



# DETAILED PROJECT REPORT

## 1. Project Title

**Co-Living Space Web Application**

## 2. Introduction

The Co-Living Space Web Application is a full-stack web project developed to help users explore available rooms, view roommate details, and contact the admin easily. This project was built to understand frontend-backend integration, REST APIs, and real-world web application structure.

## 3. Objective

- The main objectives of this project are:
- To build a responsive web interface
- To connect frontend with backend APIs
- To implement search functionality
- To handle form submissions using POST requests
- To understand Node.js and Express backend development

## 4. Technologies Used

Frontend:

- HTML
- CSS
- JavaScript

Backend:

- Node.js
- Express.js
- CORS

## 5. Features

-  View available rooms (Single, Shared, PG)
-  View roommate details
-  Search rooms by city and room type
-  Contact form with success message
-  Fully responsive design
-  REST API integration

## 6. Project Structure

```
co-living-project/
|
|   └── backend/
|       ├── server.js
|       └── package.json
|
|   └── frontend/
|       ├── index.html
|       ├── rooms.html
|       ├── roommates.html
|       ├── contact.html
|       ├── style.css
|       └── images/
|
└── README.md
```

## 7. Working of the Project

- The frontend sends HTTP requests to the backend API endpoints.

- The backend handles these requests and returns appropriate responses.

For example:

GET /api/rooms → Fetch room data

GET /api/roommates → Fetch roommate details

POST /api/contact → Submit contact form

The frontend dynamically displays the data received from the backend.

## 8. Future Enhancements

- MongoDB database integration
- User authentication (Login/Signup)
- Admin dashboard
- Room booking system

## 9. Conclusion

~This project helped in understanding full-stack development concepts including frontend design, backend server creation, API development, and client-server communication.

~It strengthened my knowledge of Node.js, Express.js, and responsive web design.

## 10. Developer

Name: Nidhi Saxena

Role: Beginner Full-Stack Developer

GitHub: <https://github.com/saxenanidhi1408/COLIVING-SPACE>