

# Sri Lanka Institute of Information Technology

# **Distributed Systems**

Project Group ID: 2022S1\_REG\_21

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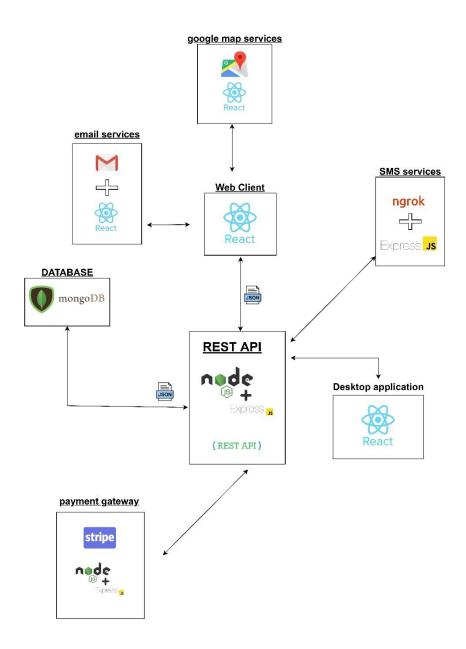
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## 1. Introduction

The hotel reservation system is implemented using Express js and node js for the Rest API, ReactJS for Web Client, and react Js for SMS Server and Email Server and the mongo DB as the database. This system allows the system admin to manage the reservation information add new reservation information and update and delete the information as well in the building.

The travelers first register to the system and create profiles and login into the system. and can see their profiles. a traveler may make multiple reservations The travelers can make the reservation and travelers can cancel their reservation booking. once the reservation confirms the traveler makes the payment and the system sends an SMS to the customer. traveler can see their booking information after the booking and login into the account. once the reservation is done the system will send an email to the customer. Once a reservation is made, a traveler may (optionally) reserve a taxi, where a request may be sent to a taxi service.

# 2. High-Level Architectural Diagram



# 3. Tools & Technologies

## 3.1 Rest API

- Node js and express js
- Postman
- Vs code

## 3.2 Web Client

- VS Code
- React Js
- Axios HTTP Client

## 3.3 Database

MongoDB

# 3.4 Desktop Application (Admin)

- React js
- Vs code

## 3.5 Email Service

- Gmail
- Vs code
- React email

## 3.6 SMS Service

- Shoutout
- Express js
- Vs code

# 3.7 Payment Service

- Node js
- Express js
- Vs code
- React js

# 4. System Components

## 4.1 Rest API

port 5000. Rest API has all Admin, traveler, system admin, payment options details, traveler profile, hotel location, booking reservation and Rooms CRUD operations, and send-email notification as well. Rest API has access to the MongoDB database. Web clients(react js) could access MongoDB through this Rest API.

### 4.1.1 Rest API End Points

endpoint	Description
http://localhost:5000/api/User/register	Create a new traveler account
http://localhost:5000/api/User/login	Login traveler account
http://localhost:5000/api/User/logout	Logout traveler account

http://localhost:5000/api/User/getAllUsers	Display all traveler account information
http://localhost:5000/ user/login	Admin, system admins login
http://localhost:5000/user/register	Admin register
http://localhost:5000/user/logout	Admin, system admin logout
http://localhost:5000/api/rooms/getAllRooms	Display all rooms
http://localhost:5000/api/rooms/getRoomByid	Get a room by id ta o reservation
http://localhost:5000/api/rooms/getRoombyid	Get a room by id
http://localhost:5000/api/rooms/getallrooms	Display room
http://localhost:5000/api/rooms/addRoom	Add new rooms
http://localhost:5000/api/rooms/update	Update room
http://localhost:5000/api/rooms/id	Delete rooms
http://localhost:5000/api/bookings/bookroom	Make room reservation
http://localhost:5000/api/bookings/cancelbooking	Cancel reservation by id
http://localhost:5000/api/bookings/getuserbookings	Get users booking by id
http://localhost:5000/api/bookings/getallbookings	Get all users booking details
http://localhost:5000/smsroute/sms	Send payment confirm messages to customer
http://localhost:5000/Malier	Send payment confirm email

## 4.2 Web Client

Web Client has implemented in ReactJS and redux some part has used. Through Rest API which runs on port 5000. Web clients run on port 3000. Web client gets all room and reservation information data from that rest API. To request HTTP request web client has used Axios HTTP client.

## 4.3 Desktop Application

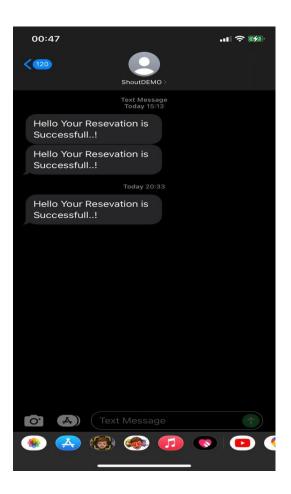
The desktop application has an Admin, and system admin login. So, unauthorized users cannot access the system where it provides security for the application. this also used run on port 3000. To request HTTP requests desktop application has used the Axios HTTP client. This provides a dashboard that displays all booking information and all customer information and room details. the system admin can add and register the admin accounts. admin can manage (update/delete) rooms and add new rooms and reservations.

### 4.4 Email Service

An email will be sent to the customer's email account. The email service component was developed using react JS and it is connected to the Rest API. Google Gmail service is used to send email alerts to customers when the reservation is done. It's sent by the system admin.

### 4.5 SMS Service

A web API called used to implement the SMS Service in this system. This service also runs on the react JS which is connected to the REST API. Same as the email service.



## 4.6 Payment gateway

A web API called used to implement the payment Service in this system. This service also runs on the react JS and node JS and also express JS. which is connected to the REST API. Same as the email service. when the customer selects the room reservation customer must payment there booking rooms. And the customer get a confirmation message via SMS

## 4.7 Database

we are using the database MongoDB. it is used by the rest of API and access database and manage data

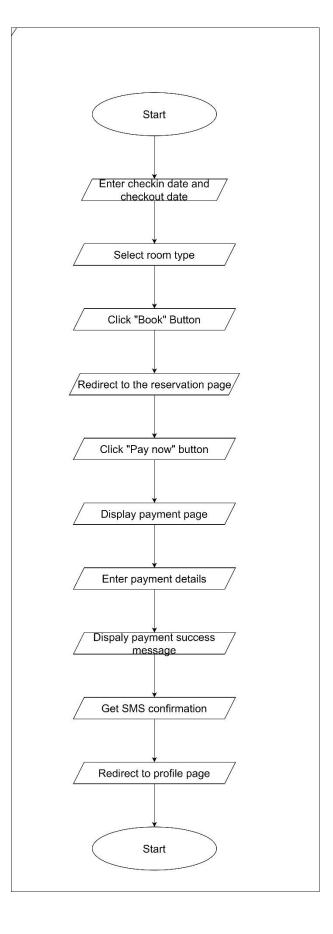
# 4.8 Authentication and Security

For approved users only, the hotel reservation system application provides an admin login. A different policy is then used to safeguard client calls as well as passport JS. They can only communicate with each other via the port that has been designated.

# 5. Interconnectivity

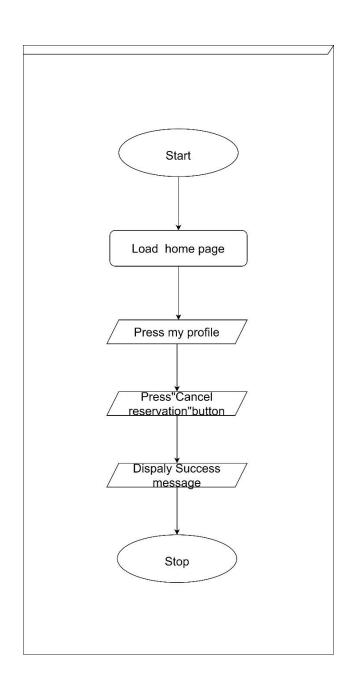
## 5.1.1 Booking room

When the customer register to the system then user can booking reservation option one reservation or more restation can booking one user .



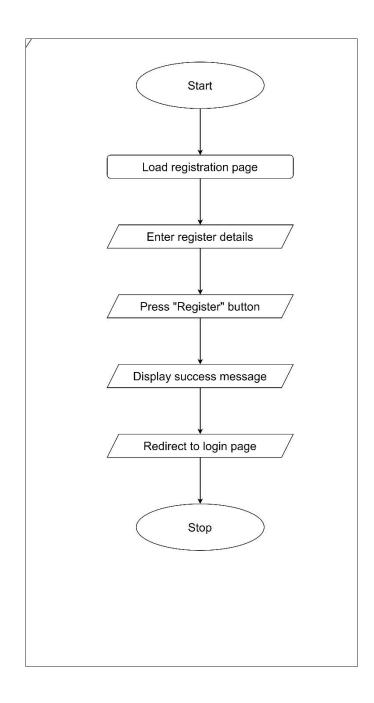
## 5.1.2 Cancel reservation

When the customer needs to cancel there reservation customer can cancel there reservation login to the there profile.



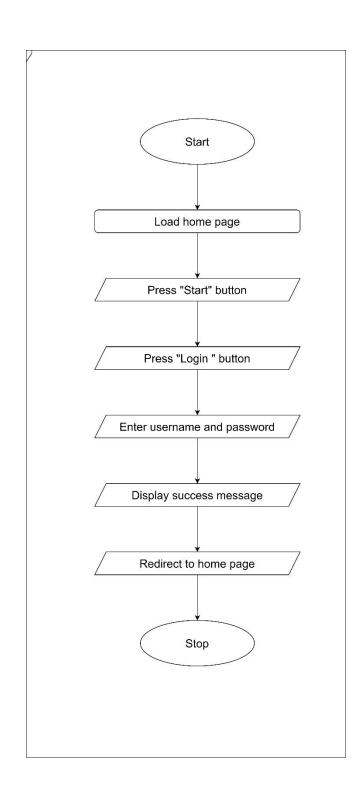
# 5.1.3 Customer Register

If customer need to make
the reservations 1st customer
need to register to the
system and after the customer
can make reservation



# 5.1.4 Customer login

Customer need to login there profile customer must enter there user email and password



# 6. Appendix

### 6.1 Rest API

### 6.1.1.1.1 Package.Json (RESTfulWebServices)

```
"name": "restfulbackend",
"version": "1.0.0",
"description": "",
"main": "index.js",
"scripts": {
 "test": "echo \"Error: no test specified\" && exit 1",
 "start": "nodemon server.js"
"author": "DSlabAssignment02",
"license": "ISC",
"dependencies": {
 "axios": "^0.27.2",
 "bcrypt": "^5.0.1",
  "cookie-parser": "^1.4.6",
 "cors": "^2.8.5",
  "express": "^4.17.3",
  "jsonwebtoken": "^8.5.1",
  "moment": "^2.29.3",
  "mongoose": "^6.3.1",
 "passport": "^0.5.2",
  "passport-jwt": "^4.0.0",
  "passport-local": "^1.0.0",
 "shoutout-sdk": "^3.0.4",
  "stripe": "^9.1.0",
  "uuid": "^8.3.2"
"devDependencies": {
  "nodemon": "^2.0.15"
```

### 6.1.2 Model class

## 6.1.2.1.1 Admin.js

```
const mongoose = require('mongoose');
const bcrypt = require('bcrypt');
const UserSchema = new mongoose.Schema({
   username :{
       type : String,
       required : true,
       min : 6,
       max : 65
    password : {
       type : String,
       required : true
    role : {
       type : String,
        enum : ['user','admin','sysadmin'],
        required: true
    },
    email : {
       type : String,
        required : true
    },
});
UserSchema.pre('save',function(next){
```

```
if(!this.isModified('password'))
        return next();
    bcrypt.hash(this.password,10,(err,passwordHash)=>{
        if(err)
             return next(err);
        this.password = passwordHash;
        next();
    });
});
UserSchema.methods.comparePassword = function(password,cb){
    bcrypt.compare(password,this.password,(err,isMatch)=>{
         if(err)
           return cb(err);
        else{
        if(!isMatch)
             return cb(null,isMatch);
        return cb(null,this);
    });
module.exports = mongoose.model('User',UserSchema);
```

#### 6.1.2.1.1.1 booking.js

```
const mongoose = require("mongoose");

const bookingSchema = mongoose.Schema({
    room:{type:String, required:true},
    roomid:{type:String, required:true},
    userid:{type:String, required:true},
    fromdate:{type:String, required:true},
    todate:{type:String, required:true},
    totalDays:{type:String, required:true},
    totalAmount:{type:String, required:true},
    transactionId:{type:String, required:true},
    status:{type:String, required:true, default:'booked'},
},{
```

```
timestamps:true,
})

const bookingModel=mongoose.model('book' , bookingSchema)

module.exports = bookingModel
```

#### 6.1.2.1.1.2 room.js

```
const mongoose = require("mongoose");
const roomSchema = mongoose.Schema({
 name: {
   type: String,
    required: true,
  },
 description: {
   type: String,
   required: true,
  },
  imageUrl: [],
 phoneNumber: { type: String, required: true },
  rentPerDay: { type: String, required: true },
  type: { type: String, required: true },
});
const roomModel = mongoose.model("rooms", roomSchema);
module.exports = roomModel;
```

#### 6.1.2.1.1.2.1 user.js

```
const mongoose = require("mongoose");

const userSchema = mongoose.Schema(
    {
        name: { type: String, require },
        email: { type: String, require },
        country: { type: String, require },
        phonenumber: { type: String, require },
        password: { type: String, require },
        isAdmin: { type: Boolean, require, default: false },
    },
}
```

```
{
    timestamps: true,
}
);
module.exports = mongoose.model("admin", userSchema);
```

#### **6.1.3** Routes

#### 6.1.3.1 bookingRoutes.js

```
const express = require("express");
const router = express.Router();
const mongoose = require("mongoose");
const { v4: uuidv4 } = require("uuid");
const moment = require("moment");
const Booking = require("../model/booking");
const Room = require("../model/room");
const stripe = require("stripe")(
    "sk_test_51KyZL6FeoRdqg6f8CfkSdkB704x3VtsehfnbEosCyzphC6IAMvV3rYUWejnhdE0flv6
aEdXTPGMzYJvv1FRMthtc00wtSqLtYz"
  );
router.post("/bookroom", async (req, res) => {
    const { room, fromdate, todate, totalDays, totalAmount, user , token } =
req.body;
      try {
        const customer = await stripe.customers.create({
          email: token.email,
          source: token.id,
        });
        const payment = await stripe.charges.create(
            amount: totalAmount * 100,
            currency: "lkr",
```

```
customer: customer.id,
      receipt_email: token.email,
    },
      idempotencyKey: uuidv4(),
  );
if (payment) {
  try {
    const newbooking = new Booking({
      userid: user._id,
      room: room.name,
      roomid: room._id,
      totalDays: totalDays,
      fromdate: moment(fromdate).format("DD-MM-YYYY"),
      todate: moment(todate).format("DD-MM-YYYY"),
      totalAmount: totalAmount,
      transactionId: "1234",
      status: 'booked'
    });
    await newbooking.save(async (err, booking) => {
      const oldroom = await Room.findOne({ _id: room._id });
      oldroom.currentbookings.push({
        bookingid: booking._id,
        fromdate: moment(fromdate).format("DD-MM-YYYY"),
        todate: moment(todate).format("DD-MM-YYYY"),
        userid: user. id,
        status: 'booked'
      });
      //console.log(currentbookings)
      await oldroom.save();
    });
    res.send("Room Booked Successfully");
  } catch (error) {
    console.log(error);
    return res.status(400).json({ message: error });
} else {
  res.send("Payment failed");
```

```
} catch (error) {
      return res.status(400).json({ message: " wrong" + error });
});
router.post("/cancelbooking", async (req, res) => {
   const {bookingid,roomid } = req.body;
   try {
      const bookingitem = await Booking.findOne({_id: bookingid})
      bookingitem.status='cancelled'
      await bookingitem.save();
      const room = await Room.findOne({_id:roomid})
      const bookings = room.currentbookings
      const
temp=bookings.filter(booking=>booking.bookingid.toString()!==bookingid)
      console.log(temp);
      room.currentbookings=temp;
      await room.save()
      res.send('Booking deleted successfully')
    } catch (error) {
      console.log(error);
      return res.status(400).json({ message: "something went wrong" });
 });
  router.post("/getuserbookings", async (req, res) => {
    const { userid } = req.body;
    console.log(userid)
   try {
      const bookings = await Booking.find({ userid: userid }).sort({ _id: -1 });
      res.send(bookings);
    } catch (error) {
      return res.status(400).json({ message: "Something went wrong" });
```

```
}
});

router.get("/getallbookings", async (req, res) => {
    try {
      const bookings = await Booking.find({});
      res.send(bookings);
    } catch (error) {
      return res.status(400).json({ message: error });
    }
});

module.exports = router;
```

## 6.1.3.2 roomRoutes.js

```
const express = require("express");
const Router = express.Router();
const Room = require("../model/room")
const mongoose = require("mongoose");

Router.get("/getAllRooms", async (req, res) => {
    try {
        const rooms = await Room.find()
    res.send(rooms)
    } catch (error) {
        return res.status(400).json({ message: 'wrong' });
    }
});
```

```
Router.post("/getRoomByid/", async(req, res) => {
     console.log(req.body);
     try {
          const room = await Room.findOne({'_id' : req.body.roomid})
          res.send(room)
     } catch (error) {
          return res.status(400).json({ message: error });
 });
 Router.put("/getRoombyid/", async(req, res) => {
     console.log(req.body);
    const {id} = req.params;
     try {
          const room = await Room.findOne({' id' : req.body.id})
          res.send(room)
     } catch (error) {
          return res.status(400).json({ message: error });
 });
Router.get("/getallrooms", async(req, res) => {
     console.log(req.body);
     try {
          const rooms = await Room.find({})
          res.send(rooms)
     } catch (error) {
          return res.status(400).json({ message: error });
});
Router.post("/addRoom", async(req, res) => {
    const { room , name,
        rentPerDay ,description ,phoneNumber ,type ,image1 } = req.body
       const newroom = new Room({
            name : room,
```

```
rentPerDay, name,
            description , phoneNumber , type , imageUrl:[image1 ]
      })
     try {
           await newroom.save()
           res.send(' Room Added Successfully')
      } catch (error) {
           return res.status(400).json({ error });
});
 Router.put("/update/:id" , (req,res) =>{
   Room.findById(req.params.id)
    .then(Room =>{
         Room.name=req.body.name,
       Room.rentPerDay=req.body.rentPerDay,
        Room.description=req.body.description,
       Room.phoneNumber=req.body.phoneNumber,
        Room.type=req.body.type,
        Room
        .save()
        .then(() => res.json("Room was updated successfully"))
        .catch(err => res.status(400).json(`${err}`));
   })
    .catch(err => res.status(400).json(`${err}`));
});
Router.delete("/:id", (req, res)=>{
   Room.findByIdAndDelete(req.params.id)
    .then(( )=> res.json("THIS Room WAS DELETE SUCCESFULLY "))
    .catch(err=> res.status(400).json(`${err}`))
```

```
});
module.exports = Router
```

#### 6.1.3.3 User.js

```
const express = require('express');
const userRouter = express.Router();
const passport = require('passport');
const passportConfig = require('../passport');
const JWT = require('jsonwebtoken');
const User = require('../model/Admin');
const signToken = userID =>{
    return JWT.sign({
       iss: "Minosh",
        sub : userID
    },"Minosh",{expiresIn : "2h"});
//register
userRouter.post('/register',(req,res)=>{
    const { username,password,role ,email} = req.body;
    User.findOne({username},(err,user)=>{
        if(err)
        res.status(500).json({message : {msgBody : "Error has occurred",
msgError: true}});
        if(user)
        res.status(400).json({message : {msgBody : "Username is already taken",
msgError: true}});
        else{
            const newUser = new User({username,password,role,email});
            newUser.save(err=>{
```

```
if(err)
                res.status(500).json({message : {msgBody : "Error has occured",
msgError: true}});
            else
                res.status(201).json({message : {msgBody : "Account successfully
created", msgError: false}});
            });
});
//login
userRouter.post('/login',passport.authenticate('local',{session :
false}),(req,res)=>{
    if(req.isAuthenticated()){
        const {_id,username,role} = req.user;
        const token = signToken(_id);
        res.cookie('access_token',token,{httpOnly: true, sameSite:true});
        res.status(200).json({isAuthenticated : true,user : {username,role}});
});
userRouter.get('/logout',passport.authenticate('jwt',{session :
false}),(req,res)=>{
    res.clearCookie('access_token');
    res.json({user:{username : "", role : ""}, success : true});
```

```
//admin user role
userRouter.get('/admin',passport.authenticate('jwt',{session :
false}),(req,res)=>{
    if(req.user.role === 'admin'){
        res.status(200).json({message : {msgBody : 'You are an admin', msgError :
false}});
    else
        res.status(403).json({message : {msgBody : "You're not an admin,go away",
msgError : true}});
});
//Supervisor user role
userRouter.get('/sysadmin',passport.authenticate('jwt',{session :
false}),(req,res)=>{
    if(req.user.role === 'sysadmin'){
        res.status(200).json({message : {msgBody : 'You are an Supervisor',
msgError : false}});
    else
        res.status(403).json({message : {msgBody : "You're not an Supervisor,go"}
away", msgError : true}});
});
userRouter.get("/alldata", (req, res) =>{
    User.find()
    .then(User =>res.json(User))
   .catch(err => res.status(400).json(`${err}`));
});
// all account login authenticated
userRouter.get('/authenticated',passport.authenticate('jwt',{session :
false}),(req,res)=>{
    const {username,role} = req.user;
    res.status(200).json({isAuthenticated : true, user : {username,role}});
});
```

```
module.exports = userRouter;
```

## 6.1.3.4 smsRoutes.js

```
const express = require("express");
const router = express.Router();
var ShoutoutClient = require("shoutout-sdk");
var debug = true,
 verifySSL = false;
var apiKey =
  "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJqdGkiOiI1ZDk5MwJmMC1kNGU0LTExZWMtODY0M
S0zOTOzMTUzY2I4ZjEiLCJzdWIi0iJTSE9VVE9VVF9BUElfVVNFUiIsImlhdCI6MTY1MjY4Mzc4MiwiZX
hwIjoxOTY4MzAyOTgyLCJzY29wZXMiOnsiYWN0aXZpdGllcyI6WyJyZWFkIiwid3JpdGUiXSwibWVzc2F
nZXMiOlsicmVhZCIsIndyaXRlIl0sImNvbnRhY3RzIjpbInJlYWQiLCJ3cml0ZSJdfSwic29fdXNlcl9p
ZCI6IjY4MDE3Iiwic29fdXNlcl9yb2xlIjoidXNlciIsInNvX3Byb2ZpbGUiOiJhbGwiLCJzb191c2VyX
25hbWUiOiIiLCJzb19hcGlrZXkiOiJub25lIn0.Mk21zIIn-
EmFzwCy3AFM2GZKSuW42pmmqVprx7hI5tw";
router.post("/sms", (req, res) => {
 const data = req.body;
  console.log("Phone number", data.number);
  var client = new ShoutoutClient(apiKey, debug, verifySSL);
 var message = {
    content: { sms: "Hello Your Resevation is Successfull..!" },
    destinations: [data.number],
    source: "ShoutDEMO",
    transports: ["SMS"],
  };
  client.sendMessage(message, (error, result) => {
    if (error) {
      console.error("Error sending message!", error);
    } else {
      console.log("Sending message successful!", result);
  });
});
module.exports = router;
```

#### 6.1.3.5 userRoutes.js

```
const express = require("express");
const router = express.Router();
const User = require("../model/user");
//register
router.post("/register", async (req, res) => {
 const { name, email, password, country, phonenumber } = req.body;
  const newUser = new User({ name, email, country, password, phonenumber });
 try {
   newUser.save();
   res.send("User Registered successfully");
 } catch (error) {
    return res.status(400).json({ message: error });
});
//Login
router.post("/login", async (req, res) => {
  const { email, password } = req.body;
  try {
    const user = await User.find({ email, password });
    if (user.length > 0) {
      const currentUser = {
        name: user[0].name,
        email: user[0].email,
        phonenumber: user[0].phonenumber,
        isAdmin: user[0].isAdmin,
        _id: user[0]._id,
      };
      res.send(currentUser);
    } else {
      return res.status(400).json({ message: " Login Failed" });
  } catch (error) {
   return res.status(400).json({ message: "error login" });
```

```
}
});

router.get("/getAllUsers", async (req, res) => {
    try {
      const users = await User.find({});
      res.send(users);
    } catch (error) {
      return res.status(400).json({ message: error });
    }
});

module.exports = router;
```

## 6.1.3.6 app.js (server)

```
const express = require("express");
const app = express();
const cors = require("cors");
const mongoose = require("mongoose");
const bodyParser = require("body-parser");
const cookieParser = require("cookie-parser");
app.use(cookieParser());
app.use(express.json());
app.use(cors());
mongoose.connect(
  "mongodb+srv://minosh:minosh@cluster0.u1yxx.mongodb.net/hotelsystem?retryWrites
=true&w=majority"
);
mongoose.connection.on("error", (err) => {
 console.log("connection failed ");
});
```

```
mongoose.connection.on("connected", (connected) => {
  console.log("connected with database ");
});
app.use(bodyParser.urlencoded({ extended: false }));
app.use(bodyParser.json());
const admin = require("./routes/User");
app.use("/user", admin);
const roomRoutes = require("./routes/roomRoutes");
app.use("/api/rooms", roomRoutes);
const userRoutes = require("./routes/userRoutes");
app.use("/api/User", userRoutes);
const bookingsRoute = require("./routes/bookingRoutes");
app.use("/api/bookings", bookingsRoute);
const smsRoutes = require("./routes/smsRoutes");
app.use("/smsroute", smsRoutes);
module.exports = app;
```

#### **6.1.3.7** *passport.js*

```
const passport = require('passport');
const LocalStrategy = require('passport-local').Strategy;
const JwtStrategy = require('passport-jwt').Strategy;
const User = require('./model/Admin');

const cookieExtractor = req =>{
    let token = null;
    if(req && req.cookies){
        token = req.cookies["access_token"];
    }
    return token;
}
```

```
//authorization
passport.use(new JwtStrategy({
    jwtFromRequest : cookieExtractor,
    secretOrKey : "Minosh"
},(payload,done)=>{
    User.findById({_id : payload.sub},(err,user)=>{
        if(err)
            return done(err,false);
        if(user)
            return done(null,user);
        else
            return done(null,false);
    });
}));
passport.use(new LocalStrategy((username,password,done)=>{
    User.findOne({username},(err,user)=>{
        if(err)
            return done(err);
        if(!user)
            return done(null,false);
        user.comparePassword(password,done);
    });
```

## 6.1.3.8 Server.js

```
const http = require('http');
const app = require('./app');

const server = http.createServer(app);

server.listen(5000, console.log('app is running' ));
```

### 6.2 Web Client

#### **6.2.1.1** *Pac*kage.JSON

```
"name": "frontend",
"version": "0.1.0",
"private": true,
"dependencies": {
  "@react-google-maps/api": "^2.10.2",
  "@testing-library/jest-dom": "^5.16.4",
  "@testing-library/react": "^13.1.1",
  "@testing-library/user-event": "^13.5.0",
  "antd": "^4.20.4",
  "aos": "^2.3.4",
  "axios": "^0.26.1",
  "bootstrap": "^4.6.1",
  "browser-router": "^0.2.0",
  "cors": "^2.8.5",
  "date-fns": "^2.28.0",
  "daterangepicker": "^3.1.0",
  "dayjs": "^1.10.5",
  "jquery": "^3.6.0",
```

```
"moment": "^2.29.3",
  "popper.js": "^1.16.1",
  "react": "^18.0.0",
  "react-bootstrap": "^1.6.5",
  "react-date-range": "^1.4.0",
  "react-datepicker": "^4.7.0",
  "react-dom": "^18.0.0",
  "react-phone-number-input": "^3.1.52",
  "react-range-picker": "^1.0.1",
  "react-redux": "^7.2.4",
  "react-responsive-carousel": "^3.2.18",
  "react-router": "^5.1.2",
  "react-router-dom": "^5.1.2",
  "react-scripts": "5.0.1",
  "react-spinners": "^0.11.0",
  "react-stripe-checkout": "^2.6.3",
  "react-switch": "^6.0.0",
  "redux": "^4.1.0",
  "scrollmagic": "^2.0.8",
  "space": "^0.22.2",
  "sweetalert2": "^11.0.16",
  "sweetalert2-react": "^0.8.3",
  "web-vitals": "^2.1.4"
},
"scripts": {
  "start": "react-scripts start",
  "build": "react-scripts build",
  "test": "react-scripts test",
  "eject": "react-scripts eject"
},
"eslintConfig": {
  "extends": [
   "react-app",
    "react-app/jest"
},
"browserslist": {
  "production": [
   ">0.2%",
    "not dead",
    "not op mini all"
  "development": [
    "last 1 chrome version",
    "last 1 firefox version",
```

```
"last 1 safari version"

]
},
"proxy": "http://localhost:5000"
}
```

#### 6.2.1.2 Index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <link rel="icon" href="%PUBLIC_URL%/logo.png" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <meta name="theme-color" content="#000000" />
    <meta
      name="description"
      content="Web site created using create-react-app"
    <link rel="apple-touch-icon" href="%PUBLIC URL%/logo.png" />
    <link rel="manifest" href="%PUBLIC_URL%/manifest.json" />
    <title>Sri </title>
    <link rel="stylesheet"</pre>
href="https://use.fontawesome.com/releases/v5.11.2/css/all.css">
    <link rel="stylesheet"</pre>
href="https://fonts.googleapis.com/css?family=Roboto:300,400,500,700&display=swap
    <link rel="stylesheet" href="node modules/mdbootstrap/css/bootstrap.min.css">
    <link rel="stylesheet" href="node_modules/mdbootstrap/css/mdb.min.css">
    <link rel="stylesheet" href="node_modules/mdbootstrap/css/style.css">
  </head>
  <body>
    <link href="https://maxcdn.bootstrapcdn.com/font-awesome/4.7.0/css/font-</pre>
awesome.min.css" rel="stylesheet" integrity="sha384-
wvfXpqpZZVQGK6TAh5PV1GOfQNHSoD2xbE+QkPxCAF1NEevoEH3S10sibVcOQVnN"
crossorigin="anonymous">
    <noscript>You need to enable JavaScript to run this app./noscript>
    <div id="root"></div>
```

```
<script src="https://code.jquery.com/jquery-3.3.1.min.js"></script>
    <link rel="stylesheet"</pre>
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"
integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
crossorigin="anonymous">
    <script src="https://unpkg.com/gijgo@1.9.13/js/gijgo.min.js"</pre>
type="text/javascript"></script>
    <link href="https://unpkg.com/gijgo@1.9.13/css/gijgo.min.css"</pre>
rel="stylesheet" type="text/css" />
    <script src="https://kit.fontawesome.com/2f503da49d.js"</pre>
crossorigin="anonymous"></script>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/font-</pre>
awesome/4.4.0/css/font-awesome.min.css">
    k
href="https://fonts.googleapis.com/css2?family=Jura:wght@700&family=Source+Sans+P
ro:wght@300&display=swap" rel="stylesheet">
    <link rel="apple-touch-icon" href="%PUBLIC_URL%/logo192.png" />
    <script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.9.3/dist/umd/popper.min.js"
integrity="sha384-
eMNCOe7tC1doHpGoWe/6oMVemdAVTMs2xqW4mwXrXsW0L84Iytr2wi5v2QjrP/xp"
crossorigin="anonymous"></script>
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.0/dist/js/bootstrap.min.js"
integrity="sha384-
cn7l7gDp0eyniUwwAZgrzD06kc/tftFf19T0As2zVinnD/C7E91j9yyk5//jjpt/"
crossorigin="anonymous"></script>
    <link rel="manifest" href="%PUBLIC URL%/manifest.json" />
    <script src="https://kit.fontawesome.com/2f503da49d.js"</pre>
crossorigin="anonymous"></script>
    <link rel="preconnect" href="https://fonts.googleapis.com">
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/font-</pre>
awesome/4.4.0/css/font-awesome.min.css">
href="https://fonts.googleapis.com/css2?family=Jura:wght@700&family=Source+Sans+P
ro:wght@300&display=swap" rel="stylesheet">
    <link rel="apple-touch-icon" href="%PUBLIC URL%/logo192.png" />
```

```
<script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.9.3/dist/umd/popper.min.js"
integrity="sha384-
eMNCOe7tC1doHpGoWe/6oMVemdAVTMs2xqW4mwXrXsW0L84Iytr2wi5v2QjrP/xp"
crossorigin="anonymous"></script>
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.0/dist/js/bootstrap.min.js"
integrity="sha384-
cn7l7gDp0eyniUwwAZgrzD06kc/tftFf19T0As2zVinnD/C7E91j9yyk5//jjpt/"
crossorigin="anonymous"></script>
    <link rel="manifest" href="%PUBLIC URL%/manifest.json" />
      <path d="M15.502 1.94a.5.5 0 0 1 0 .706L14.459 3.69l-2-2L13.502.646a.5.5 0</pre>
0 1 .707 0l1.293 1.293zm-1.75 2.456-2-2L4.939 9.21a.5.5 0 0 0-.121.196l-.805
2.414a.25.25 0 0 0 .316.31612.414-.805a.5.5 0 0 0 .196-.1216.813-6.814z"/>
      <path fill-rule="evenodd" d="M1 13.5A1.5 1.5 0 0 0 2.5 15h11a1.5 1.5 0 0 0</pre>
1.5-1.5v-6a.5.5 0 0 0-1 0v6a.5.5 0 0 1-.5.5h-11a.5.5 0 0 1-.5-.5v-11a.5.5 0 0 1
.5-.5H9a.5.5 0 0 0 0-1H2.5A1.5 1.5 0 0 0 1 2.5v11z"/>
    </svg>
    k
href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
crossorigin="anonymous">
    <script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.10.2/dist/umd/popper.min.js"
integrity="sha384-
7+zCNj/IqJ95wo16oMtfsKbZ9ccEh31eOz1HGyDuCQ6wgnyJNSYdrPa03rtR1zdB"
crossorigin="anonymous"></script>
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.min.js"
integrity="sha384-
QJHtvGhmr9XOIpI6YVutG+2QOK9T+ZnN4kzFN1RtK3zEFEIsxhlmWl5/YESvpZ13"
crossorigin="anonymous"></script>
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js
 integrity="sha384-
ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+I1RH9sENBO0LRn5q+8nbTov4+1p"
crossorigin="anonymous"></script>
  </body>
</html>
```

#### 6.2.1.3 Index.js

#### 6.2.1.4 App.js

```
import React, { useState, useEffect } from "react";
import Register from "./Components/Register";
import Sysadmin from "./Components/Sysadmin";
import Admin from "./Components/Admin";
import PrivateRoute from "./hocs/PrivateRoute";
import UnPrivateRoute from "./hocs/UnPrivateRoute";
import Login from "./Components/Login";
import BookingRoom from "./Components/BookingRoom";
import Homescreen from "./Components/MainPage";
import Mainpage from "./Components/Home";
import NavBar from "./Components/NavBar";
import UserLogin from "./Components/UserLogin";
import RegisterUser from "./Components/RegisterUser";
import UserProfile from "./Components/UserProfile";
import AdminNarBar from "./Components/AdminNarBar";
import AllReservationAdmin from "./Components/AllReservationAdmin";
import ManageAllRooms from "./Components/ManageAllRooms";
import AddRooms from "./Components/AddRooms";
import ManageAllUsers from "./Components/ManageAllUsers";
import UpdateRooms from "./Components/UpdateRooms";
```

```
import axios from "axios";
import { BrowserRouter as Router, Route } from "react-router-dom";
function App() {
  const [room, setPosts] = useState([]);
 useEffect(() => {
    axios
      .get("http://localhost:5000/api/rooms/getallrooms/")
      .then((res) => setPosts(res.data))
      .catch((error) => console.log(error));
  });
  return (
    <div className="App">
      <NavBar />
      <Router>
        <Route path="/" exact component={Homescreen} />
        <Route path="/home" component={Mainpage} />
        <Route path="/register" component={RegisterUser} />
        <Route path="/AdminNarBar" component={AdminNarBar} />
        <Route path="/login" component={UserLogin} />
        <Route path="/adminlogin" component={Login} />
        <Route path="/adminregister" component={Register} />
        <Route path="/profile" component={UserProfile} />
        <Route
          path="/update/:id"
          render={(props) => <UpdateRooms {...props} posts={room} />}
        />
        <PrivateRoute path="/Admin" roles={["admin"]} component={Admin} />
        <PrivateRoute
          path="/allReservation"
          roles={["admin"]}
          component={AllReservationAdmin}
        />
        <PrivateRoute
          path="/adminroom"
          roles={["admin"]}
          component={ManageAllRooms}
        <PrivateRoute
          path="/ManageAllUsers"
          roles={["admin"]}
```

```
component={ManageAllUsers}
        />
        <Route path="/AddRooms" component={AddRooms} />
        <Route
          path="/booking/:roomid/:fromdate/:todate"
          component={BookingRoom}
        />
        <PrivateRoute
          path="/sysadmin"
          roles={["sysadmin"]}
          component={Sysadmin}
        />
      </Router>
    </div>
  );
export default App;
```

## **6.2.2** Components

#### 6.2.2.1 BookingRoom.js

```
import React, { useEffect , useState } from 'react'
import axios from "axios";
import Swal from 'sweetalert2'
import Error from "../Components/Error";
import Loader from "../Components/Loader";
import Success from '../Components/Success'
import StripeCheckout from 'react-stripe-checkout'

import moment from "moment"
import AOS from 'aos';

AOS.init();
AOS.refresh()
```

```
function BookingRoom({match}) {
   const[loading, setloading]=useState(true);
   const[error, seterror]=useState(false)
   const[success, setsuccess]=useState(false)
   const[room , setroom]=useState()
   const roomid=match.params.roomid
   const fromdate=moment(match.params.fromdate , 'DD-MM-YYYY')
   const todate=moment(match.params.todate,'DD-MM-YYYY')
   const totalDays = moment.duration(todate.diff(fromdate)).asDays()+1
   const [totalAmount , settotalAmount]=useState()
   const [phonenumber , setphonenumber]=useState()
   const smsfunc= (e) => {
      e.preventDefault();
      let number = JSON.parse(localStorage.getItem('currentUser')).phonenumber
      console.log("Phone number ",number)
      let data = {
          number:number
      axios.post("http://localhost:5000/smsroute/sms/",data)
       .then((data)=>{
          console.log(data);
          alert("Success");
       })
       .catch((err)=>{
          console.log(err);
      })
   useEffect(async() => {
       try {
           setloading(true);
```

```
const data = await (await
axios.post("http://localhost:5000/api/rooms/getRoomByid" , {roomid})).data;
             console.log(data);
             setroom(data);
             setphonenumber(data);
             setloading(false);
             settotalAmount(data.rentPerDay * totalDays)
           } catch (error) {
             console.log(error);
             setloading(false);
    }, [])
     async function tokenHander(token) {
         console.log(token);
         const bookingDetails ={
             user : JSON.parse(localStorage.getItem('currentUser')),
             room ,
             fromdate,
             phonenumber,
             todate,
             totalDays,
             totalAmount
         try {
             setloading(true);
             const result = await
axios.post('http://localhost:5000/api/bookings/bookroom' , bookingDetails)
             setloading(false)
             Swal.fire('Congrats' , 'Your Room has booked succeessfully' ,
 success').then(result=>{
                 window.location.href='/profile'
             })
         } catch (error) {
             console.log(error);
             setloading(false)
```

```
Swal.fire('Oops' , 'Something went wrong , please try later' ,
 error')
    return (
        <div className='m-5'>
            {loading ? (<Loader/>) : error ? (<Error/>) : (
                <div className="row p-3 mb-5 bs" data-aos='flip-right'</pre>
duration='2000'>
                      <div className="col-md-6 my-auto">
                         <div>
                         <h1> {room.name}</h1>
                         </div>
                      </div>
                      <div className="col-md-6 text-right">
                           <div>
                           <h1><b>Booking Details</b></h1>
                           <b>Name</b> :
{JSON.parse(localStorage.getItem('currentUser')).name}
                           <b>From Date</b> : {match.params.fromdate}
                           <b>To Date</b> : {match.params.todate}
                           <b>phone number</b> :
{JSON.parse(localStorage.getItem('currentUser')).phonenumber}
                           </div>
                           <div className='mt-5'>
                           <h1><b>Amount</b></h1>
                           Total Days : <b>{totalDays}</b>
                           Rent Per Day : <b>{room.rentPerDay}</b>
                           <h1><b>Total Amount : {totalAmount} /-</b></h1>
                           <button className='btn btn-</pre>
primary' >confirm</button>
```

```
<br></br>
                    <br></br>
                    <br></br>
                            <StripeCheckout
            token={tokenHander}
            stripeKey='pk test 51KyZL6FeoRdqg6f816PBNMT9VvvDUCbwgUS6pvLiK2kQ6Mvx3
q4BOFTQc9ENZpb0IeCH2a3GABcaxBbTStcyvocg00TK9Bbc8z' >
                  <button className='btn btn-primary'</pre>
onClick={(e)=>smsfunc(e)}>Pay Now</button>
            </StripeCheckout>
                             </div>
                        </div>
                 </div>
             )}
         </div>
 export default BookingRoom;
```

#### 6.2.2.2 Home.js

```
import React, { useState, useEffect } from "react";
import { Calendar } from "react-date-range";
import { DateRangePicker } from "react-date-range";
import "react-date-range/dist/styles.css"; // main style file
import "react-date-range/dist/theme/default.css"; // theme css file
import "react-datepicker/dist/react-datepicker.css";
```

```
import moment from "moment";
import axios from "axios";
import Loader from "../Components/Loader";
import Room from "../Components/DisplayAllRooms";
import { DatePicker, Space } from "antd";
const { RangePicker } = DatePicker;
function Home() {
  const [reservation, setreservation] = useState([]);
  const [hotels, sethotels] = useState([]);
  const [fromdate, setfromdate] = useState("");
  const [todate, settodate] = useState("");
  const [loading, setloading] = useState(false);
  const [searchkey, setsearchkey] = useState("");
  const [type, settype] = useState("all");
  function filterByDate(dates) {
    setfromdate(moment(dates[0]).format("DD-MM-YYYY"));
    settodate(moment(dates[1]).format("DD-MM-YYYY"));
   var temp = [];
    for (var room of hotels) {
      var availability = false;
      for (var booking of room.currentbookings) {
       if (room.currentbookings.length) {
          if (
            !moment(moment(dates[0]).format("DD-MM-YYYY")).isBetween(
              booking.fromdate,
              booking.todate
            ) &&
            !moment(moment(dates[1]).format("DD-MM-YYYY")).isBetween(
              booking.fromdate,
              booking.todate
            if (
              moment(dates[0]).format("DD-MM-YYYY") !== booking.fromdate &&
              moment(dates[0]).format("DD-MM-YYYY") !== booking.todate &&
              moment(dates[1]).format("DD-MM-YYYY") !== booking.fromdate &&
              moment(dates[1]).format("DD-MM-YYYY") !== booking.todate
              availability = true;
```

```
if (availability || room.currentbookings.length == 0) {
      temp.push(room);
    setreservation(temp);
useEffect(async () => {
  try {
    setloading(true);
    const rooms = await (
      await axios.get("http://localhost:5000/api/rooms/getAllRooms")
    ).data;
    console.log(rooms);
    setreservation(rooms);
    sethotels(rooms);
    setloading(false);
  } catch (error) {
    console.log(error);
    setloading(false);
}, []);
function filterBySearch() {
  const dupdate = hotels.filter((room) =>
    room.name.toLowerCase().includes(searchkey)
  );
  setreservation(dupdate);
function filterByType(e) {
  settype(e);
  if (e !== "all") {
    const dupdate = hotels.filter((room) =>
      room.type.toLowerCase().includes(e.toLowerCase())
    );
    setreservation(dupdate);
  } else {
    setreservation(hotels);
```

```
return (
  <div className="mt-5">
    <div className="container">
      <div className="row bs p-3 m-5">
        <div className="col-md-3">
          <RangePicker
            id="datepicker"
            type="date"
            onChange={filterByDate}
            format="DD-MM-YYYY"
            className="m-2"
          />
        </div>
        <div className="col-md-4">
          <input</pre>
            type="text"
            className="form-control i2 m-2"
            placeholder="find Rooms"
            value={searchkey}
            onKeyUp={filterBySearch}
            onChange={(e) => {
              setsearchkey(e.target.value);
            }}
          />
        </div>
        <div className="col-md-4">
          <select
            className="form-control m-2"
            value={type}
            onChange={(e) => {
              filterByType(e.target.value);
            }}
            <option value="all">All</option>
            <option value="delux">AC rooms</option>
            <option value="non-delux">Non AC Room</option>
            <option value="delux">Luxury Room</option>
            <option value="non-delux">Normal Room</option>
          </select>
        </div>
      </div>
    </div>
    <div className="row justify-content-center">
```

## 6.2.2.3 MainPage.js

```
import React from "react";
import Map from "./Map";
import { Link } from "react-router-dom";
function MainPage() {
  return (
    <div className="">
      <div className="landing row justify-content-center text-center">
        <div
          className="col-md-9 my-auto"
          style={{ borderRight: "8px solid white" }}
          <br></br>
          <h2 style={{ color: "black", fontSize: "90px" }} data-aos="zoom-in">
            hotel bo0king
          </h2>
          <img
            class="card-img-top"
            src={require("./qq.jpg")}
            height={450}
            width={-10}
            alt="Card image cap"
```

```
<h1 data-aos="zoom-out">"The bestplace to booking your room" </h1>
          <Link to="/home">
            <button className="btn btn-primary">Get Started</putton>
          </Link>
          <br></br>
          <br></br>
          <br></br>
          <Link to="/adminlogin">
            <button className="btn btn-primary">Admin login
          </Link>
          <br></br>
          <Map />
        </div>
      </div>
    </div>
  );
export default MainPage;
```

#### 6.2.2.4 Map.js

```
import React from "react";
import { GoogleMap, LoadScript, Marker } from "@react-google-maps/api";

const containerStyle = {
    marginTop: "220px",
    width: "1210px",
    height: "600px",
};

const position = {
    lat: 6.93197,
    lng: 79.85775,
};

const onLoad = (marker) => {
    console.log("marker: ", marker);
```

#### mailer.js

```
import emailjs from "emailjs-com";
import React, { useEffect, useState } from "react";
import axios from "axios";
import { Link } from "react-router-dom";
const Mailer = () => {
    const user = JSON.parse(localStorage.getItem('currentUser'));
  function sendEmail(e) {
    e.preventDefault();
    emailjs.sendForm(
      "service 24jbmdk",
      "template_dg25svx",
      e.target,
      "15NUKPpbvRhbN3ZL1"
    ).then(res=>{
        alert("email send success ")
        console.log(res);
    }).catch(err=> console.log(err));
 return (
```

```
<div
      className="container border"
      style={{
        marginTop: "50px",
        width: "50%",
        backgroundImage: `url('')`,
        backgroundPosition: "center",
        backgroundSize: "cover",
      }}
      <h1 style={{ marginTop: "25px" }}>Contact Form</h1>
      <form
        className="row"
        style={{ margin: "25px 85px 75px 100px" }}
        onSubmit={sendEmail}
        <label>name</label>
        <input type="text" name="name" value={user.name} className="form-</pre>
control" />
        <label>Email</label>
        <input type="email" name="user_email" value={user.email} className="form-</pre>
control" />
        <label>Message</label>
        <textarea name="message" rows="4" value="hotel reservation successfully "
className="form-control" />
        <input</pre>
          type="submit"
          value="Send"
          className="form-control btn btn-primary"
          style={{ marginTop: "30px" }}
        />
      </form>
    </div>
  );
};
export default Mailer;
```

## 6.2.2.5 DisplayAllRooms.js

```
import React, { useState, useEffect } from "react";
import { Modal, Carousel } from "react-bootstrap";
```

```
import { Link } from "react-router-dom";
function DisplayAllRooms({ room, fromdate, todate }) {
  const [show, setShow] = useState(false);
  const handleClose = () => setShow(false);
  const handleShow = () => setShow(true);
  return (
    <div className="row m-3 p-3 bs">
     <div className="col-md-4">
       <img src={room.imageUrl[0]} className="img-fluid" />
     </div>
     <div className="col-md-8">
       <br/>
<br/>
b>Room Name</b>
       <h2>{room.name}</h2>
       <br/>
<br/>
b>Hotel facilities</b>
         24 hour front desk     ,Business Center,    
         Fitness Center     ,Lounge/Bar     ,Internet
         Access - Free in room    , Contactless check-in and
         check-out
       <b>Type : {room.type}</b>
       <b>rent Per Day : {room.rentPerDay}</b>
        <b>phoneNumber : {room.phoneNumber}</b>
       <div style={{ float: "right" }}>
         {fromdate && todate && (
           <Link to={\'/booking/$\{room._id\}/$\{fromdate\}/$\{todate\}\'\}>
             <button className="btn btn-dark m-2">Book </button>
           </Link>
         )}
         <Link to="/home">
           <button className="btn btn-primary">view 
         </Link>
```

#### 6.2.2.6 UserLogin.js

```
import React, { useState, useEffect } from "react";
import { useDispatch, useSelector } from "react-redux";
import axios from "axios";
import Error from "../Components/Error";
import Loader from "../Components/Loader";
import Success from "../Components/Success";
export default function UserLogin() {
  const [email, setemail] = useState("");
  const [password, setpassword] = useState("");
  const [loading, setloading] = useState(false);
  const [error, seterror] = useState(false);
  const [success, setsuccess] = useState(false);
 useEffect(() => {
    if (localStorage.getItem("currentUser")) {
     window.location.href = "/";
  }, []);
  async function login() {
    const user = {
      email,
      password,
    };
    try {
      setloading(true);
      const result = await (
        await axios.post("http://localhost:5000/api/User/login", user)
      ).data;
      localStorage.setItem("currentUser", JSON.stringify(result));
      window.location.href = "/home";
    } catch (error) {
      seterror(true);
      setloading(false);
```

```
console.log(error);
return (
  <div className="login">
    <div className="row justify-content-center mt-12">
      <div className="col-md-5 mt-5 text-left shadow-lg p-3 mb-12 ">
        <h1 className="text-center m-2">Customer Login</h1>
        <br></br>
        {loading && <Loader />}
        {error && <Error error="Invalid Credentials" />}
        {success && <Success success="User Login Successfully" />}
        <div>
          <input</pre>
            required
            type="text"
            placeholder=" enter your email"
            className="form-control mt-1"
            value={email}
            onChange={(e) => {
              setemail(e.target.value);
            }}
          />
          <br></br>
          <input</pre>
            type="text"
            placeholder="enter your password"
            className="form-control mt-1"
            value={password}
            required
            onChange={(e) => {
              setpassword(e.target.value);
            }}
          />
          <button onClick={login} className="btn btn-success mt-3 mb-6 ">
            login
          </button>
          <br />
          <a style={{ color: "black" }} href="/register" className="mt-2">
            Register to the systems
          </a>
        </div>
```

```
</div>
</div>
</div>
);
}
```

## 6.2.2.7 UserProfile.js

```
import React, { useEffect, useState } from "react";
import { Tabs } from "antd";
import axios from "axios";
import Swal from "sweetalert2";
import Error from "../Components/Error";
import Loader from "../Components/Loader";
import Success from "../Components/Success";
import { Tag, Divider } from "antd";
import { Link } from "react-router-dom";
const { TabPane } = Tabs;
const user = JSON.parse(localStorage.getItem('currentUser'))
function UserProfile() {
    return (
      <div className="mt-5 ml-3">
        <Tabs defaultActiveKey="1">
          <button className='btn btn-danger' tab="My Account" key="1">
           <div className="row">
             <div className="col-md-6 bs m-2 p-3">
             <h4>my Name : {user.name}</h4>
            <h4>my Email : {user.email}</h4>
            <h4>my id : {user._id}</h4>
             </div>
           </div>
          </button>
          <TabPane tab="Bookings" key="2">
          <h1>
            <MyReservation />
          </h1>
        </TabPane>
```

```
</Tabs>
        <Link to="/Mailer">
      <button type="button" class="btn btn-primary">
      get email
      </button>
    </Link>
      </div>
   );
  export default UserProfile;
  export const MyReservation = () => {
    const [mybookings, setmybookings] = useState([]);
   const [loading, setloading] = useState(false);
    const [error, seterror] = useState(false);
    const [success, setsuccess] = useState(false);
   useEffect(async () => {
        try {
            setloading(true);
            const data = await (
              await
axios.post("http://localhost:5000/api/bookings/getuserbookings", {
                userid: JSON.parse(localStorage.getItem("currentUser"))._id,
              })
            ).data;
            setmybookings(data);
            setloading(false);
          } catch (error) {
            setloading(false);
            seterror(true);
        }, []);
        async function cancelBooking(bookingid , roomid){
          try {
```

```
setloading(true);
            const result = await
axios.post('http://localhost:5000/api/bookings/cancelbooking' ,
{bookingid:bookingid, userid:user.id, roomid:roomid});
            setloading(false);
            Swal.fire('Congrats' , 'Your Room has cancelled succeessfully' ,
 success').then(result=>{
              window.location.href='/profile'
          })
          } catch (error) {
            Swal.fire('Congrats' , 'Your Room has cancelled succeessfully' ,
 success').then(result=>{
              window.location.href='/profile'
          })
            setloading(false)
        return (
            <div>
              {loading ? (
                <Loader />
              ) : error ? (
                <Error />
                mybookings.map(booking=>{
                  return <div className="row">
                  <div className="col-md-6 my-auto">
                    <div className='bs m-1 p-2'>
                      <h4>{booking.room}</h4>
                      <h6>TransactionId : {booking.transactionId}</h6>
                      <h6><b>Check In : </b>{booking.fromdate}</h6>
                      <h6><b>Check Out : </b>{booking.todate}</h6>
                      <h6><b>Amount : </b> {booking.totalAmount}</h6>
                      <h6><b>Status</b> : {booking.status == 'booked' ? (<Tag
color="green">Confirmed</Tag>) : (<Tag color="red">Cancelled</Tag>))</h6>
                      <div className='text-right'>
                      {booking.status=='booked' && (<button className='btn btn-
primary' onClick={()=>cancelBooking(booking. id , booking.roomid)}>Cancel
Reservations/button>)}
                      </div>
                    </div>
                  </div>
```

## 6.2.2.8 NavBar.js

```
import React from "react";
import { Link } from "react-router-dom";
function NavBar() {
   function logout() {
       localStorage.removeItem('currentUser')
       window.location.href='/login'
  return (
   <div>
     <nav class="navbar bg-primary navbar-expand-lg">
       <a class="navbar-brand">
        Hotel Reservation
       </a>
       <button
         class="navbar-toggler"
         type="button"
         data-toggle="collapse"
         data-target="#navbarNav"
         aria-controls="navbarNav"
         aria-expanded="false"
         aria-label="Toggle navigation"
         <span class="navbar-toggler-icon"></span>
       </button>
       <div class="collapse navbar-collapse " id="navbarNav">
```

```
{localStorage.getItem('currentUser') ? (
 <div class="dropdown mr-5">
  <button class="btn btn-secondary dropdown-toggle" type="button" aria-</pre>
haspopup="true" aria-expanded="false">
 <i class="fa fa-user" aria-</pre>
hidden="true"></i> {JSON.parse(localStorage.getItem('currentUser')).name} </but</pre>
  <div id="myDropdown" class="dropdown-content" >
  <a class="dropdown-item" href="/profile">Profile</a>
  <a class="dropdown-item" href="#" onClick={logout}>Logout</a>
  </div>
</div>
       <>
       <a class="navbar-item" href="/register">
           Register
         </a>
       <a class="navbar-item" href="/login">
           Login As Customer
         </a>
       </>
       )}
     </div>
  </nav>
</div>
export default NavBar;
```

## 6.2.2.9 Loader.js

## 6.2.2.10 Success.js

#### 6.2.2.11 Error.js

#### 6.2.2.12 Message.js

#### 6.2.3 Database connection

```
const mongoose = require('mongoose');

mongoose.connect('mongodb+srv://minosh:minosh@cluster0.u1yxx.mongodb.net/hotelsys
tem?retryWrites=true&w=majority');

mongoose.connection.on('error', err=>{
    console.log("connection failed ");
```

```
});
mongoose.connection.on('connected' , connected=>{
    console.log('connected with database ');
});
```

# **6.3 Desktop Application (Admin)**

# **6.3.1** Admin.js

```
import React, { useEffect, useState } from "react";
import { Link } from "react-router-dom";
import axios from "axios";
const Admin = () => (
 <div className="container">
   <br></br>
   <br></br>
   <h2 style={{ color: "black", fontSize: "70px" }} data-aos="zoom-in">
    Welcome to System Admin Page
   </h2>
   <h1> </h1>
   <br></br>
   <br></br>
   <Link to="/allReservation">
     <button type="button" class="btn btn-primary">
      All Reservation
     </button>
   </Link>
         
   <Link to="/adminroom">
     <button type="button" class="btn btn-primary">
      manage Room
     </button>
   </Link>
```

## 6.3.2 AdminNarBar.js

```
import React, { useContext } from "react";
import { Link } from "react-router-dom";
import AuthService from "../Services/AuthService";
import { AuthContext } from "../Context/AuthContext";
const AdminNarBar = (props) => {
  const { isAuthenticated, user, setIsAuthenticated, setUser } =
   useContext(AuthContext);
 //logout button create
 const onClickLogoutHandler = () => {
   AuthService.logout().then((data) => {
     if (data.success) {
       setUser(data.user);
       setIsAuthenticated(false);
   });
 };
  const unauthenticatedNavBar = () => {
   return (
     <>
       <Link to="/">
         Home
       <Link to="/adminlogin">
```

```
Login
    </Link>
    <Link to="/adminregister">
     Register
  </>
 );
};
const authenticatedNavBar = () => {
 return (
    <Link to="/">
     Home
    </Link>
    <Link to="/to">
     View Hotel Rooms
    </Link>
    {user.role === "admin" ? (
     <Link to="/admin">
       Admin
     </Link>
    ) : null}
    {user.role === "sysadmin" ? (
     <Link to="/sysadmin">
       Admin
     </Link>
    ) : null}
    <button</pre>
     type="button"
     className="btn btn-link nav-item nav-link"
     onClick={onClickLogoutHandler}
     Logout
    </button>
  </>
 );
};
return (
 <div>
  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
```

## 6.3.3 AllReservationAdmin.js

```
import React, { useState, useEffect } from "react";
import axios from "axios";
import Swal from "sweetalert2";
import Error from "../Components/Error";
import Loader from "../Components/Loader";
import Success from "../Components/Success";
import { Link } from "react-router-dom";
function AllReservationAdmin() {
  const [bookings, setbookings] = useState([]);
  const [loading, setloading] = useState(false);
  const [error, seterror] = useState(false);
  const [success, setsuccess] = useState(false);
  useEffect(async () => {
    try {
      setloading(true);
      const data = await (
        await axios.get("http://localhost:5000/api/bookings/getallbookings")
      ).data;
      setbookings(data);
      setloading(false);
    } catch (error) {
      setloading(false);
      seterror(true);
```

```
}, []);
return (
 <div className="col-md-11">
  <h1>All Reservation</h1>
  {loading ? (
    <Loader />
  ) : error ? (
    <Error />
    <div>
     <Link to="/Admin">
       <button type="button" class="btn btn-primary">
        back to admin
       </button>
     </Link>
     <br></br>
     <thead className="bs">
        Booking Id
         Userid
         Room
         From
         To
         Status
        </thead>
       {bookings.map((booking) => {
         return (
           {booking._id}
            {booking.userid}
            {booking.room}
            {booking.fromdate}
            {booking.todate}
            {booking.status}
           );
        })}
```

## 6.3.4 UpdateRooms.js

```
import React, { useState, useEffect } from "react";
import axios from "axios";
import { Link } from "react-router-dom";
const UpdateRooms = (props) => {
  const [name, setroom] = useState("");
  const [rentPerDay, setrentperday] = useState();
  const [description, setdescription] = useState("");
  const [phoneNumber, setphonenumber] = useState("");
  const [type, settype] = useState("");
  const changeOnClick = (f) => {
   //f.preventDefault();
    const updateroom = {
      name,
      rentPerDay,
     description,
      phoneNumber,
     type,
    };
    setroom("");
    setrentperday("");
    setdescription("");
    setphonenumber("");
    settype("");
    axios
      .put(
        `http://localhost:5000/api/rooms/update/${props.match.params.id}`,
        updateroom
```

```
.then((res) => alert(" Updated!")(res.data))
    .catch((err) => {
      console.log(err);
    });
};
useEffect(() => {
  axios
    .put(
      `http://localhost:5000/api/rooms/getRoombyid/${props.match.params.id}`
    .then((res) \Rightarrow [
      setroom(res.data.name),
      setrentperday(res.data.rentPerDay),
      setdescription(res.data.description),
      setphonenumber(res.data.phoneNumber),
      settype(res.data.type),
    ])
    .catch((error) => console.log(error));
}, []);
return (
  <div className="container">
    <h1>Update rooms </h1>
    <form onSubmit={changeOnClick} encType="mltipart/form-data">
      <div class="mb-3">
        <label htmlFor="courseID" class="form-label">
          name room{" "}
        </label>
        <input</pre>
          type=""
          class="form-control"
          placeholder=""
          onChange={(e) => setroom(e.target.value)}
          value={name}
        />
      </div>
      <div class="mb-3">
        <label htmlFor="courseName" class="form-label">
          rent per day
        </label>
```

```
<input</pre>
    type=""
    class="form-control"
    placeholder=""
    onChange={(e) => setrentperday(e.target.value)}
    value={rentPerDay}
 />
</div>
<div class="form-outline">
  <label htmlFor="courseType" class="form-label">
    description
  </label>
  <input</pre>
    type=""
    class="form-control"
    placeholder=""
    onChange={(e) => setdescription(e.target.value)}
    value={description}
 />
</div>
<div class="form-group">
  <label htmlFor="description">phone number</label>
  <textarea
    className="form-control"
   rows="5"
    onChange={(e) => setphonenumber(e.target.value)}
    value={phoneNumber}
 ></textarea>
</div>
<div class="row mb-4">
  <div class="col">
    <div class="form-outline">
      <label htmlFor="requirement" class="form-label">
        type
      </label>
      <input</pre>
        type="text"
        class="form-control"
        placeholder=""
        onChange={(e) => settype(e.target.value)}
        value={type}
```

```
</div>
          </div>
        </div>
        <div className="container">
          <br></br>
          <button type="submit" class="btn btn-success">
            Update Course
          </button>
          <br></br>
          <br></br>
          <Link to="/Admin">
            <button type="button" class="btn btn-primary">
              back to admin
            </button>
          </Link>
        </div>
      </form>
      <div align="right">
        </div>
    </div>
  );
};
export default UpdateRooms;
```

## 6.3.5 ManageAllUsers.js

```
import React, { useState, useEffect } from "react";
import axios from "axios";
import Swal from "sweetalert2";
import Error from "../Components/Error";
import Loader from "../Components/Loader";
import Success from "../Components/Success";
import { Link } from "react-router-dom";

function ManageAllUsers() {
  const [users, setusers] = useState();
  const [loading, setloading] = useState(true);
  useEffect(async () => {
    try {
```

```
const data = await (
     await axios.get("http://localhost:8290/User/getAllUsers")
   ).data;
   setusers(data);
   setloading(false);
 } catch (error) {
   console.log(error);
   setloading(false);
}, []);
return (
 <div className="row">
   {loading && <Loader />}
   <div className="col-md-10">
    <br></br>
    <br></br>
    <Link to="/Admin">
      <button type="button" class="btn btn-primary">
        back to admin
      </button>
     </Link>
     <br></br>
     <br></br>
    <thead className="bs">
        Id
         Name
         Email
        </thead>
      {users &&
         users.map((user) => {
           return (
             {user._id}
              {user.name}
              {user.email}
             );
```

## 6.3.6 ManageAllRooms.js

```
import React, { useState, useEffect } from "react";
import axios from "axios";
import Swal from "sweetalert2";
import Error from "../Components/Error";
import Loader from "../Components/Loader";
import Success from "../Components/Success";
import { Link } from "react-router-dom";
function ManageAllRooms() {
  const [rooms, setrooms] = useState([]);
  const [loading, setloading] = useState(false);
  const [error, seterror] = useState(false);
  const [success, setsuccess] = useState(false);
  const deleteRoom = (id) => {
    axios
      .delete(`http://localhost:5000/api/rooms/${id}`)
      .then((res) => alert(res.data));
    setrooms(rooms.filter((elem) => elem._id !== id));
  };
  useEffect(async () => {
    try {
      setloading(true);
      const data = await (
        await axios.get("http://localhost:5000/api/rooms/getallrooms")
      ).data:
```

```
setrooms(data);
   setloading(false);
 } catch (error) {
   setloading(false);
   seterror(true);
}, []);
return (
 <div className="col-md-11">
   <br></br>
   <br></br>
   <Link to="/Admin">
    <button type="button" class="btn btn-primary">
      back to admin
     </button>
   </Link>
   <br></br> <br></br> <br></br>
   <Link to="/AddRooms">
    <button type="button" class="btn btn-primary">
    </button>
   </Link>
   <br></br>
   <h1>Rooms</h1>
   {loading ? (
    <Loader />
    <Error />
    <div>
      <thead className="bs">
         >
           Room Id
           Name
           Type
           Rent Per day
           Phone Number
           delete
           update
          </thead>
        {rooms.map((room) => {
```

```
return (
               {room._id}
                {room.name}
                {room.type}
                {room.rentPerDay}
                {room.phoneNumber}
                <button
                   onClick={() => deleteRoom(room._id)}
                   className="btn btn-danger"
                   style={{ marginTop: "10px" }}
                    delete
                  </button>
                <Link
                   to={`/update/${room._id}`}
                   className="btn btn-warning"
                   style={{ marginTop: "13px" }}
                   <i class="fas fa-edit"></i>&nbsp;Edit{" "}
                  </Link>
                );
           })}
         </div>
     )}
   </div>
export default ManageAllRooms;
```

## 6.3.7 AddRooms.js

import axios from "axios";

```
import React, { useState } from "react";
import Swal from "sweetalert2";
import { Link } from "react-router-dom";
const AddRooms = () => {
  const [name, setroom] = useState("");
  const [rentPerDay, setrentperday] = useState();
  const [description, setdescription] = useState("");
  const [phoneNumber, setphonenumber] = useState("");
  const [type, settype] = useState("");
  const [image1, setimage1] = useState("");
  const changeOnClick = (f) => {
    //f.preventDefault();
    const addroom = {
      name,
      rentPerDay,
      description,
      phoneNumber,
      type,
      image1,
    };
    axios.post("http://localhost:5000/api/rooms/addRoom", addroom);
    Swal.fire("Congrats", "New Room Added succeessfully", "success")
      .then((res) => console.log("success"))
      .catch((err) => {
        console.log(err);
      });
  };
  return (
    <div className="container">
        <br></br> <br></br>
      <center>
        <h1>Add a New room</h1>
        <form onSubmit={changeOnClick} encType="">
          <div className="form-row">
            <div className="form-group col-md-6">
              <label htmlfor="name">room name</label>
              <br />
              <input</pre>
               type="text"
```

```
onChange={(f) => setroom(f.target.value)}
      className="form-control"
      placeholder="name"
    />
  </div>
  <div className="form-group col-md-6">
    <label htmlfor="rentPerDay">rent Per Day</label>
    <br />
    <input</pre>
      type="text"
      onChange={(f) => setrentperday(f.target.value)}
      className="form-control"
      placeholder="rent Per Day "
    />
  </div>
  <div className="form-group col-md-6">
    <label htmlfor="description">description</label>
    <br />
    <input</pre>
      type="text"
      onChange={(f) => setdescription(f.target.value)}
      className="form-control"
      placeholder="description"
    />
  </div>
</div>
<div className="form-group col-md-6">
  <label htmlfor="phoneNumber">phone Number </label>
  <input</pre>
    type="text"
    onChange={(f) => setphonenumber(f.target.value)}
    className="form-control"
  />
</div>
<div className="form-group col-md-6">
  <label htmlfor="type">Room type</label>
  <br />
  <input</pre>
    type="text"
    onChange={(f) => settype(f.target.value)}
    className="form-control"
```

```
placeholder="type"
            />
          </div>
          <div className="form-group col-md-6">
            <label htmlfor="image1">image</label>
            <br />
            <input</pre>
              type="text"
              onChange={(f) => setimage1(f.target.value)}
              className="form-control"
              placeholder="upload image url "
            />
          </div>
          <br />
          <br />
          <button type="submit" className="btn btn-primary">
            Add new room
          </button>
        </form>
      </center>
      <Link to="/Admin">
        <button type="button" class="btn btn-primary">
          back to admin
        </button>
      </Link>
      <br></br></br>
    </div>
 );
};
export default AddRooms;
```

#### 6.3.8 Register.js

```
import React, {useState,useRef,useEffect} from 'react';
import AuthService from '../Services/AuthService';
import Message from '../Components/Message';
const Register = props=>{
```

```
const [user,setUser] = useState({username: "", password : "", email : "",
role : "user"});
    const [message,setMessage] = useState(null);
    let timerID = useRef(null);
    useEffect(()=>{
        return ()=>{
            clearTimeout(timerID);
    },[]);
    const onChange = e =>{
        setUser({...user,[e.target.name] : e.target.value});
    const resetForm = ()=>{
        setUser({username : "", password : "", email : "",role : "admin"});
const onSubmit = e =>{
        e.preventDefault();
        AuthService.register(user).then(data=>{
            const { message } = data;
            setMessage(message);
            resetForm();
            if(!message.msgError){
                timerID = setTimeout(()=>{
                    props.history.push('/adminlogin');
                },2000)
        });
    return(
       <div className="container">
<br></br> <br></br>
<div class="card">
<img class="card-img-top" src={require('./reg.png')} height={570}</pre>
width={0} alt="Card image cap"/>
<div class="card-body">
```

```
<h2 class="card-title">Admin Register</h2>
<form onSubmit={onSubmit}>
<label htmlFor="username" className="sr-only">Username: </label>
                <input type="text"</pre>
                        name="username"
                        value={user.username}
                        onChange={onChange}
                        className="form-control"
                        placeholder="Enter Username"/>
                        <br></br>
                <label htmlFor="password" className="sr-only">Password: </label>
                <input type="password"</pre>
                       name="password"
                        value={user.password}
                        onChange={onChange}
                        className="form-control"
                        placeholder="Enter Password"/>
                          <br></br>
                <label htmlFor="email" className="sr-only">email: </label>
                <input type="email"</pre>
                       name="email"
                        value={user.email}
                        onChange={onChange}
                        className="form-control"
                        placeholder="Enter email"/>
  <br></br>
                <label htmlFor="role" className="sr-only">Role: </label>
                <input type="text"</pre>
                       name="role"
                       value={user.role}
                       onChange={onChange}
                        className="form-control"
                       placeholder=""/>
                 <br></br>
                 <button className="btn btn-lg btn-primary btn-block"</pre>
                         type="submit">Register</button>
               </form>
               {message ? <Message message={message}/> : null}
</div>
</div>
</div>
```

```
export default Register;
```

## 6.3.9 Sysadmin.js

#### 6.3.10 AuthService.js

```
})
   },
   register : user =>{
       console.log(user);
       return fetch('/user/register',{
           method : "post",
           body : JSON.stringify(user),
           headers : {
                'Content-Type' : 'application/json'
       }).then(res => res.json())
          .then(data => data);
   },
   logout : ()=>{
       return fetch('/user/logout')
                .then(res => res.json())
                .then(data => data);
   },
   isAuthenticated : ()=>{
       return fetch('/user/authenticated')
                .then(res=>{
                    if(res.status !== 401)
                        return res.json().then(data => data);
                   else
                        return { isAuthenticated : false, user : {username :
"",role : ""}};
               });
```

## **6.3.11** PrivateRoute.js

```
import React, {useContext} from 'react';
import {Route,Redirect} from 'react-router-dom';
import { AuthContext } from '../Context/AuthContext';

const PrivateRoute = ({component : Component, roles, ...rest})=>{
    const { isAuthenticated, user} = useContext(AuthContext);
```

### 6.3.12 UnPrivateRoute.js

# 6.3.13 AuthContext.js

```
import React, {createContext,useState,useEffect} from 'react';
import AuthService from '../Services/AuthService';
```

```
export const AuthContext = createContext();
export default ({ children })=>{
    const [user, setUser] = useState(null);
    const [isAuthenticated, setIsAuthenticated] = useState(false);
    const [isLoaded, setIsLoaded] = useState(false);
    useEffect(()=>{
        AuthService.isAuthenticated().then(data =>{
            setUser(data.user);
            setIsAuthenticated(data.isAuthenticated);
            setIsLoaded(true);
        });
    },[]);
    return (
       <div>
            {!isLoaded ? <h1>Loading</h1> :
            <AuthContext.Provider
value={{user,setUser,isAuthenticated,setIsAuthenticated}}>
                { children }
            </AuthContext.Provider>}
        </div>
```