# FRONTEND CAT Project Report

Project Title: RentHub – A Local Housing Rental Platform

Student Name: [Your Name]

Course: Frontend Development

Date Submitted: [Insert Date]

## 1. Project Overview

RentHub is a web-based rental platform created to solve a real-world issue: connecting individuals (especially students) looking for housing with landlords offering rental spaces. It focuses on ease of use, accessibility, and realistic workflows through form-based interactions.

## 2. Objectives

- Solve local rental housing discovery problems.  
- Provide a space for owners to list their houses.  
- Validate all user input to ensure clean data.  
- Connect with social media for broader reach.  
- Create a prototype before full implementation.

## 3. GUI Prototype

Before coding began, a simple low-fidelity GUI prototype was sketched to define the structure of the platform. It included:  
  
- Home Page Layout: Header, introduction text, main navigation.  
- Post Listing Page: Form elements for rental details and uploads.  
- Booking Page: Date selectors, house title input, and user contact fields.  
- Contact Page: Inquiry form with message box.  
- About Page: Text blocks with team/mission content.  
  
Prototype tools used:  
- Paper & pen sketches (or Figma/Wireframe.cc if digital)  
- Placeholder boxes for images and forms  
- Focus on layout and flow, not colors or fine visuals

## 4. Technologies Used

|  |  |
| --- | --- |
| Technology | Purpose |
| HTML5 | Page structure |
| CSS3 | Custom design |
| JavaScript | Input validation & form control |
| Bootstrap | (Optional / can be re-added for styling) |
| Facebook & Twitter APIs | (Planned: embed social feeds) |

## 5. Main Features

- Post a House: Form with title, rent, description, image, and contact fields.  
- Book Now: Date range selector and booking form.  
- About Us & Contact: Static pages with validated forms.  
- Responsive Navbar: Links across all pages.  
- Validation: Client-side checks using JavaScript.  
- File/Image Upload: For listing property photos.

## 6. Social Media Integration (Planned)

- Facebook Page Embed  
- Twitter Timeline Embed  
These will display posts from a RentHub page/account using standard HTML embed codes or API snippets.

## 7. Scalability

The modular structure of RentHub allows:  
- Easy expansion to other districts  
- Backend integration (MySQL/PHP or Firebase)  
- Admin dashboard & user accounts  
- Advanced filters, maps, and messaging

## 8. Source Code & Demo

- GitHub Repository: [Insert link]  
- Demo URL (Optional): [Insert link]

## 9. Conclusion

RentHub successfully addresses a local community need with a fully working frontend system. It meets the core requirements of the CAT assignment—offering form-based interaction, validation, prototype-driven design, and potential for real-world use.