
Portfolio

HomeAway Prototype

Shivam Tyagi



Introduction

HomeAway website is an online portal where travellers can search and book properties for short term stays and owners can list their properties for renting them out. Thus it gives a platform where travellers and property owners can use as per their requirements.

Features :

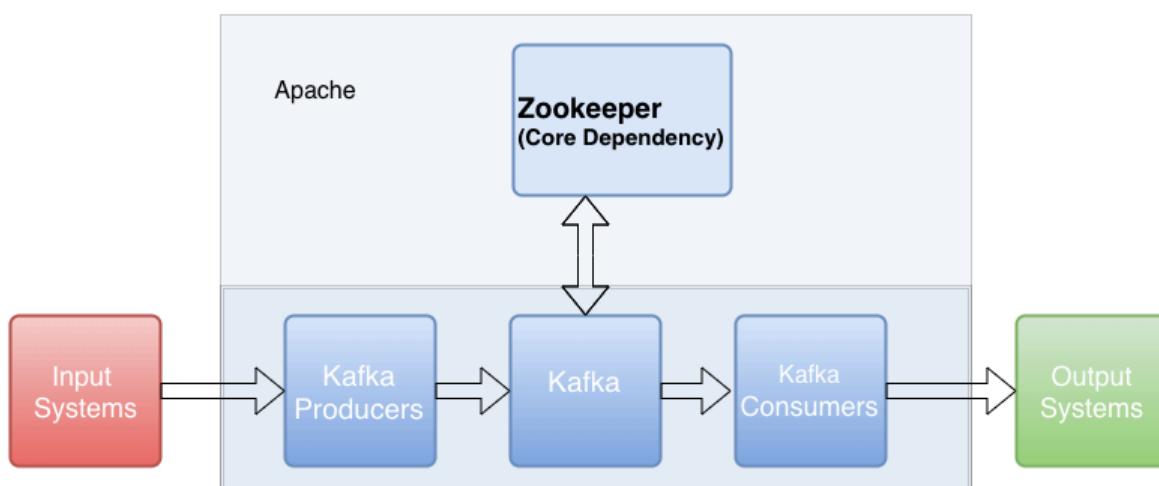
- Sign Up, Sign In
- User details and Password update
- Search, View and Book Property
- List Property
- View History
- Send and Receive Messages

System Design

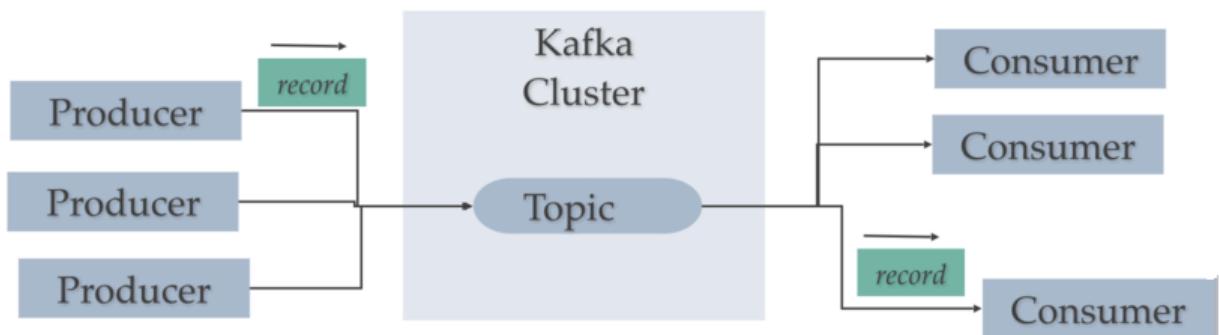
Architecture of prototype is divided into three layers. First layer is the frontend component which accepts user requests and passes them to backend components for processing. It then accepts the response and displays it in user display. Frontend design uses REACT and Redux libraries and follows REST architecture.

Next comes backend which is divided into two parts, Kafka and Backend. All the requests are received by kafka which then sends them to respective services for processing. Kafka is comprised of Topics, Consumers, Producers and Brokers. Zookeeper is the program which maintains the kafka cluster. It maintains the queue. Kafka accepts the requests

Kafka Architecture: Core Kafka



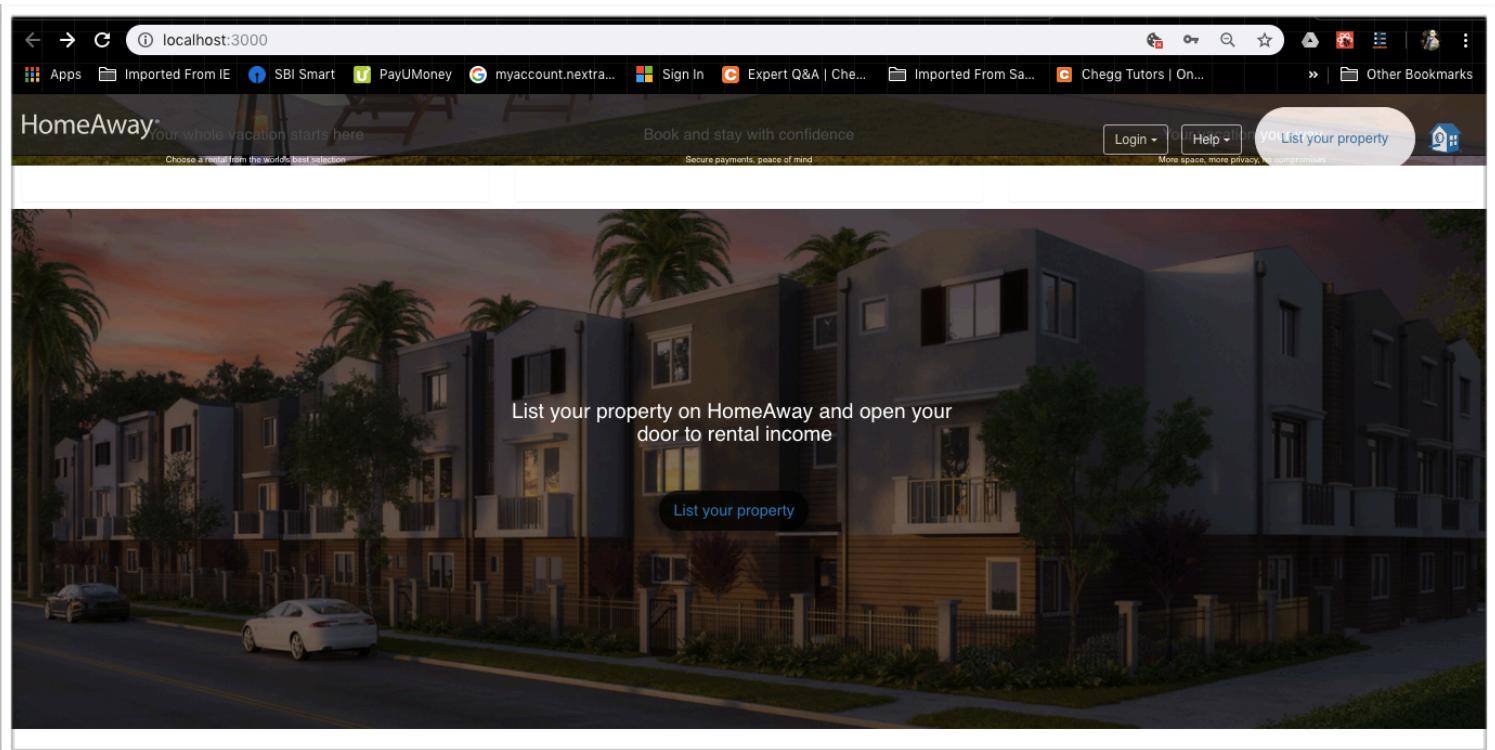
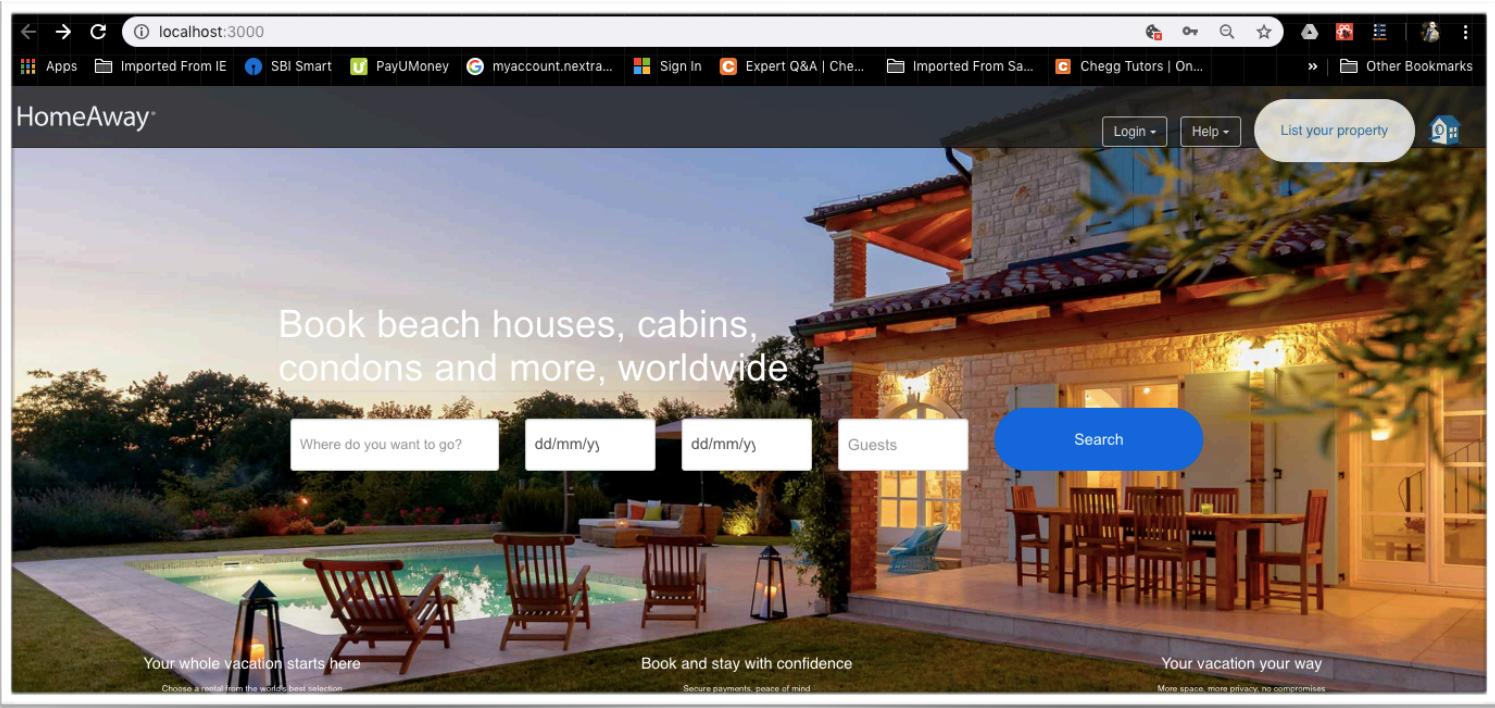
containing topic names and then send them for processing depending on the topic names they have requested.



Our design has many services like login, signup, listing searching and booking property which rely on Kafka topics to be fulfilled by the server. All these services have unique topic names. Every time a request is invoked from front end, it is placed in a kafka queue.

After processing the response is sent back from different stream to front end which then delivers the final output to user .

HomeAway :



Meet the HomeAway family

HomeAway

VRBO

VacationRentals.com

Homelidays

Abril HomeAway

FeWo-direkt

Toprural

bookabach

stayz

AlugueTemporada

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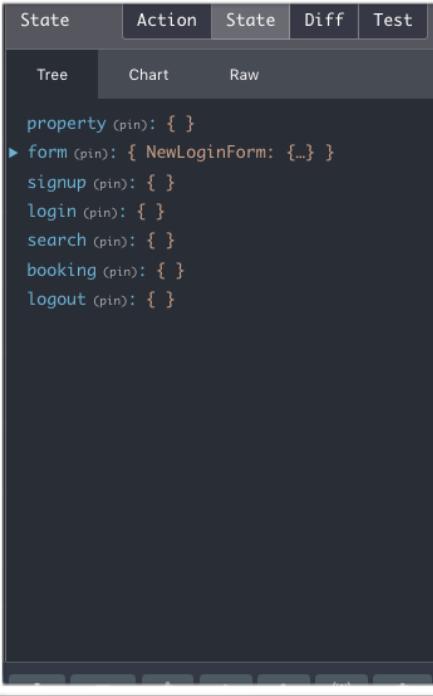
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97c359f7-d389-4388-afd7-d2efffd1cc0c



Traveller Login

Initial state :



Log in to HomeAway as Traveller
Need an account? [Sign Up](#)

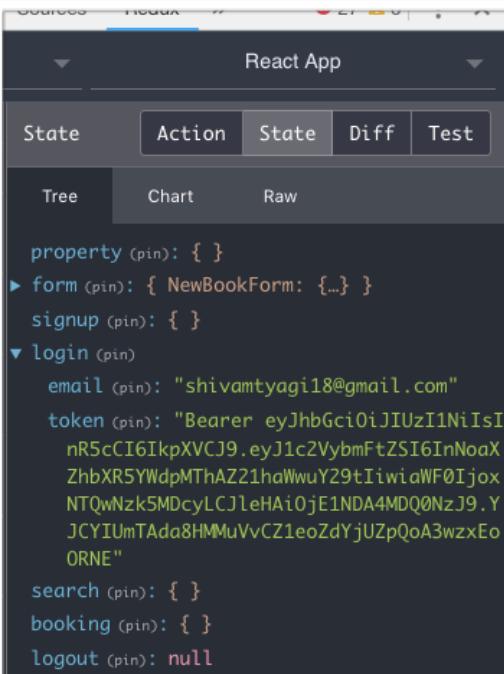
Traveller Login

shivamtyagi18@gmail.com

.....

Log In

After Login state :



HomeAway®
[shivamtyagi18@gmail.com](#) Help ▾

Book beach houses, cabin condons and more, world

Where do you want to go?

Your whole vacation starts here Book and stay with confidence

Traveller Login (Wrong credentials)

Initial state :

The screenshot shows the React DevTools State tab. The left sidebar lists components with their prop names: property (pin), form (pin), signup (pin), login (pin), search (pin), booking (pin), and logout (pin). The main area displays the HomeAway login page. The email input field contains "shivamtyagi18@gmail.com" and the password input field contains ".....". The "Log In" button is orange.

After Login State:

The screenshot shows the React DevTools State tab. The left sidebar lists components with their prop names: property (pin), form (pin), signup (pin), login (pin), search (pin), booking (pin), and logout (pin). The main area displays the HomeAway login page. The email input field contains "shivamtyagi18@gmail.com" and the password input field contains ".....". A red error message "Invalid Login" is displayed above the "Log In" button.

Owner Login

Initial state :

The screenshot shows the HomeAway login page and the Redux DevTools state panel side-by-side.

HomeAway Login Page: The title "HomeAway" is at the top. Below it, the text "Log in to HomeAway as Owner" is displayed, followed by "Need an account? [Sign Up](#)". A modal window titled "Owner Login" contains fields for email ("shivamowner@gmail.c") and password ("....."), and an orange "Log In" button.

Redux DevTools State Panel: The title "Sources" and "Redux" are at the top. The "React App" tab is selected. The "State" tab is active. The state tree shows the following structure:

```
property (pin): {}  
form (pin): { NewBookForm: {} }  
signup (pin): {}  
login (pin): {}  
search (pin): {}  
booking (pin): {}  
logout (pin): {}
```

After Login state :

The screenshot shows the HomeAway homepage and the Redux DevTools state panel side-by-side.

HomeAway Homepage: The title "HomeAway" is at the top. The main banner features a beach house and the text "Book beach houses, cab condons and more, world". Overlaid on the banner are several white rectangular boxes containing placeholder text: "Where do you want to go?", "What's your budget?", "How many people?", and "When are you traveling?".

Redux DevTools State Panel: The title "Sources" and "Redux" are at the top. The "React App" tab is selected. The "Action" tab is active. The state tree shows the following structure:

```
property (pin): {}  
form (pin): { NewBookForm: {} }  
signup (pin): {}  
login (pin): {  
  email (pin): "shivamowner@gmail.com"  
  token (pin): "Bearer eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VybmtFtZSI6InNoaXZhbW93bmVyQGdtYWlsLmNvbSIsImlhCI6MTU0MDgwMTIyMCwiZXhwIjoxNTQwODA2NjIwfQ.XeVX47RNndTP2WcUmoxNIwvBl6Io0BFumo-6MWYJu0"  
}  
search (pin): {}  
booking (pin): {}  
logout (pin): {}
```

Owner Login (Wrong credentials)

Initial state :

The screenshot shows the HomeAway login interface. On the left, a Redux DevTools sidebar displays the state tree for a 'React App'. The 'State' tab is selected, showing various actions like 'property', 'form', 'signup', 'login', 'search', 'booking', and 'logout'. The main right panel shows the 'HomeAway' logo and the text 'Log in to HomeAway as Owner'. Below it is a link 'Need an account? [Sign Up](#)'. A central 'Owner Login' form contains an email input field with the value 'shivamowner@gmail.c' and a password input field with the value '.....'. An orange 'Log In' button is at the bottom of the form.

After Login State :

The screenshot shows the same HomeAway login interface as before, but now with an error message. The Redux DevTools sidebar remains the same. The main right panel shows the 'HomeAway' logo and the text 'Log in to HomeAway as Owner'. Below it is a link 'Need an account? [Sign Up](#)'. The 'Owner Login' form now has a red error bar at the top with the text 'Invalid Login'. The email input field still shows 'shivamowner@gmail.c' and the password input field shows '.....'. The orange 'Log In' button is still present at the bottom.

Traveller SignUp

Initial state :

Traveller Sign up for HomeAway

Please enter your details

shivamtraveller@gmail.com

.....

Traveller

shivam

Traveller

Sign Me Up

After SignUp state :

Log in to HomeAway as Traveller

Need an account? [Sign Up](#)

Traveller Login

shivamtraveller@gmail

.....

Log In

Owner SignUp

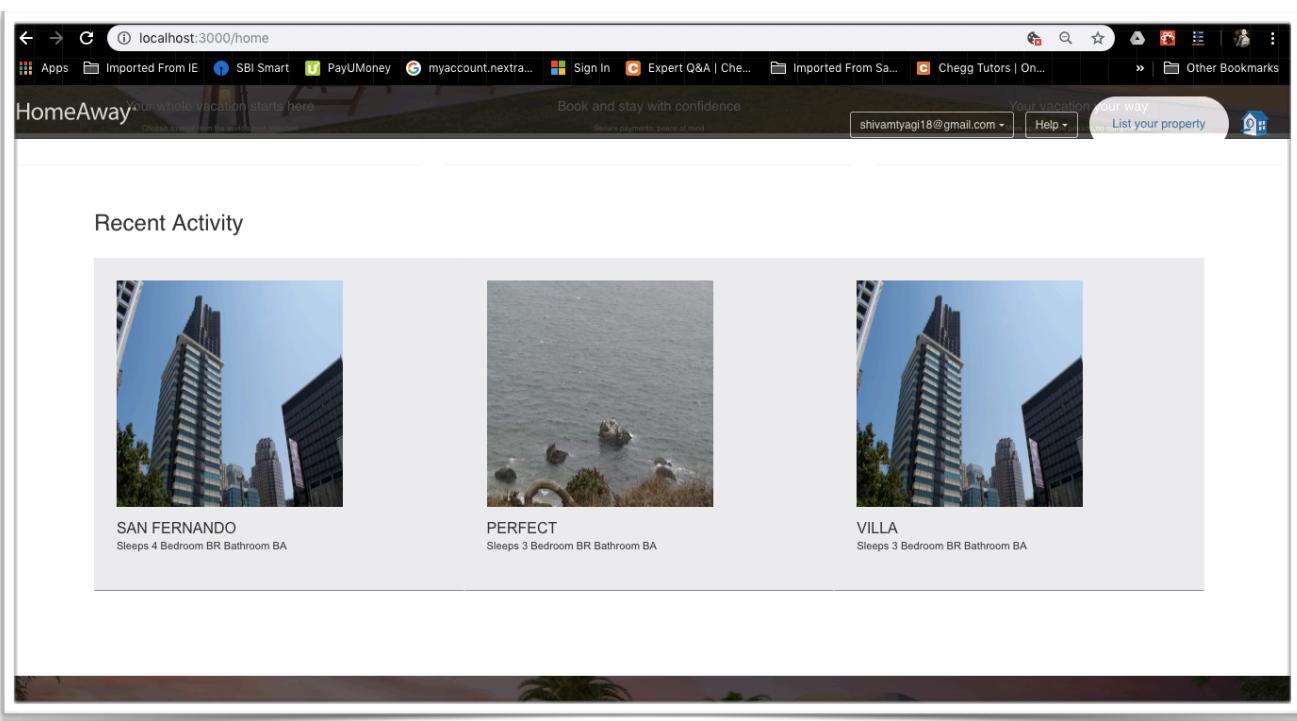
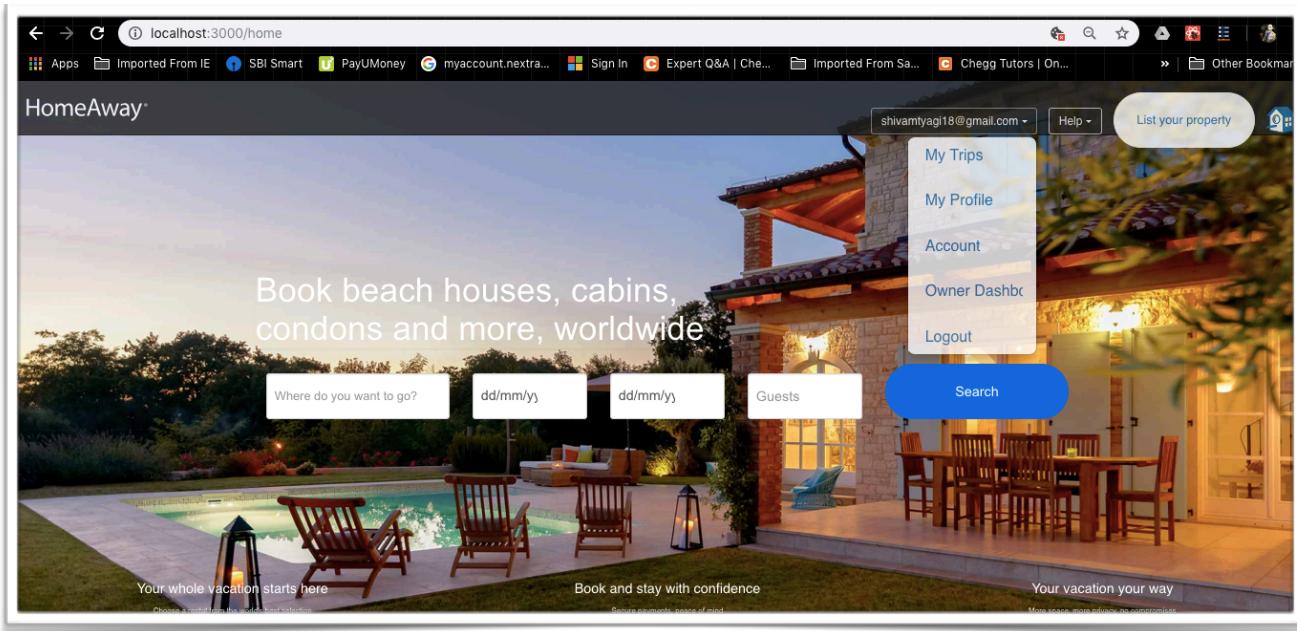
Initial state :

The screenshot shows a split-screen interface. On the left is a dark sidebar with navigation tabs: State, Action, State, Diff, and Test. Below these are Tree, Chart, and Raw tabs. The main area displays a "Owner Sign up for HomeAway" form with fields for Email (shivamowner@gmail.com), Password (.....), First Name (Owner), Last Name (shivam), and Username (owner). A large orange "Sign Me Up" button is at the bottom.

After Login State:

The screenshot shows a split-screen interface. On the left is a dark sidebar with navigation tabs: State, Action, State, Diff, and Test. Below these are Tree, Chart, and Raw tabs. The main area displays a "Log in to HomeAway as Owner" form with fields for Email (shivamtyagi18@gmail.com) and Password (.....). A "Log In" button is at the bottom. Above the form, it says "Need an account? [Sign Up](#)".

Traveller Home



Traveller MyTrips

HomeAway®

bolton25@sjsu.edu ▾ Help ▾

Where do you want to go? dd/mm/yy dd/mm/yy Guests Search

Total 6 bookings found

 BRIDGE CAFE

foundry

Check-in 26/10 Check-out 30/10 Guests 3

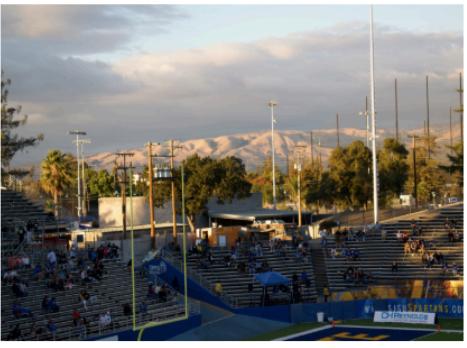
\$ 200

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bolton25@sjsu.edu ▾ Help ▾



\$ 800



Tree villa 2

Check-in 26/10 Check-out 30/10 Guests 6

\$ 936

1 2 next

Total 6 bookings found



Dear Park

Check-in
26/10

Check-out
30/10

Guests 5

\$ 100

prev 1 2

Owner Properties

HomeAway®

bolton25@sjsu.edu ▾ Help ▾ List your property



A "Grand" Stay

3 BR 2 BA Sleeps 6

\$ 349 per night

1 2 next

HomeAway®

bolton25@sjsu.edu ▾ Help ▾ List your property



Hogwarts

50 BR 50 BA Sleeps 100

\$ 545 per night

prev 1 2

Property Display & Booking Page

HomeAway®



Hogwarts

Details	Location	Sleeps	Bedrooms	Bathrooms	Minimum Stay
	san jose	100	50	50	4

bolton25@sjsu.edu ▾ Help ▾ List your property 

dd/mm/yy dd/mm/yy

Guests

Total : \$0

Request to Book

Book Online or call HomeAway Booking Assistance 888-829-7076

After Booking

HomeAway®



\$545 per night

5/12/2018 8/11/2018

6 Request to Book Total : \$1635

bolton25@sjsu.edu ▾ Help ▾ List your property 

Book Online or call HomeAway Booking Assistance 888-829-7076

C localhost:3000/mytrips

Imported From IE SBI Smart PayUMoney myaccount.nextra... Sign In Expert Q&A | Che... Imported From Sa... Chegg Tutors | On...

HomeAway®



Hogwarts

Check-in 5/12 Check-out 8/11 Guests 6

\$ 1635

bolton25@sjsu.edu ▾ Help ▾

Traveller Dashboard after booking

HomeAway®

shivamtraveller@gmail.com ▾ Help ▾



\$ 1047



Hogwarts

Check-in
5/11 Check-out
8/11 Guests 6

\$ 1635

prev 1 2

Profile Update Page

shivam Traveller
New York

Profile Information

shivamtraveller@gmail.com

shivam

Traveller

About me

Updating Last Name

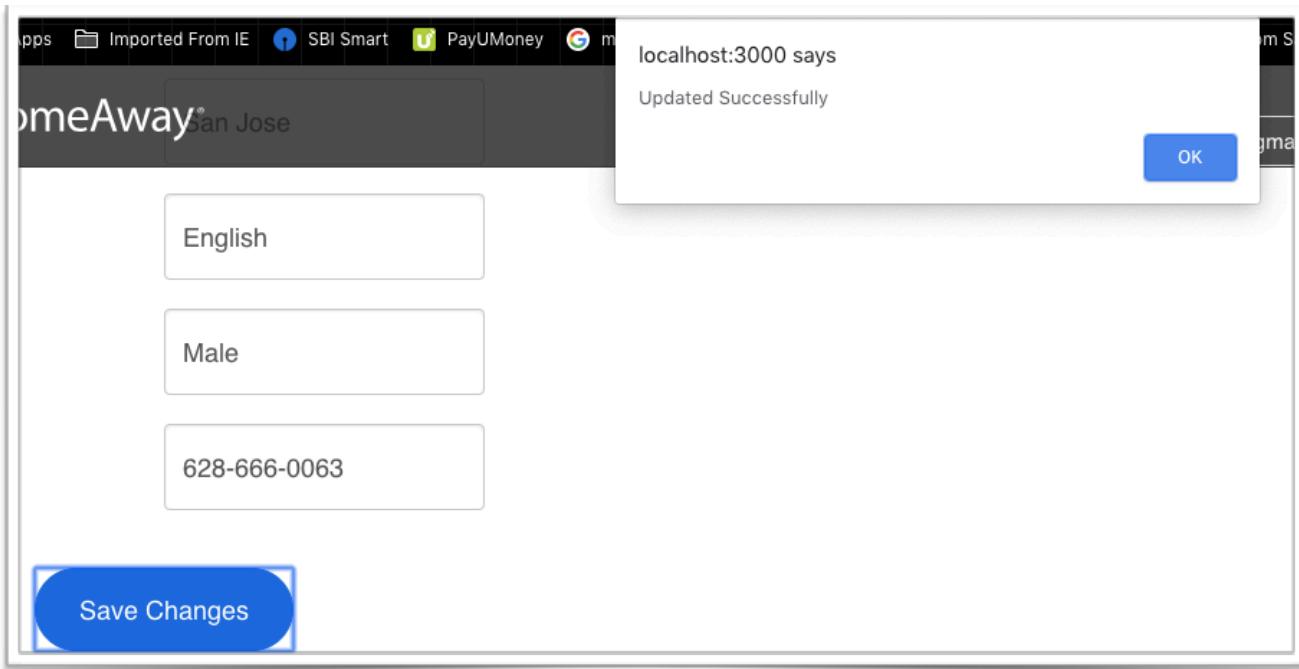
shivam Traveller
New York

Profile Information

shivamtraveller@gmail.c

Shivam

Tyagi



A screenshot of a user profile page. At the top center, the name 'Shivam Tyagi' is displayed above the text 'New York'. Below this, the section 'Profile Information' is heading. Under this heading, there are three input fields containing the values 'shivamtraveller@gmail.c', 'Shivam', and 'Tyagi' respectively.

Account & Password Update

HomeAway®

shivamtraveller@gmail.com ▾

Profile Information

shivamtraveller@gmail.com

shivam

cmpe273

cmpe273

Apps Imported From IE SBI Smart PayUMoney m

HomeAway® shivam

cmpe273

cmpe273

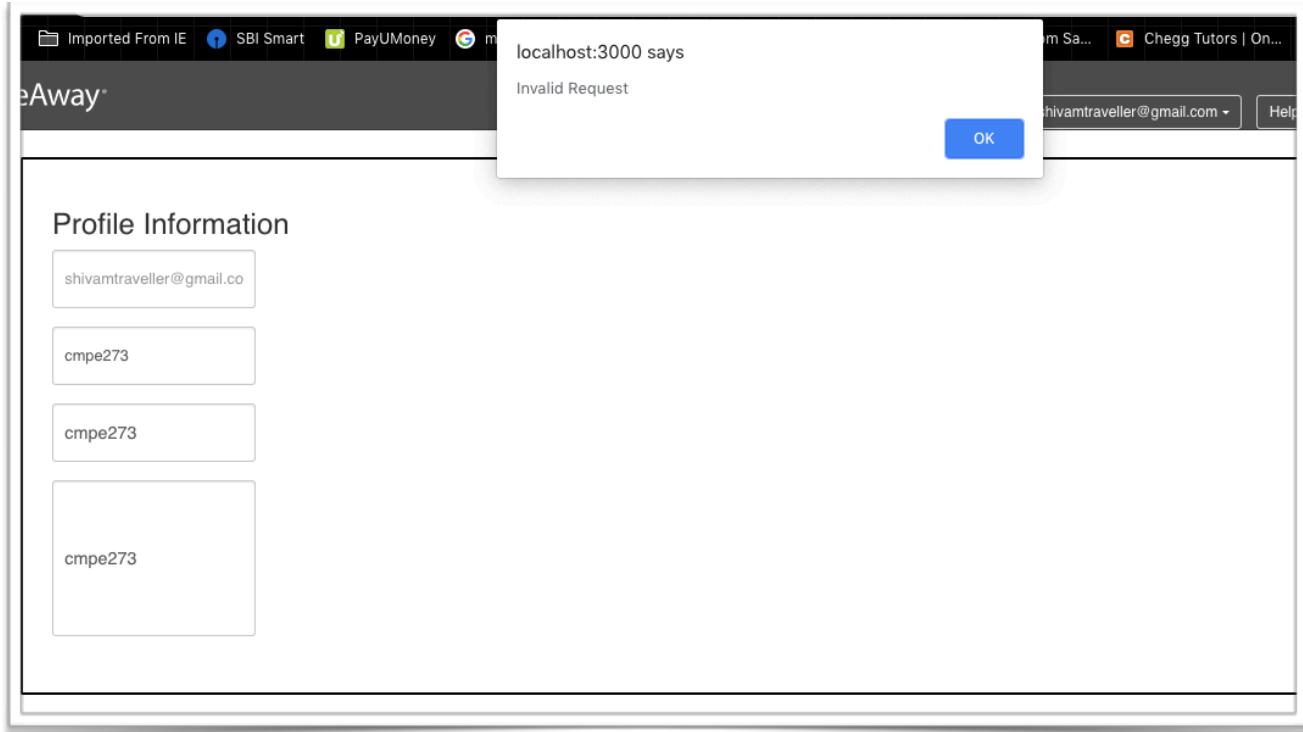
localhost:3000 says

Congratulations! Successfully updated

OK

Save Changes

When new password is same as old



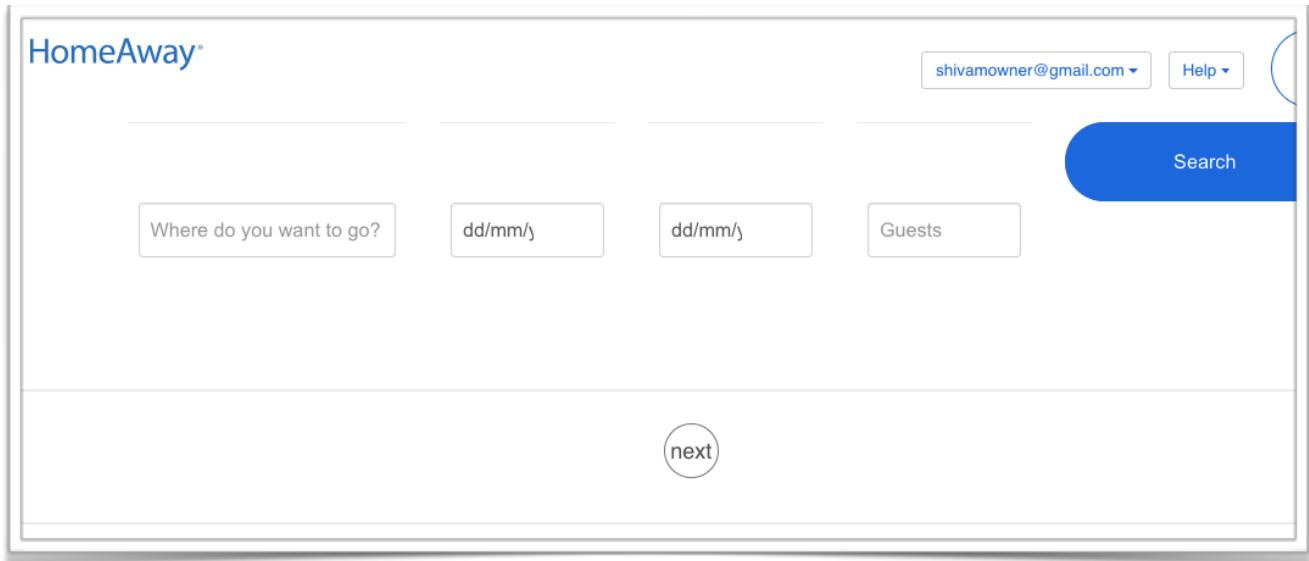
List Property

List Your Property

Please enter property details

<input type="text" value="Property Name"/>	<input type="text" value="Minimum Stay"/>
<input type="text" value="Location"/>	<input type="text" value="Price"/>
<input type="text" value="dd/mm/yyyy"/>	<input type="text" value="Pin Code"/>
<input type="text" value="dd/mm/yyyy"/>	<input type="text" value=""/>
<input type="text" value="Guests"/>	<input type="button" value="Choose Files"/> No file chosen
<input type="text" value="Bedroom"/>	
<input type="text" value="Bathroom"/>	

Owner dashboard before Listing Property



List Your Property

Please enter property details

Percy Villa	4
san jose	185
04/11/2018	95001
31/12/2018	Percy-villa
40	<input type="button" value="Choose Files"/> fullsizeoutput_2bd9.jpeg

Owner dashboard after Listing Property

HomeAway®

shivamowner@gmail.com ▾ Help ▾ List your property



Percy Villa

15 BR 15 BA Sleeps 40

\$ 185 per night

1

Search

The screenshot shows the HomeAway search interface. At the top, there's a dark header bar with the HomeAway logo, a user email (shivamtraveller@gmail.com), a 'Help' link, and a 'List your property' button. Below the header is a large banner image of a rustic house at dusk. Overlaid on the banner is the text 'Book beach houses, cabins, condos and more, worldwide'. Below the banner are search input fields: a yellow field containing 'san jose', a date range from '1/2018' to '1/2018', and a guest count field showing '5'. To the right of these inputs is a blue 'Search' button.

The screenshot shows two HomeAway listing cards. The first listing is for 'Beautiful Rose Vine House', featuring a photo of a house with a rose vine covered porch. The listing details are: 10 BR, 8 BA, Sleeps 20, and a price of '\$ 189 per night'. The second listing is for 'Sausalito Waterfront Apartment', featuring a photo of a bedroom with a large bed and a balcony door. The listing details are: 7 BR, 7 BA, Sleeps 15, and a price of '\$ 180 per night'.

HomeAway®

shivamtraveller@gmail.com ▾

Help ▾

List your property



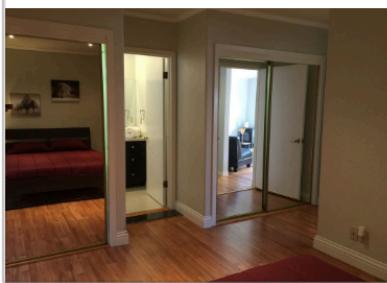
In the heart of Alameda. Minutes from San Francisco

3 BR

2 BA

Sleeps 6

\$ 300 per night



A "Grand" Stay

3 BR

2 BA

Sleeps 6

\$ 349 per night

HomeAway®

shivamtraveller@gmail.com ▾

Help ▾



\$ 349 per night



San Francisco and Golden Gate Views

2 BR

2 BA

Sleeps 6

\$ 450 per night

1 2 next

HomeAway®

shivamtraveller@gmail.com ▾ Help ▾

8 BR 8 BA Sleeps 20

\$ 234 per night

Hogwarts

50 BR 50 BA Sleeps 100

\$ 545 per night

prev 1 2

Search Validation

shivamtraveller@gmail.com ▾ Help ▾

Book beach houses, cabins, condons and more, worldwide

Search

Where do you want to go
Enter a location

dd/mm
Enter checkin date

dd/mm
Enter checkout date

Guests
Enter number of guests

Messaging

Traveller sending message

The image consists of two vertically stacked screenshots of a messaging interface on the HomeAway platform.

Screenshot 1 (Top): This screenshot shows the traveler's message to the owner. The traveler's information is at the top right: **shivamtraveller@gmail.com**. The message content is as follows:

- Owner:** bolton25@sjsu.edu
- sender : message**
- Open Message** button
- Test Message for Grand Stay owned by bolton25**
- Send Message** button

Screenshot 2 (Bottom): This screenshot shows the confirmation of the message being sent successfully. The message content is identical to the one above, but it includes a confirmation message at the top right:

- Message sent successfully**
- OK** button
- Owner:** bolton25@sjsu.edu
- sender : message**
- Open Message** button
- Test Message for Grand Stay owned by bolton25**
- Send Message** button

Owner Receiving message

The screenshot shows the HomeAway messaging interface. At the top, there's a header with the HomeAway logo and a user dropdown set to "bolton25@sjsu.edu". Below the header, there's a section titled "About the Property" which contains a detailed description of the rental. Underneath this, there's a "Owner" section where the email "bolton25@sjsu.edu" is listed. A message bubble from "shivamtraveller@gmail.com" is shown, reading "Test Message for Grand Stay owned by t". Below the message is an "Open Message" button. A reply input field is present with the placeholder "Reply here" and a "Send Message" button at the bottom.

Owner Replying back

This screenshot shows the HomeAway messaging interface after the owner has replied. The "About the Property" section remains the same. In the "Owner" section, the email "bolton25@sjsu.edu" is listed. A message bubble from the owner is shown, reading "Test Message for Grand Stay owned by t". Below the message is an "Open Message" button. A reply input field contains the text "Reply to message for Grand Stay From Bolton25 to Shivam|". A "Send Message" button is located at the bottom of this input field.

HomeAway®

bolton25@sjtu.edu Help ▾

About the Property

There are 3 bedrooms downstairs One bedroom has a King Bed Second bedroom has a Queen Bed The last bedroom has 2 Full Size Beds We speak both English and Chinese Convenient location: 3 miles to SFO airport. (Airport easily visible on view) 1 Mile to Downtown Millbrae Restaurant 15 miles to Downtown SF 18 miles to Pier 39 & Golden Gate Bridge

Message sent successfully

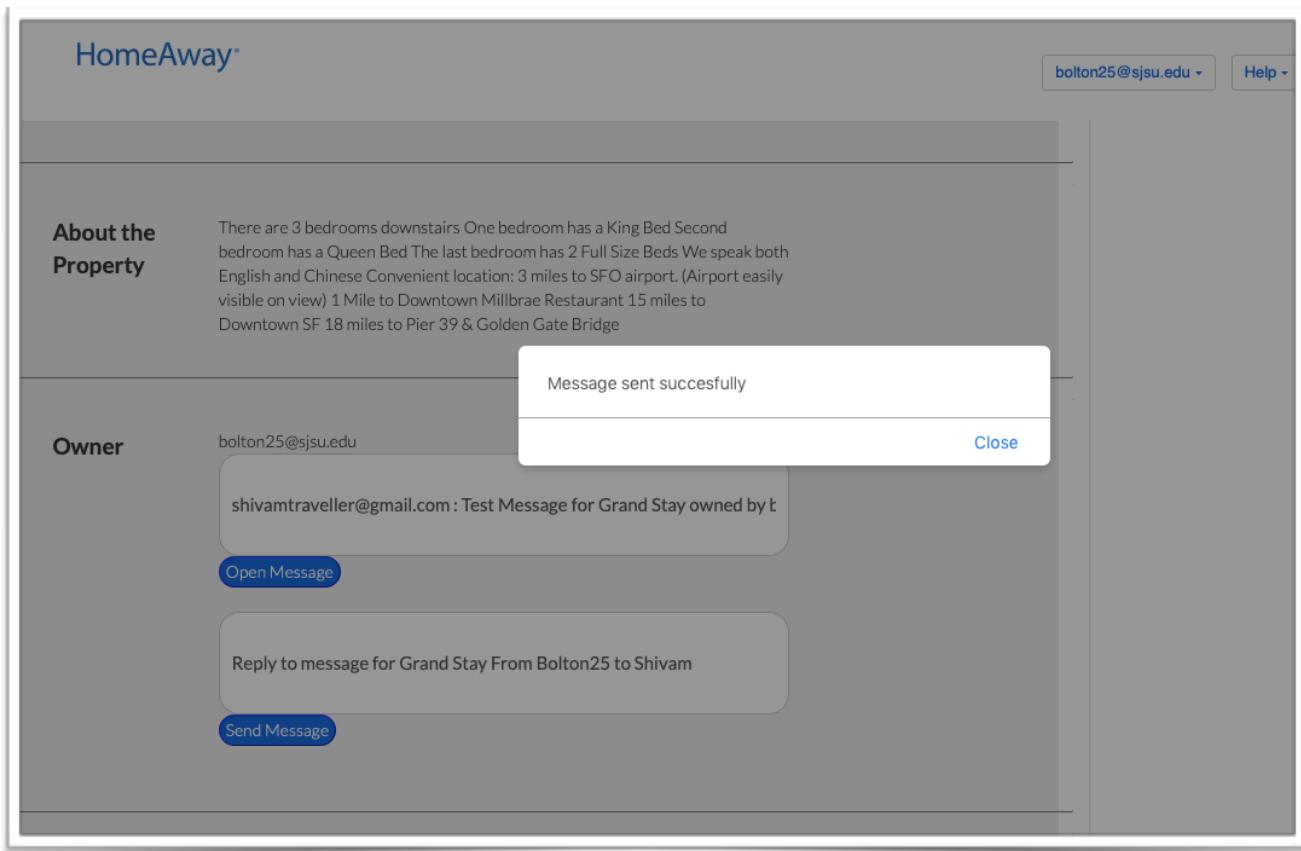
Owner bolton25@sjtu.edu Close

shivamtraveller@gmail.com : Test Message for Grand Stay owned by t

[Open Message](#)

Reply to message for Grand Stay From Bolton25 to Shivam

[Send Message](#)



Traveller receiving message

HomeAway®

shivamtraveller@gmail.com Help ▾ List

Owner bolton25@sjtu.edu

bolton25@sjtu.edu : Reply to message for Grand St

[Open Message](#)

Test Message for Grand Stay owned by bolton25

[Send Message](#)

