall display real-time room availability to guests.

- 1.3. The system shall enable guests to book a room and provide necessary information, such as name, contact information, and payment details.

Guest check-in and check-out automation:

2.1. The system shall allow receptionists to check-in guests upon arrival.

- 2.2. The system shall enable receptionists to check-out guests upon departure.

Guest profiles and preferences management:

3.1. The system shall allow receptionists to create, view, and update guest profiles.

3.2. The system shall store guest preferences, such as room type, bed preference, and dietary restrictions.

Housekeeping task management and scheduling:

4.1. The system shall allow housekeeping staff to view their daily task list.

4.2. The system shall enable housekeeping staff to mark tasks as complete and add notes about completed tasks.

4.3. The system shall notify the front desk when a room is ready for check-in.

Reporting and analytics for management:

5.1. The system shall generate reports on room occupancy rates, revenue, and guest demographics.

5.2. The system shall provide analytics on housekeeping efficiency and areas for improvement.

5. Traceability Matrix:

Requirement ID	Description	Design Component	Test Case ID
1.1	Guests can search for room availability	Booking Module	TC_1.1
1.2	Display real-time room availability	Booking Module	TC_1.2
1.3	Guests can book a room with necessary information	Booking Module	TC_1.3

3.1	Receptionists can create, view, and update profiles	Guest Profile Module	TC_3.1
3.2	Store guest preferences	Guest Profile Module	TC_3.2
4.1	Housekeeping staff can view daily tasks	Housekeeping Module	TC_4.1
4.2	Housekeeping staff can mark tasks as complete	Housekeeping Module	TC_4.2

4.3	Notify front desk when room is ready	Housekeeping Module	TC_4.3
5.1	Generate reports on room occupancy and revenue	Reporting & Analytics	TC_5.1
5.2	Provide analytics on housekeeping efficiency	Reporting & Analytics	TC_5.2

6. Project Plan (use a project management software to create a Gantt chart or task list):

Task ID	Task Description	Start Date	End Date	Responsible
1	Develop room booking feature	01/01/2023	01/30/2023	Frontend Dev
2	Implement check-in automation	02/01/2023	02/28/2023	Backend Dev
3	Develop guest profile management	03/01/2023	03/31/2023	Full Stack

4	Implement guest profile management	04/01/2023	04/30/2023	Full Stack
5	Develop housekeeping task management	05/01/2023	05/31/2023	Backend Dev

6	Implement reporting and analytics	06/01/2023	06/30/2023	Data Analyst
7	System integration and testing	07/01/2023	07/31/2023	QA Team
8	Deployment and training	08/01/2023	08/15/2023	Project Lead
9	Post-deployment support	08/16/2023	Ongoing	Support Team

7. Team Working Agreement:

Team Name: Hotel Management System Team

1. Communication: We will maintain open communication and provide regular updates on progress, obstacles, and concerns.
2. Meeting Attendance: We will attend all scheduled meetings and notify the team in advance if unable to attend.
3. Timeliness: We will complete tasks on time and inform the team if we need assistance or an extension.