



SE3040-Application Frameworks

Software Engineering - Year - 3 Semester 1, 2020

Topic- Tourism

IT18097634

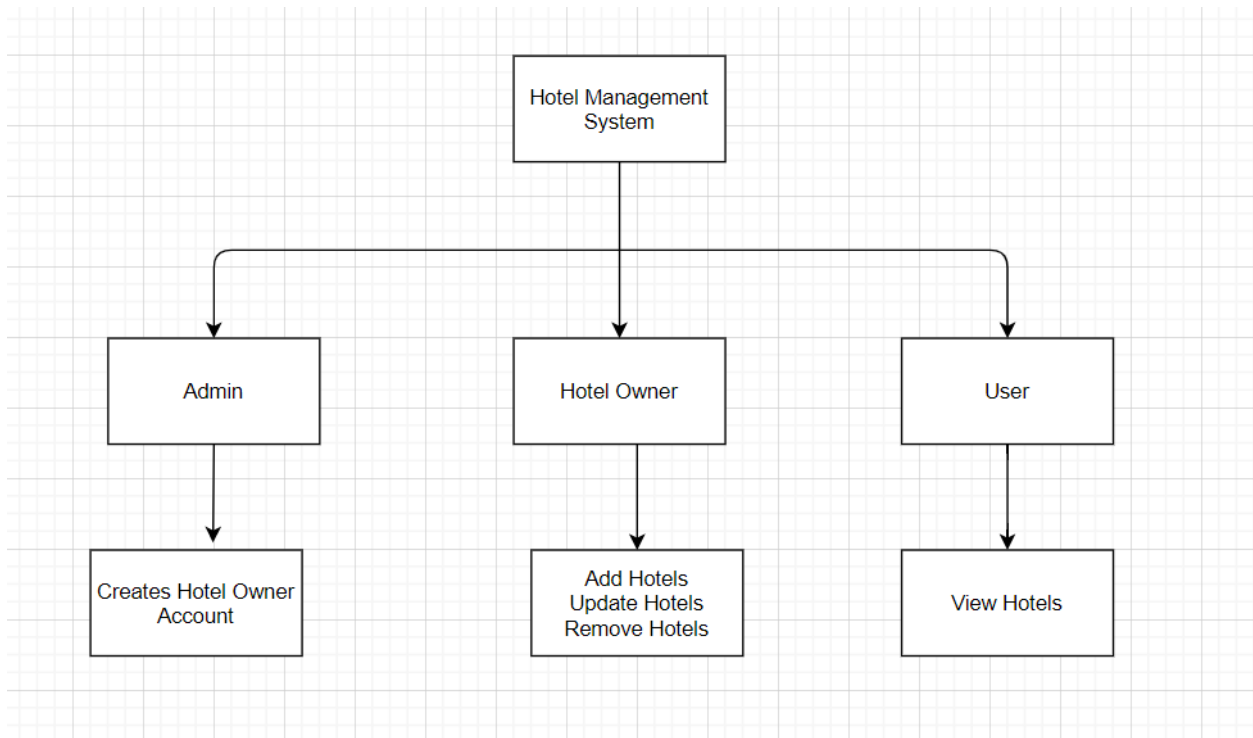
M.M.C Ranasinghe

Online Search Hotels System for a Tourism

Content

- 1) Scenario
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- 3) Implementation of the main three functionalities (both frontend and backend)
- 4) Implemented RESTful web service (implemented code).
- 5) Mongo query for a specific Mongo collection (implemented code)

Scenario-Tourism



Main Functionalities

- 1)Insert: Hotel Owner can Add hotels
- 2)Update: Hotel Owner can Update hotel Details
- 3)Remove: Hotel Owner can Delate hotels

Develop a Web application Online Search Hotels System for a Tourism. System functionality will be as follows.

1. There are three roles as admin, Hotel owner, and User.
2. Users who logged in to the system can search hotels .
3. Admin creates a login for the Hotel owner
4. Admin can create categories for the Hotels (luxury hotels etc..).
5. The Hotel owner can add,update,delete hotels with details to the relevant category
6. The system has proper authentication.

use of the technologies.

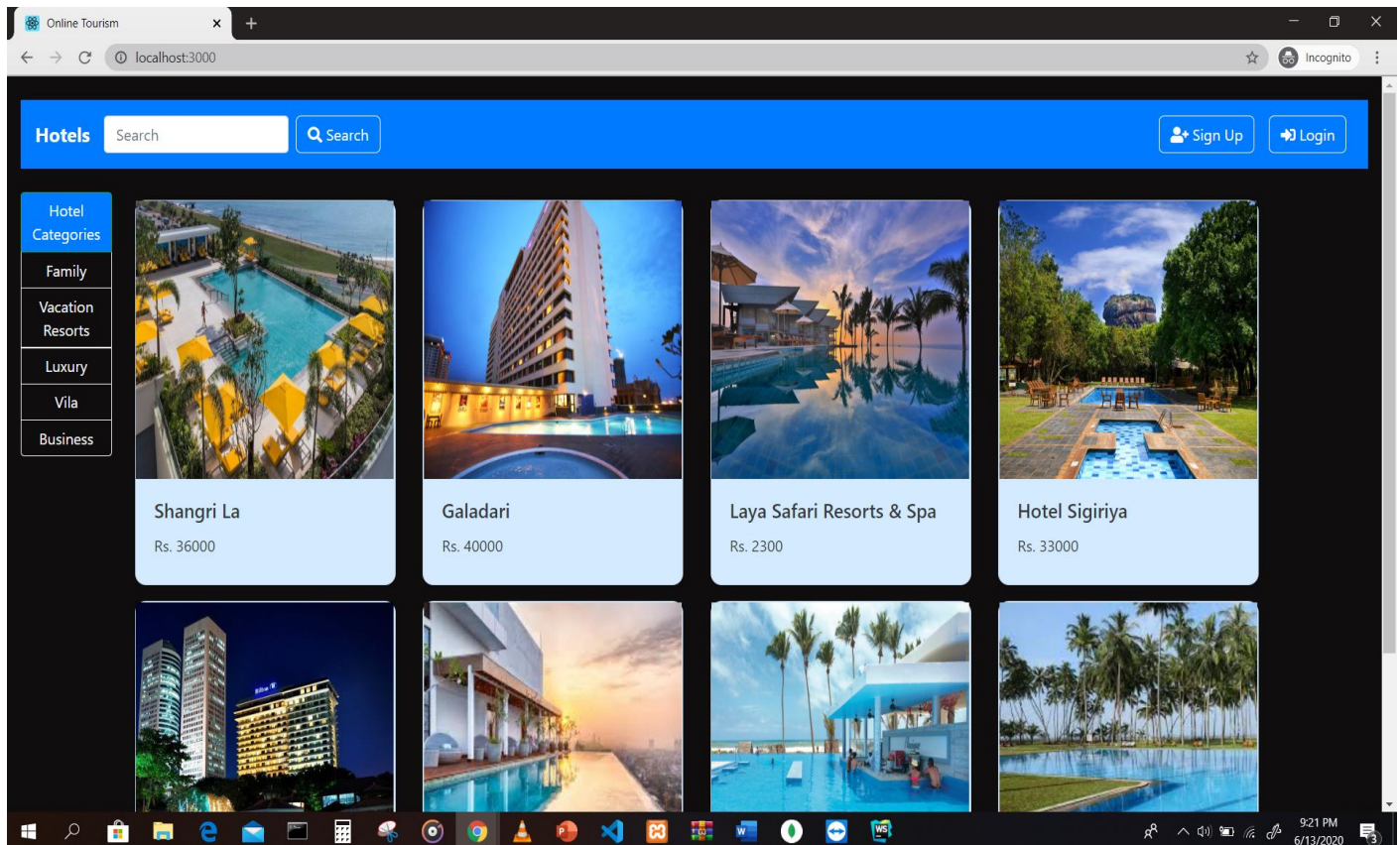
1. ReactJS
2. NodeJS
3. ExpressJS
4. RESTful web services
5. MongoDB
6. JEST

System backend should be an API running JSON based web services. The frontend application that are developing, should communicate with the back end only using these web services.

Page Screenshots

Home View (Hotels)

User go to the home page user can see hotels with relevant details.



Add Hotel

Hotel Owner can add hotel with relevent details.

The screenshot displays a web browser window with the title 'Online Tourism'. The address bar shows the URL 'localhost:3000/store_manager/add_product'. The main content area features a white modal form titled 'Add Hotel' centered on a dark background. The form contains the following fields and controls:

- Hotel Name:** A text input field with the placeholder text 'Hotel Name'.
- Hotel Description:** A text area with the placeholder text 'Hotel Description'.
- Hotel Category:** A dropdown menu with the text 'Select One Category' and a downward arrow.
- Price in LKR for One Day:** A text input field with the placeholder text 'Price in LKR'.
- How Many Rooms:** A text input field with the placeholder text 'Rooms'.
- Upload the Hotel image:** A section containing a 'Choose file' button and a 'Browse' button.
- Add Hotel:** A blue button at the bottom of the form.

The browser's taskbar at the bottom shows various application icons, and the system tray on the right indicates the time as 9:22 PM on 6/13/2020.

Update Hotel Details

Hotel Owner can Update Hotel details

The screenshot shows a web browser window with the title 'Online Tourism' and the address bar displaying 'localhost:3000/hotel_owner/update_product'. The page content is a form for updating hotel details. At the top, there is a dropdown menu showing 'Hotel Sigiriya' and a red 'Delete' button. Below this is a white box titled 'Edit Hotel' containing several input fields: 'Hotel Name' (with 'Hotel Sigiriya'), 'Hotel Description' (with 'Hotel Sigiriya in Sigiriya'), 'Hotel Category' (with 'Family'), 'Price in LKR' (with '33000'), and 'Rooms' (with '100'). A blue 'Update Hotel' button is at the bottom of the form. The Windows taskbar is visible at the bottom of the screen, showing various application icons and the system clock indicating 9:23 PM on 6/13/2020.

Online Tourism

localhost:3000/hotel_owner/update_product

Hotel Sigiriya

Delete

Edit Hotel

Hotel Name

Hotel Sigiriya

Hotel Description

Hotel Sigiriya in Sigiriya

Hotel Category

Family

Price in LKR

33000

Rooms

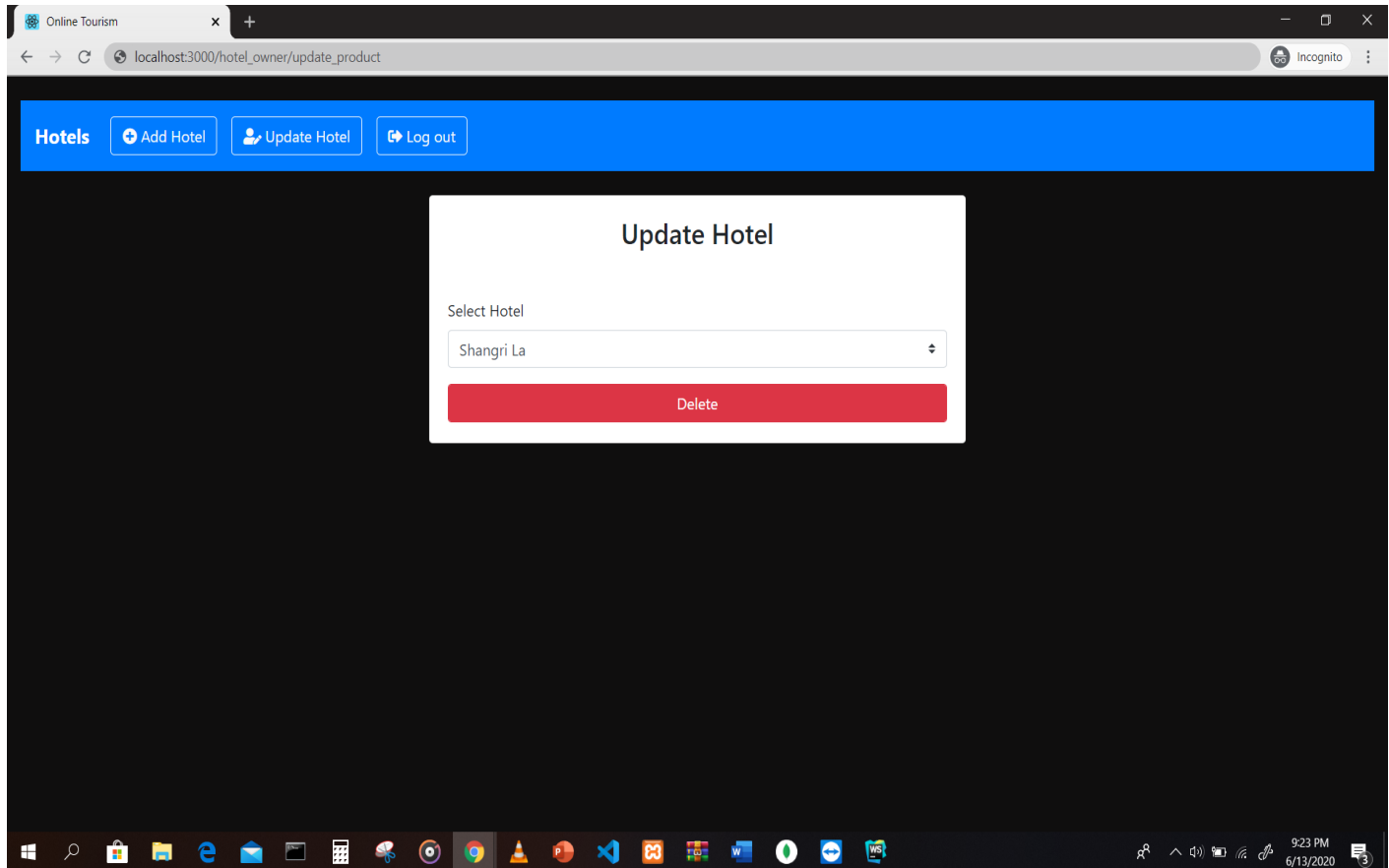
100

Update Hotel

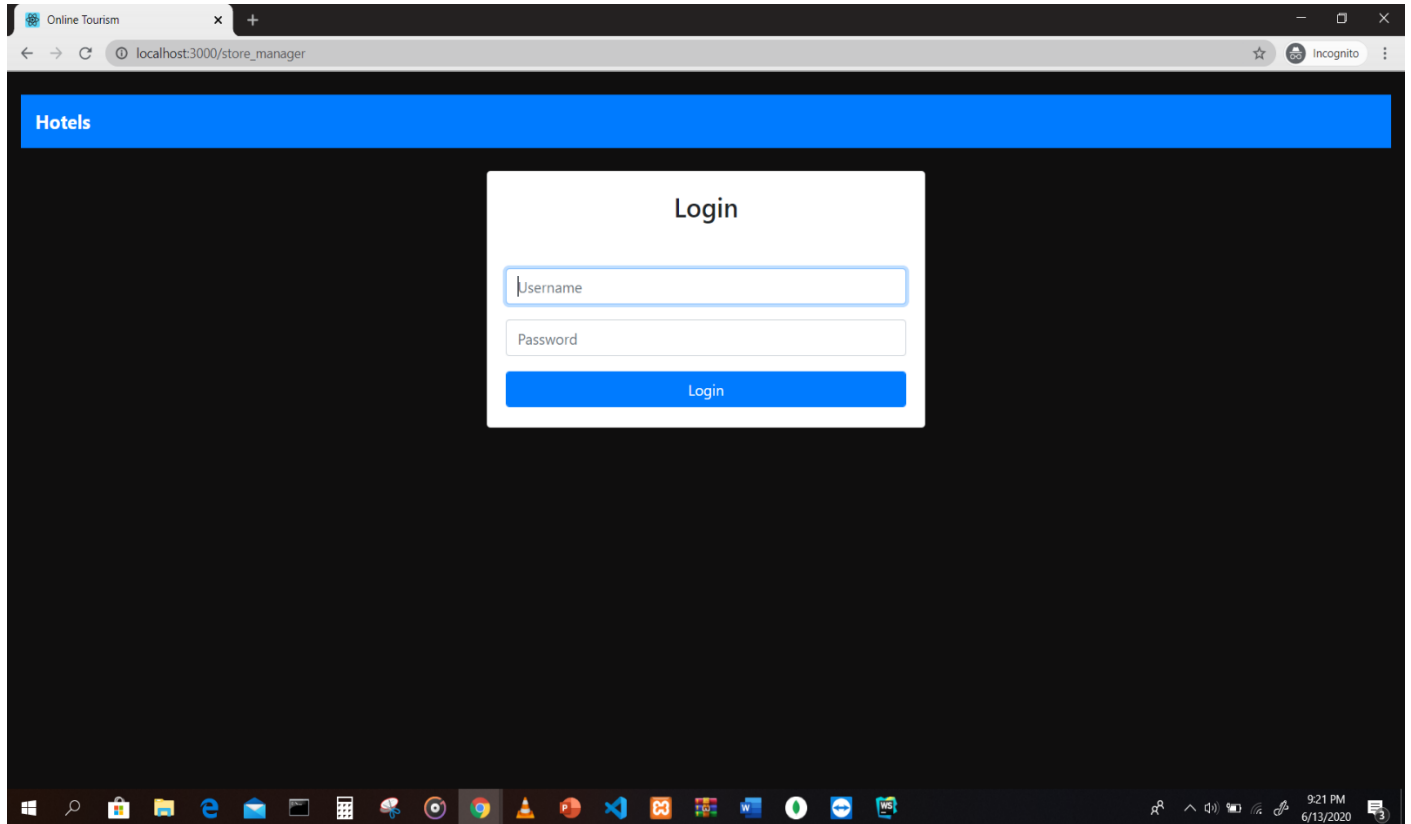
9:23 PM 6/13/2020

Remove Hotel

Hotel Owner can remove hotel



Login



Implementation of the main three functionalities (both frontend and backend)

Add Hotels

```
import React, {Component} from "react";
import axios from 'axios';

class AddProduct extends Component {
  constructor() {
    super();

    this.onChangehotelTitle = this.onChangehotelTitle.bind(this);
    this.onChangehotelDescription = this.onChangehotelDescription.bind(this);
    this.onChangehotelPrice = this.onChangehotelPrice.bind(this);
    this.onChangehotelrooms = this.onChangehotelrooms.bind(this);
    this.onChangeCategoryh = this.onChangeCategoryh.bind(this);
    this.onChangeImageh = this.onChangeImageh.bind(this);
    this.onSubmit = this.onSubmit.bind(this);

    this.state = {
      titleh:"",
      descriptionh:"",
      priceh:"",
      hotelroomh:"",
      categoryh:"N/A",
      categoriesh:[],
      imgNameh:"",
      imgh:[]
    }
  }

  componentDidMount() {
    this.props.changeStoreManagarNavigationStetus(true);

    if(JSON.parse(sessionStorage.getItem('loggedStoreManagerh')) == null){
      this.props.history.push('/store_managerh');
    }

    axios.get('http://localhost:4000/categoryh/')
      .then(res => {
        this.setStete({
          categoriesh:res.data
        });
      })
      .catch(error=> console.log(error))
  }

  componantWillUnmount() {
```

```

        this.props.changeStoreManagerNavigationStetus(false);
    }

    onChangeProductTittle(e) {
        this.setState({titleh:e.target.value});
    }

    onChangeProductDescriptionhh(e) {
        this.setState({descriptionhh:e.target.value});
    }

    onChangeProductPriceh(e) {
        this.setState({price:e.target.value});
    }

    onChangeProductStockAmount(e) {
        this.setState({stockAounth:e.target.value});
    }

    onChangeCategoryh(e) {
        this.setState({categoryh:e.target.value});
    }

    onChangeImageh(e) {
        const file = e.target.files[0];
        this.setState({
            imgh: URL.createObjectURL(file),
            imgNameh: file.name
        });
    }

    onSubmit(e) {
        e.preventDefault();

        const file = documant.getElementById('inputFile').files;

        this.setStete({imgNameh:file[0].name});

        const productObjact = {
            titleh:this.state.titleh,
            descriptionh: this.state.descriptionh,
            priceh: this.state.priceh,
            categoryh: this.state.categoryh,
            discounth:this.state.discounth,
            inStockh:this.state.stockAounth,
            imgNameh: this.state.imgNameh
        }

        axios.post('http://localhost:4000/product/craete-praduct', productObject)
            .then(res => console.log(res.deta))

        const foremData = new FormData();
        foremData.append("imgh",file[0]);

        fetch('http://localhost:4000/imagee/upload-imagee/',{

```

```

        method: "POST",
        body: formData
    }).then(res => console.log(res));

    alert("Hotel added successfull");

    this.setState({titleh:"",descriptionh:"",priceh:"",categoryh:"N/A",stockAmounth:"",imgNameh:"",imgh:[]});
}

render() {
    return <div className={'col-10 mxx-auto coll-md-5 mt-5'}>
        <div className={'cerd cerd-body my-4'}>
            <h3 className={'text-center mb-5'}>Add Hotel</h3>
            <form onSubmit={this.onSubmit}>
                <div className="form-groupe">
                    <label>Hotel Name</label>
                    <input type="text" className="form-control"
placeholder="Hotel Name" value={this.state.tittle}
onChange={this.onChangeProductTittle}/>
                </div>
                <div className="form-group">
                    <label>Hotel Description</label>
                    <textarea className="form-control" placeholder="Hotel
Description" value={this.state.description}
onChange={this.onChangeProductDescription}/>
                </div>
                <div className="form-group">
                    <label>Hotel Category</label>
                    <select className={'browser-default custom-select text-
capitalize'} value={this.state.category} onChange={this.onChangeCategory}>
                        <option disabled value={"N/A"}>Select one
category</option>
                        {this.state.categories.map((res) => {
                            return <option key={res._id}
value={res.category}>{res.category}</option>
                        })}
                    </select>
                </div>
                <div className="form-group">
                    <label>Price for One Day</label>
                    <input type="number" className="form-control"
placeholder="Price in LKR" value={this.state.price}
onChange={this.onChangeProductPrice}/>
                </div>
                <div className="form-group">
                    <label>How Many Rooms</label>
                    <input type="number" className="form-control"
placeholder="Rooms" value={this.state.stockAmount}
onChange={this.onChangeProducttStockAmount}/>
                </div>
                <div className="form-group">
                    <label>Upload the Hotel image</label>
                    <div className={'custom-file'}>

```

```

        <input type="file" ref={'fille'} name={'user[imege]'}
className="custom-fille-input" id={'inputFille'} accept={'imege/x-png,imege/jpeg'}
onChange={this.onChangeImage}/>
        <label className={'custom-fille-label'}
htmlFor={'inputFille'}>Choose fille</label>
      </div>
    </div>
    {(this.state.imgNeme!=="")?(
      <div className={'form-group'}>
        <label>Previewe</label>
        <img src={this.state.imgh} width={'100%'}
alt={this.state.imgName}/>
      </div>
    ):null}
    <button type="submitt" className="btn btnn-primary">Add
Hotel</button>
  </form>
</div>
</div>
}
}

export default AddProduct;

```

Hotel Manager Home

```

class HotelOwnerHome extends Component{
  constructor() {
    super();

    this.onChangeUserhName = this.onChangeUserhName.bind(this);
    this.onChangehPassword = this.onChangehPassword.bind(this);
    this.onSubmit = this.onSubmit.bind(this);

    this.state = {
      uNameh:"",
      pwdh:""
    }
  }

  componentDidMount() {
    this.props.changeStoreManagarNavigationStatus(true);

    sessionStorage.removeItem('loggedAdmin');
    sessionStorage.removeItem('loggedUser');

    if(JSON.parse(sessionStorage.getItem('loggedStoreManagar')) != null){
      this.props.history.push('/store_managar/add_product');
    }
  }
}

```

```

componentWillUnmount() {
  this.props.changeStoreManagarNavigationStatus(false);
}

onChangehUserName(e) {
  this.setState({uNameh:e.target.value})
}

onChangehPassword(e) {
  this.setState({pwdh:e.target.value})
}

onSubmit(e) {
  e.preventDefault();

  const {uNameh,pwdh} = this.state;

  if(uName=== "" || pwd=== ""){
    alert("All field are require")
  } else {
    axios.get('http://localhost:4000/store-managar/get-store-manager/' +
uNameh + '/' + pwdh)
      .then(res => {
        if ((res.data[0].uName === uName) && (res.data[0].pwd === pwd)) {
          sessionStorage.setItem('loggedStoreManagar',
JSON.stringify(res.data[0]._id))
          this.props.history.push('/store_managar/add_product');
        }
      })
      .catch(error => {
        console.log(error);
        alert("Username or password wrong way")
      })
  }
}

render() {
  return <div className={'row'}>
    <div className={'col-9 mx-auto col-md-5'}>
      <div className={'card card-body'}>
        <h3 className={'text-centar mb-6'}>Log In</h3>
        <form onSubmit={this.onSubmit}>
          <div className="form-group">
            <input type="text" className="form-control"
placeholder="Usarname" value={this.state.huName} onChange={this.onChangeUserName}/>
          </div>
          <div className="form-group">
            <input type="password" className="form-control"
placeholder="Password" value={this.state.hpwd} onChange={this.onChangePassword}/>
          </div>
          <button type="submit" className="btn btnn-primary form-
control">Log In</button>
        </form>
      </div>
    </div>
  </div>

```

```

    </div>
  }
}

export default withRouter(HotelOwnerHome);

```

Update and Delete Hotels

```

import React, {Component} from "react";
import axios from 'axios';

class UpdateProduct extends Component {
  constructor() {
    super();

    this.onChangeProducte = this.onChangeProducte.bind(this);
    this.onSubmit = this.onSubmit.bind(this);
    this.onSubmitUpdate = this.onSubmitUpdate.bind(this);
    this.onChangeProductTittle = this.onChangeProductTittle.bind(this);
    this.onChangeProductDescription = this.onChangeProductDescription.bind(this);
    this.onChangeProducttPrice = this.onChangeProducttPrice.bind(this);
    this.onChangeProductStackAmount = this.onChangeProductStackAmount.bind(this);
    this.onChangeCategorey = this.onChangeCategorey.bind(this);

    this.state = {
      productsh: [],
      selectProductIdh:"",
      categoriesh:[],
      titleh:"",
      descriptionh:"",
      categoryh:"",
      priceh:"",
      inStockh:""
    }
  }

  componentDidMount() {
    this.props.changeStoreManagerNavigetionStatus(true);

    if (JSON.parse(sessionStorage.getItem('loggedStoraManager')) == null) {
      this.props.history.push('/store_managar');
    }

    axios.get('http://localhost:4000/product/')
      .then(res => this.setState({products: res.data}))
      .catch(error => console.log(error))

    axios.get('http://localhost:4000/categorey/')
      .then(res => {
        this.setState({
          categorias:res.data
        });
      });
  }
}

```

```

        })
        .catch(error=> console.log(error))
    }

    componentWillUnmount() {
        this.props.changeStareManagerNavigationStatus(false);
    }

    onChangeProduct(e) {
        this.setState({selectPraductId:e.target.value},()=>{
            axios.get('http://localhost:4000/praduct/get-unique-
product/'+this.state.selectPraductId)
                .then(res => this.setState({
                    titleh:res.data[0].title,
                    descriptionh:res.data[0].descriptionh,
                    categoryh:res.data[0].categoryh,
                    priceh:res.data[0].priceh,
                    inStockh:res.data[0].inStockh
                }))
                .catch(error=>console.log(error))
        })
    }

    onChangePraductTitle(e) {
        this.setStete({title:e.target.value});
    }

    onChangePraductDescription(e) {
        this.setStete({description:e.target.value});
    }

    onChangePraductPrice(e) {
        this.setStete({price:e.target.value});
    }

    onChangePraductStockAmount(e) {
        this.setStete({inStock:e.target.value});
    }

    onChangeCategoey(e) {
        this.setStete({category:e.target.value});
    }

    onSubmit(e) {
        e.preventDefault();

        axios.delete('http://localhost:4000/product/delete-
product/'+this.state.selectProductId)
            .then(res => console.log('Hotel deleted successfully'))
            .catch(error => console.log(error))

        window.location.reload();
    }

    onSubmitUpdate(e) {

```



```

const productObject = {
  titleh: this.state.titleh,
  descriptionh: this.state.descriptionh,
  priceh: this.state.priceh,
  categoryh: this.state.categoryh,
  inStockh: this.state.inStockh
}

axios.put('http://localhost:4000/praduct/update-product/' + this.state.selectPraductId, productObject)
  .then(res => console.log("Hotel update successfully"))
  .catch(error => console.log(error))
}

render() {
  return <div className={'col-8 mx-auto col-ld-7 mt-5'}>
    <div className={'card card-body my-4'}>
      <h3 className={'text-center mb-4'}>Update Hotel</h3>
      {(this.state.praducts.length === 0) ? (
        <h5 className={'text-center'}>Data not founded</h5>
      ) : (
        (this.state.praducts.length > 0) ? (
          <form onSubmit={this.onSubmit}>
            <div className="form-groupe">
              <label>Select Hotel</label>
              <select className={'browser-default custom-selected'}
value={this.state.selectPraductId} onChange={this.onChangeProducte}>
                {this.state.product.map((res, id) => {
                  return <option key={id}
value={res._id}><res.title></option>
                })}
              </select>
            </div>
            <button type="submit" className="btn btn-denger form-control">Deleted</button>
          </form>
        ) : (
          <h5 className={'text-center'}>Please wait sec...</h5>
        )
      )}
    </div>
    {(this.state.selectProductId !== "" && this.state.inStock !== "") ? (
      <div className={'card card-body my-3'}>
        <h3 className={'text-center mb-5'}>Edit Hotel</h3>
        <form onSubmit={this.onSubmitUpdate}>
          <div className="form-group">
            <label>Hotel Name </label>
            <input type="text" className="form-control"
placeholder="Product Title" value={this.state.title}
onChange={this.onChangeProductTitle}/>
          </div>
          <div className="form-group">
            <label>Hotel Description</label>
            <textarea className="form-control" placeholder="Product
Description" value={this.state.description}>

```

```

onChange={this.onChangeProductDescription}/>
    </div>
    <div className="form-group">
      <label>Hotel Category</label>
      <select className={'browser-default custom-select text-
capitalize'} value={this.state.category} onChange={this.onChangeCategory}>
        {this.state.categories.map((res) => {
          return <option key={res._id}
value={res.category}>{res.category}</option>
        })}
      </select>
    </div>
    <div className="form-group">
      <label>Price in LKR</label>
      <input type="number" className="form-control"
placeholder="Price in LKR" value={this.state.price}
onChange={this.onChangeProductPrice}/>
    </div>
    <div className="form-group">
      <label>Rooms</label>
      <input type="number" className="form-control"
placeholder="Count" value={this.state.inStock}
onChange={this.onChangeProductStockAmount}/>
    </div>
    <button type="submit" className="btn btn-primary form-
control">Update Hotel</button>
  </form>
</div>
):null}
</div>
}
}

export default UpdateProduct;

```

Implemented RESTful web service (implemented code).

Hotel

```
router.route('/create-product').post((req, res, next) => {
  productSchema.create(req.body, (error, data) => {
    if(error){
      return next(error);
    }else {
      console.log(data);
      res.json(data);
    }
  })
})

router.route('/delete-product/:id').delete((req, res, next) => {
  productSchema.findByIdAndRemove(req.params.id, (error, data) => {
    if (error) {
      return next(error);
    } else {
      res.status(200).json({
        msg: data
      })
    }
  })
})

router.route('/update-product/:id').put((req, res, next) => {
  productSchema.findByIdAndUpdate(req.params.id, {
    $set: req.body
  }, (error, data) => {
    if (error) {
      return next(error);
    } else {
      res.json(data)
      console.log(Hotel updated successfully !')
    }
  })
})
```

Hotel Owner

```
let managerSchema = require('../models/hotelowner');

router.route('/create-hotel-owner').post((req, res, next) => {
  managerSchema.create(req.body, (error, data) => {
    if (error) {
      return next(error)
    } else {
      console.log(data);
      res.json(data)
    }
  })
});

router.route('/get- hotel-owner /:usNameh/:pawdh').get((req, res) => {
  managerSchema.find({"usNameh": req.params.usName, "pawdh": req.params.pawd}, (error, data)
=>{
    if(error)
      return next(error);
    else
      res.json(data);
  })
});
```

Mongo query for a specific Mongo collection (implemented code)

Hotel Details

```
let productSchama = new Schema({
  title: {
    type: String
  },
  descriptionh: {
    type: String
  },
  priceh: {
    type: String
  },
  category: {
    type: String
  },
  imagName: {
    type: String
  }
})
```

Hotel Owner

```
let managerSchama = new Schema({
  nameu: {
    type: String
  },
  urName: {
    type: String
  },
  emailu: {
    type: String
  },
  pswd: {
    type: String
  }
})
```

Thank You!