

WPL Project

CS 6314.003

APTIC

A Property Renting and Hosting website

Team Number : 23

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Aptic is a website that is used to rent and host a property. Users/consumers can reserve available property. Users can switch to host and can now even host a property.

Currently, this website is running on the localhost of the system used to develop it. Details on how to run this website are added in a readme.md file attached with this project files.

Completed Functionalities are mentioned at the end of the report.

Video Link :

https://cometmail-my.sharepoint.com/:v:/g/personal/prp200000_utdallas_edu/ESuncqr-VWtLuMKWjBqA9-0BCzNh4GhaH5ldiObkXeXCDQ

Technologies Used:

React is used for the **front-end** along with HTML, CSS and JavaScript. For better design of web-pages, external help of Bootstrap is used in this project. Front-end is running as port number : 3000 by default.

For **backend**, Node.js and Express.js are used. These two frameworks are used to manage data in the backend . Also, Express.js is used to create and implement APIs. Mongoose is a Node.js-based Object Data Modeling (ODM), which we used to interact with the MongoDB database. Backend is running in port number 9000 by default.

Database Design

We have used the NoSQL database MongoDB to store the data. We are using the cloud based MongoDB Atlas.

There are 4 collections:

1. Users
2. Hosts
3. Reservations
4. Property

MongoDB UTD C...

Documents
wpl_airbnb.users

My Queries

Databases

Search

admin

local

wpl_airbnb

- hosts
- properties
- reservations
- users

wpl_airbnb.users

7 DOCUMENTS2 INDEXES

DocumentsAggregationsSchemaExplain PlanIndexesValidation

FilterType a query: { field: 'value' }

ResetFindMore Options

ADD DATAEXPORT COLLECTION

1 - 8 of 8

isHost: false

> tokens: Array

createdAt: 2022-12-11T06:21:30.733+00:00

updatedAt: 2022-12-11T07:48:13.674+00:00

__v: 11

> favourites: Array

> reservations: Array

1 _id: ObjectId('63980d93e8019d55c489c944')

2 firstname: "Helosdo,"

3 lastname: "asdasdo,"

4 email: "test@demo.com,"

5 password: "\$2b\$08\$VtIoVbAYUqHyUzPQVsG9eebra1104JWdSLaQUGrZue6xhzTYr15G,"

6 contact: "99789742,"

7 dob: "2022-12-12,"

8 isHost: false

9 > favourites: Array

10 > tokens: Array

11 createdAt: 2022-12-13T05:28:51.385+00:00

12 updatedAt: 2022-12-13T05:31:01.612+00:00

13 __v: 2

ObjectId

String

String

String

String

String

String

Boolean

Array

Array

Date

Date

Int32

CANCEL

UPDATE

_MONGOSH

Required Functionalities

CS 6314 – Final Project – Required Functionalities

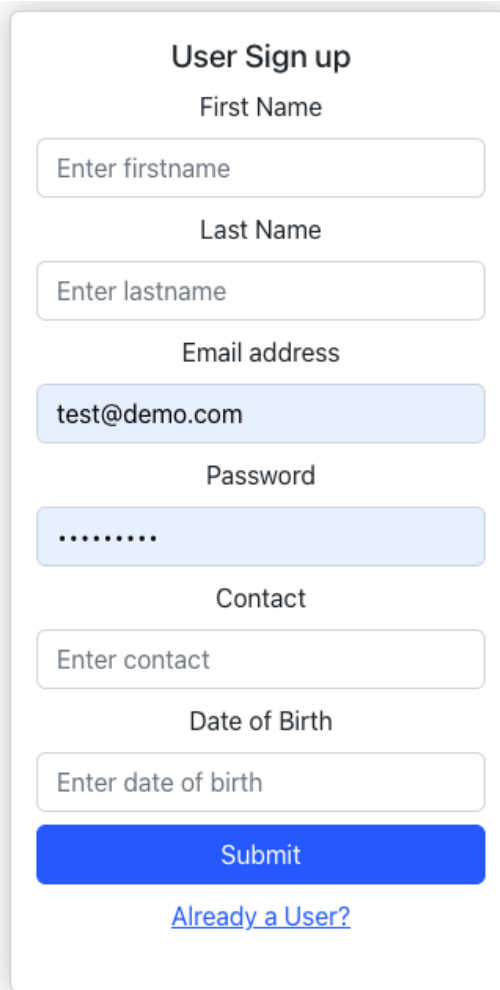
- ✓ User signup: Register a new user to the system
 - ✓ Form validation: Check if all mandatory fields are filled out
 - ✓ Check if password is strong enough. Define the rules of having a strong password. User passwords should be hashed, and only encrypted version of passwords should be stored in the database
- ✓ User login
- ✓ List all properties in the system
- ✓ Users will “filter” properties based on a city and/or property type
- ✓ Users will add properties to their favorites list
- ✓ Users will access their favorites list
- ✓ Users will remove properties from their favorites list
- ✓ Users will be able to rate a given property
- ✓ They will enter their feedback/comments as they rate the property
- ✓ Users will be able to sign-up for a host account (Become a host)
- ✓ Hosts will add properties to the system

For adding a property, they should be able to upload picture(s)

- ✓ Hosts will update property details (description, amenities, price, cleaning fee etc.)
- ✓ Hosts will delete properties from the system (soft delete: mark them as unavailable)
- ✓ Users will make reservations. For making a reservation, availability of the property should be checked
- ✓ For users, reservations (both past and future) will be listed along with reservation dates
- ✓ Users will be able to cancel the reservation if it is before 48 hours before reservation date/time

User signup: Register a new user to the system

If a user does not have an account, he has to register first as a new user into the system. A simple signup page is used for this functionality. Upon submitting the form, that data goes to the user collection present in our mongo database.



The image shows a 'User Sign up' form with the following fields and elements:

- Title:** User Sign up
- First Name:** Input field with placeholder text 'Enter firstname'.
- Last Name:** Input field with placeholder text 'Enter lastname'.
- Email address:** Input field containing the text 'test@demo.com'.
- Password:** Input field with placeholder text '.....'.
- Contact:** Input field with placeholder text 'Enter contact'.
- Date of Birth:** Input field with placeholder text 'Enter date of birth'.
- Submit:** A blue button with the text 'Submit'.
- Link:** A blue hyperlink with the text '[Already a User?](#)'.

Form validation: Check if all mandatory fields are filled out

While filling the sign-up form, the system will validate the form and check if all the fields are filled out as required.

Check if the password is strong enough. Define the rules of having a strong password. User passwords should be hashed, and only encrypted version of passwords should be stored in the database

When it comes to the password, the system checks whether it is strong enough or not. Once it is accepted, the password is stored in the database collection. However, the direct value of the password is not stored in the collection, its encrypted value is used instead. This reserves the data privacy of the registered user. JWT Token and bcrypt are used to encrypt the password.

User Sign up

First Name

asdasd

Last Name

adad

Email address

Enter email

Enter valid email address. Example:
abc@def.xyz

Password

Enter password

1 Uppercase, 1 Lowercase, 1 Number
and 1 Special character required.
Minimum length is 6

Contact

76757446664

Date of Birth

1999-12-12

Submit

[Already a User?](#)

User login

After doing registration, user can login to the website now. After entering email as password, entered password is checked with the stored password from user collection. A decrypting algorithm is used here. On checking for credentials, the user is redirected to the home page if credentials are correct.

Login

Email address


Password

[New User?](#)


Sign in


List all properties in the system

On the home page, users can view all the properties listed. Properties will be in the form of cards with title, location and a short description. Upon clicking on see more... link, a detailed page of that property is opened where users can see all the details of that property like amenities, house rules, etc and can further proceed to reserve it if interested.




Search Destinations


Home 




Lazy Acres Farmhouse
[Anna, Texas, United States](#)
This home is very close to wedding venues, Hurricane Creek Country Club, and a short drive to downtown McKinney.
\$175 per night
[See More...](#)



Shores of Panama 511 Remodeled Lower Level!
[Panama City Beach, Florida, United States](#)
This property features 100% sanitized, clean sheets and towels, professionally cleaned by Gulf Coast Laundry Services.
\$126 per night
[See More...](#)



HIGHLANDS CASTLE... overlooking Lake George!
[Bolton, New York, United States](#)
Highlands Castle is a hidden jewel in a private setting, yet only 3-minutes from downtown Bolton Landing
\$8295 per night
[See More...](#)



Kettle House Galveston - As Seen On TV DIY
[Galveston, Texas, United States](#)
Welcome to the 'Galveston' famous Kettle House. Enjoy this newly renovated 1960's home originally built as a steel storage tank.
\$307 per night
[See More...](#)

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Users will “filter” properties based on a city and/or property type

Since, there are all properties in the home page, users can filter out properties based on title and location(city, state, country) by searching from the search bar in the header. Searching and showing results will use React functionalities thereby reducing loading time.



Shores of Panama 511 Remodeled Lower Level!

Panama City Beach, Florida, United States



This property features 100% sanitized, clean sheets and towels, professionally cleaned by Gulf Coast Laundry Services.


\$126 per night

[See More...](#)

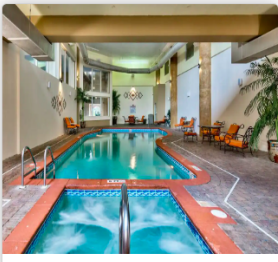


Users will add properties to their favorites list

Users can also mark a property as their favorite if they want from a detailed description page of that property.

Property Details 

Shores of Panama 511 Remodeled Lower Level! Add to favourites 

★ 4 | [2 reviews](#) | [Panama City Beach, Florida, United States](#)





Entire condo hosted by Vacation Life Properties CheckIn :

6 guests 4 bed 2 bath CheckOut :


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Users will access their favorites list


Users can access their favorite listed properties from the property option provided in the header section.

Search Destinations Favourites 

Sr. No.	Title	City	State	Country	Action
1	Lazy Acres Farmhouse	Anna	Texas	United States	Remove from Favorite
2	HIGHLANDS CASTLE... overlooking Lake George!	Bolton	New York	United States	Remove from Favorite



Lazy Acres Farmhouse
[Anna, Texas, United States](#)
This home is very close to wedding



HIGHLANDS CASTLE... overlooking Lake George!
[Bolton, New York, United States](#)

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Users will remove properties from their favorites list

Users can also remove property from the favorite list. This operation can be performed either on the favorite list page or from the property details page by clicking the heart icon again.

The screenshot shows the APTIC website interface. At the top, there is a search bar labeled "Search Destinations" and a "Favourites" button with a heart icon. Below this is a table listing favorite properties:

Sr. No.	Title	City	State	Country	Action
1	Lazy Acres Farmhouse	Anna	Texas	United States	Remove from Favorite

Below the table is a detailed view of the "Lazy Acres Farmhouse". It includes a large image of the property, the title "Lazy Acres Farmhouse", the location "Anna, Texas, United States", and a description: "This home is very close to wedding venues, Hurricane Creek Country Club, and a short drive to downtown". At the bottom of the page, there is a footer with the text "© APTIC, a home rental website. All rights reserved • [Terms & Conditions](#) • [Privacy Policy](#)" and social media links for "Support | Feedback | f | @".

Users will be able to rate a given property

Users can give rating stars based on his experience. This can be done from the reservation page.

They will enter their feedback/comments as they rate the property. Users can also provide feedback along with ratings for the property.

The screenshot shows the APTIC website interface with a "Reservations" button in the top right corner. A modal form titled "Add Reviews" is open in the center. The form contains the following fields:

- Rating :** A row of five green stars.
- Feedback :** A text input field with the placeholder text "Review.....".
- Buttons:** "Cancel" and "Add Review" buttons at the bottom right of the modal.

In the background, a table of reservations is visible:

Checkin Date	Checkout Date	Actions
2022-12-01	2022-12-09	Review
2022-12-22	2022-12-30	Cancel

Users will be able to sign-up for a host account (Become a host)

Users can choose to become a host and add properties for rent. To become a host, users have to provide more details like DOB, bank details, his address etc. After becoming a host he can do all the functions of the host.

Register for host

<input type="text"/>	<input type="text"/>	
First Name	Last Name	
<input type="text"/>	<input type="text" value="dd/mm/yyyy"/>	
Phone no.	DOB	
<input type="text"/>		
Street		
<input type="text"/>	<input type="text"/>	<input type="text"/>
City	State	Zip Code
<input type="text"/>	<input type="text"/>	
Account Name	Bank Name	
<input type="text"/>	<input type="text"/>	
Account Number	Routing Number	
<input type="button" value="Register"/>		

Host Dashboard

[Add Property](#)

Hosted Properties :

Sr. No.	Title	Location	Average Ratings	Status	Actions
1	Lazy Acres Farmhouse	Anna, Texas, United States	3.25	Active	Edit Delete
2	Shores of Panama 511 Remodeled Lower Level!	Panama City Beach, Florida, United States	4	Active	Edit Delete
3	HIGHLANDS CASTLE... overlooking Lake George!	Bolton, New York, United States	2	Suspended	Edit Delete

Hosts will add properties to the system

From the host dashboard, hosts can add properties into the system. All the details of property will go to property collection present in MongoDB.

Host Add Property

Title of Property

Enter Title

Short Description

Enter Short Description

Long Description

Enter Long Description

Host message

Enter any message

City

City

State

State

Country

Country

No of Guests

No of Bedrooms

No of Beds

No of Bathrooms

Cleaning Fee

Cleaning Fees

Service Fee

Service Fees

Nightly Fee

Nightly Fees in \$

Add Amenities

Please add coma seperated ammenities

House Rules

Please add comma seperated house rules

Health and Saftey

Please add coma seperated realth and saftey

Cancellation Policy

Please add cancelation policy

Property Images

Choose file

No file chosen

Submit

For adding a property, they should be able to upload picture(s)

Hosts will update property details (description, amenities, price, cleaning fee etc.)

Host can update property details. This option is available in the host dashboard. Upon clicking on the edit button, a page is opened with auto filled values. Host can make changes to the required fields and click on the submit button. This will update data in property collection.

Host Add Property

Title of Property

Lazy Acres Farmhouse

Short Description

This home is very close to wedding venues, Hurricane

Long Description

Long or short term rental. This cutie of a farm house w

Host message

Entire cottage hosted by Eric

City

Anna

State

Texas

Country

United Stz

No of Guests

6

No of Bedrooms

3

No of Beds

4

No of Bathrooms

3

Cleaning Fee

25

Service Fee

28

Nightly Fee

175

Add Amenities

Kitchen,,Free parking on premises,,Pets allowed,,Wifi,,J

House Rules

Check-in: After 3:00 PM,Checkout: 10:00 AM,Self chec

Health and Safety

Security camera/recording device,Nearby lake, river, ot

Cancellation Policy

Partial refund: Get back 50% of every night but the firs

Property Images


Choose file

No file chosen

Submit

Hosts will delete properties from the system (soft delete: mark them as unavailable)

Host can delete properties. Doing this will just mark the property as unavailable from the system. Data of that property is not removed from the database collection.

APTIC

Host Dashboard

Host Dashboard

Switch to User

Add Property

Hosted Properties :


Sr. No.	Title	Location	Average Ratings	Status	Actions
1	Lazy Acres Farmhouse	Anna, Texas, United States	3.25	Active	<div>EditDelete</div>
2	Shores of Panama 511 Remodeled Lower Level!	Panama City Beach, Florida, United States	4	Active	<div>EditDelete</div>
3	HIGHLANDS CASTLE... overlooking Lake George!	Bolton, New York, United States	2	Suspended	<div>EditDelete</div>

Delete Property

Are you sure you want to permanently suspend this property?

Close

Delete Property

APTIC

Host Dashboard

Host Dashboard

Switch to User

Add Property

Hosted Properties :


Sr. No.	Title	Location	Average Ratings	Status	Actions
1	Lazy Acres Farmhouse	Anna, Texas, United States	3.25	Active	<div>EditDelete</div>
2	Shores of Panama 511 Remodeled Lower Level!	Panama City Beach, Florida, United States	4	Active	<div>EditDelete</div>
3	HIGHLANDS CASTLE... overlooking Lake George!	Bolton, New York, United States	2	Suspended	<div>EditDelete</div>


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Users will make reservations. For making a reservation, availability of the property should be checked

Users can reserve a property from the property details page. He will be asked certain parameters such as no of guests, checkin, checkout date, card details etc. isAvailable parameter is checked from property collection. If isAvailable is false, the user cannot proceed to make reservations. By checking isAvailable, redundancy in reservation is maintained.



Reservations 

No of guests :

Payment Details

Credit/Debit Card number :

Name on Credit/Debit Card:

exp month : mm/yy cvc :

Zipcode :

Cancellation Policy

You can cancel reservation before 48 hours.

Important Notice

ID of person who booked will be required as an Identity proof.

Shores of Panama 511 Remodeled Lower Level!

Panama City Beach, Florida, United States


Per night fee X 1	126 * 1
Cleaning fee	309
Service fee	79
Taxes	25
Total	539


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For users, reservations (both past and future) will be listed along with reservation dates

Users can view upcoming, current and past reservations in the reservation page available from the header section. For past and current reservations, users can give feedback and a rating for his experience of that property. For future reservations, user is allowed to cancel the reservation



Reservations 

Sr. No.	Title	Location	Checkin Date	Checkout Date	Actions
1	HIGHLANDS CASTLE... overlooking Lake George!	Bolton, New York, United States	2022-12-01	2022-12-09	<input type="button" value="Review"/>
2	Shores of Panama 511 Remodeled Lower Level!	Panama City Beach, Florida, United States	2022-12-22	2022-12-30	<input type="button" value="Cancel"/>

Users will be able to cancel the reservation if it is before 48 hours before reservation date/time

On the reservation page, users can cancel their reservation before 48 hours. In the reservation page, the current date and time is being noted and that is compared with the reserved property's check in time which is stored in the collection.

