

Project Title: BnB

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Type of Project

This project is a web application for connecting people in order to rent property for a few days or months.

Purpose

The purpose of this project is to help property owners to manage and rent their property and renters to find a suitable property to stay.

Target Users

The target users would be people who want to put their property on rent and the travellers who do not want to stay at a hotel.

Functional Requirements

1. Sign up and profile management
2. Property listing (description, photos etc.)
3. Search and filter
4. Booking System
5. Payment gateway
6. Admin dashboard
7. User dashboard
8. Review & Ratings
9. Messaging system
10. Wishlist
11. Notification button

Feature

- FR-1:** able to register a profile. Log in, log out and edit profile
- FR-2:** able to list properties along with their location and details
- FR-3:** able to search the property based on title, city or area
- FR-4:** able to book properties for particular period of time
- FR-5:** able to pay for the booking
- FR-6:** admin can see and remove properties, profiles, bookings and payments
- FR-7:** in user dashboard user can see their listed properties and also their bookings
- FR-8:** the guests can leave a review and rate the properties
- FR-9:** users can message admin, owner and guests
- FR-10:** users can add favourite properties in wishlist
- FR-11:** notification button shows the recent notifications, promotions posted by admin

Technology Stack & Architectural Overview

1. Technology Stack

- **Backend Framework:**
 - **Flask** – A lightweight Python web framework used to build the server-side logic. Chosen for its simplicity, flexibility, and support for MVC architecture.

- **Architecture Pattern:**
 - **MVC (Model-View-Controller)** – Separates application logic into three layers:
 - **Model:** Handles database interactions and data logic.
 - **View:** Handles the presentation layer (HTML templates, Jinja2).
 - **Controller:** Handles user requests, processes input, and sends responses.
- **Database:**
 - Example: **SQLite** – Stores application data like user profiles, properties, bookings, etc.
- **Frontend:**
 - **HTML, CSS** (or frameworks like Bootstrap) for responsive and interactive UI.
- **Other Tools & Libraries:**
 - **Flask-Login** – User authentication.
 - **SQLAlchemy** – ORM for database management.
 - **Flask-WTF** – Form handling and validation.
 - **Jinja2** – Template engine for rendering dynamic HTML.
- **Development Tools:**
 - **Git** – Version control
 - **VS Code**

2. Architectural Overview

Explain how the application is structured:

- The application follows the **MVC architecture**:

1. **Model:** Defines database schemas and interacts with the database using SQLAlchemy.
2. **View:** HTML templates rendered using Jinja2, showing data to the user.
3. **Controller:** Flask routes handle incoming requests, call models to fetch data, and render views.

- **Flow of a Request:**

1. User sends a request (e.g., view a property).
2. Flask route (Controller) receives the request.
3. Controller fetches data from the Model (database).
4. Data is passed to the View (HTML template) and rendered to the user.

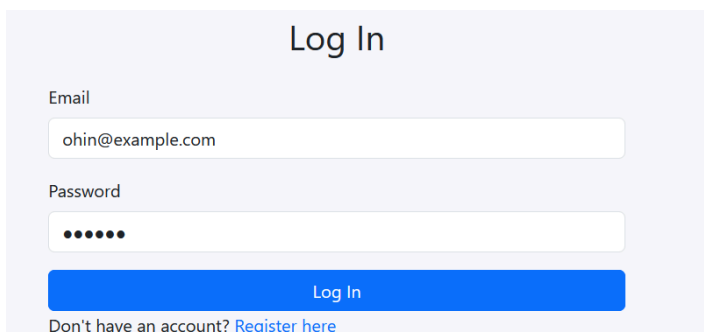
Conclusion

This SRS provides a detailed outline of the BnB web application using flask. It helps in establishing communication between guests and hosts of bnbs by providing functions like property hosting, messaging, booking etc. By following the outlined Agile sprints, the project aims to deliver a robust, scalable, and user-friendly solution within the designated timeline

Sprint 1

Feature 1,2 & 3

At first the login page where user can go to the register page or log in to their account.



Log In

Email

ohin@example.com

Password

•••••

Log In

Don't have an account? [Register here](#)

Register

Username

Email

Password

Confirm Password

Bio

Register

Already have an account? [Login here](#)

The home page shows all the property listings. The list property button goes to the page where we can list a new property.

Welcome, ohin!

Search properties...

ProfileLogout

[+ List Property](#)

Property Listings

Basha

Uttara, Dhaka

\$2000.0 per night

Status: active

Max Guests: 5

Logged in successfully!

Title

barl

Description

2bhk

Location

12, road

Area

Badda

City

Dhaka

Price per Night

2000

Max Guests

4

Status

Active

Property Photo

The new property is created and we can search them based on title, area or city

Property Listings

Basha

Uttara, Dhaka

\$2000.0 per night

Status: active

Max Guests: 5

bari

Badda, Dhaka

\$2000.0 per night

Status: active

Max Guests: 4

Property Listings

Basha

Uttara, Dhaka

\$2000.0 per night

Status: active

Max Guests: 5

Sprint 2

Feature 4,5,6 & 7

The user can book properties from the property details page

Basha

\$1000.0/night

Hosted by ohin

Location: 1/3, road, Badda, Dhaka
Max Guests: 3
Posted on: August 17, 2025

Description
gd

Book Now

Back to Properties

Book Basha

Badda, Dhaka

Hosted by ohin

Check-in Date

dd / mm / yyyy

Check-out Date

dd / mm / yyyy

Number of Guests

Special Requests

Book Now

Back to Home

Booking #1

PENDING

Basha

Badda, Dhaka

Hosted by ohin

Check-in: Friday, September 05, 2025

Check-out: Monday, September 08, 2025

Nights: 3

Total Price: \$3000.00

Cancel Booking

After booking the property the user can pay for the property

Payment

Total Amount: **\$3000.00**

Cardholder Name

John Doe

Card Number

1234 5678 9012 3456

Expiry Date

MM/YY

CVV

123

Pay Now

This is a dummy payment gateway. No real payment will be processed.

Back to My Bookings

Back to Home

The admin dashboard where admin can see the property, the users, the bookings and payment and delete the property, the users and the bookings

Admin Dashboard

Logout

Users

ID	Username	Email	Admin	Action
1	admin	admin@example.com	Yes	Delete
2	ohin	ohin@example.com	No	Delete
3	faiaz	faiaz@example.com	No	Delete

Properties

ID	Title	Location	Owner	Action
1	Basha	1/3, road	ohin	Delete
2	bari	12, road	ohin	Delete

Bookings

ID	Property	Guest	Host	Status	Action
1	Basha	faiaz	ohin	pending	Delete

The user dashboard has the list of bookings and properties along with their informations

faiaz

Email: faiaz@example.com

Bio: N/A

[My Bookings](#)

Sprint 3

Feature 8,9,10 & 11

The guests can leave a review and rate the property .

Reviews

Average Rating: ★ 3.0/5 (1 reviews)

Add Your Review

Rating: Select a rating ▼

Write your review...

Submit Review

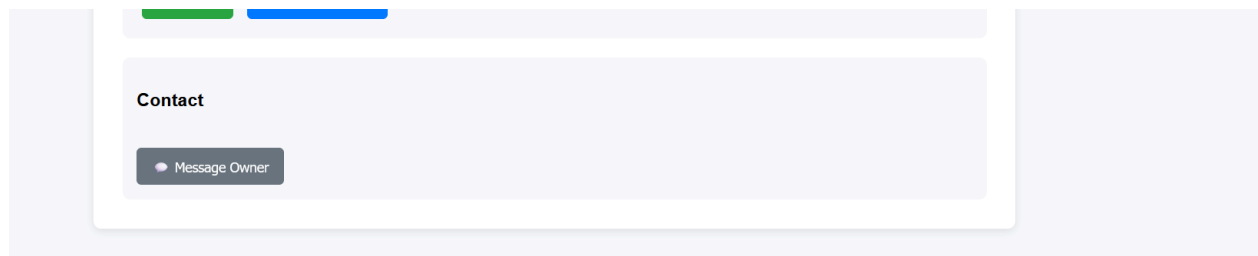
faiaz ★ 3

gd

Posted on August 31, 2025

[Edit](#) [Delete](#)

The user can message the guest, host and admin



Message ohin

Message

Send

[Back to Inbox](#)

Inbox

Message Admin

From: faiaz | **To:** ohin

hi

Aug 31, 2025 10:24

Write a reply...

↩ Reply

[← Back to Properties](#)

Users can add their favourite properties in wishlist

[+ List Property](#)

Property Listings

Basha

Badda, Dhaka

\$1000.0 per night

Status: active

Max Guests: 3

★ 3.0/5 (1 reviews)

[Add to Wishlist](#)

bari

Uttara, Dhaka

\$1500.0 per night

Status: active

Max Guests: 4

[Add to Wishlist](#)

My Wishlist

[bari](#)

Dhaka - \$1500.0

[Remove](#)[Back to Home](#)

The notification button shows the confirmations and promotions posted

