

# 技职教育系 Department of Vocational Education

# 软件工程与移动应用程序开发课程 Software Engineering and Application Developer (SEMD)

## 个人作业 Final Assignment

科目	Subject	Mobile Application
		Development- IOS
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Before Login

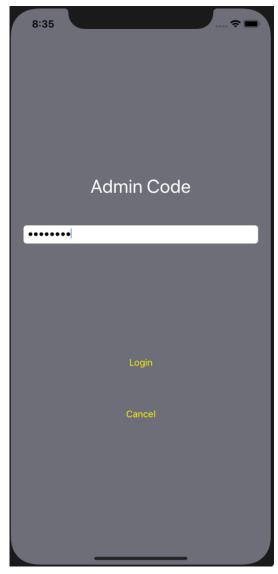
Before this application open to user, please register a admin account with <a href="mailto:admin@gmail.com">admin@gmail.com</a> and password admin.

After registration you can press the Admin Login on top right of the screen.



This is the page of admin login insert email and admin password that we register before login and press the login button.





This is a confirmation to make sure other user didn't allow to login by admin account.

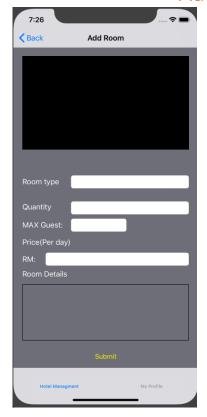
Admin Code: Admin185.

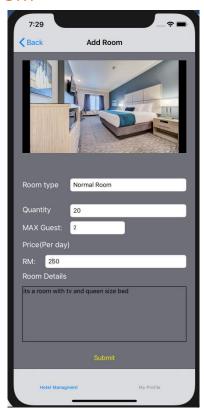
### Hotel Management - Room List



Once you login with admin account you will be seeing this Hotel Management room list you can add new room by pressing the + button on the top right or select one of the room in this list to do edition, update or delete.

#### Add Room

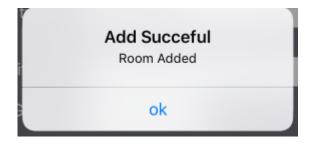




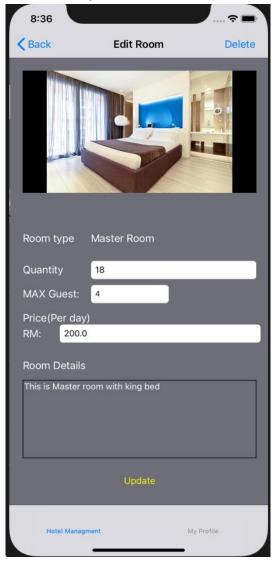
Left: That black area is an on click area that allow you to upload your room image from phone to that area. And all the blank below is the detail and information about your room (Room type-name, quantity of room, max guest allow, price, room details-description)

Right: this is the example after all insert.

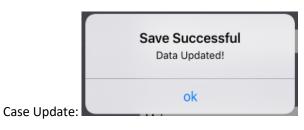
Press the Submit button to add this room.

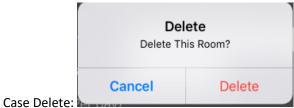


Edit / Delete Room



It allow admin to change the room information (price, max guest, quantity of room) or delete this room on list.





Room will only delete after clicked Delete button.

My Profile - Admin
7:29

My Profile LogOut

Admin Name:

Loo Zhen Xi (Admin)

Edit

Hotel Managment My Profile

Hotel Managment My Profile

For private case this will only show admin name and image about admin, you can edit and view more details after press Edit button.



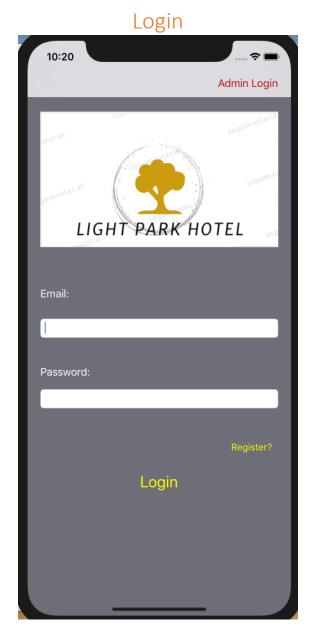
Edit Profile - Admin

Here you can edit your admin information including Profile Picture, Name, Gender, Date of Birth and Phone Number in case that admin changed.

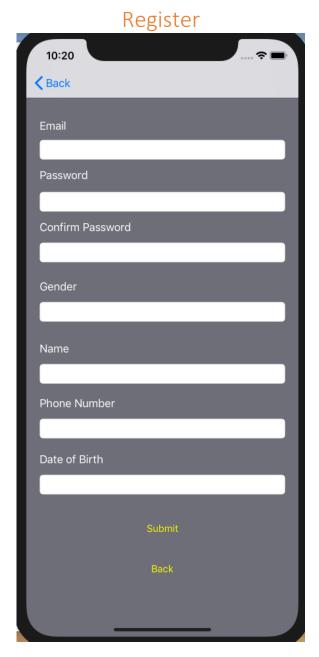
## Launch Screen



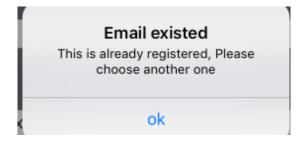
This is our Launch Screen while loading the application.



It is our Login page of user for user insert email and password to login. If it didn't have account yet please click on the Register? Button.



Here is the screen after clicked register? Button on Login screen. Please insert all the information. Remind: once email has been registered can't register again, please write down you email in case.

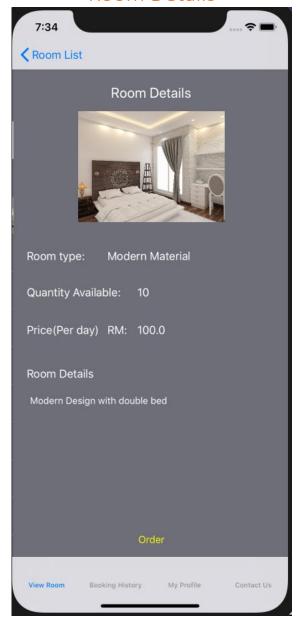


Room List

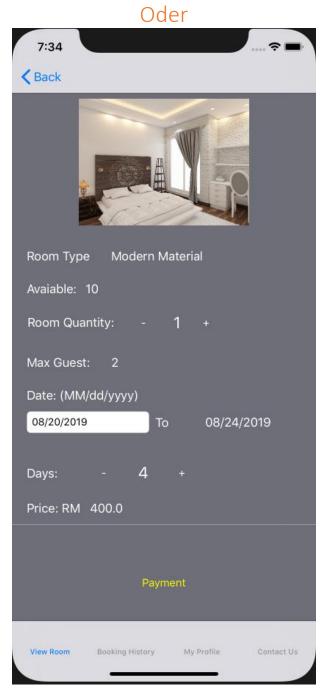


After you Login, this is first you will be seeing. It is all room list that we have now, select one of the room to see details.

#### Room Details

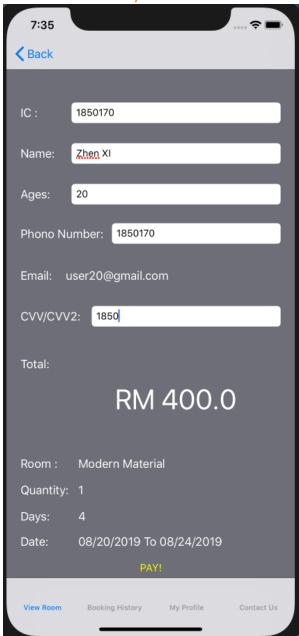


After select room on room list, it's the page show you all the detail about (price, available, room details) and an order button.

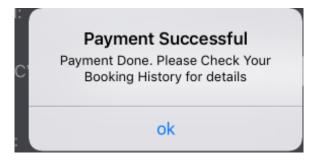


Select your room quantity (Max 3), date and days that you want to book. Confirm all the selection is correct press Payment button.

#### **Payment**



Insert all your personal information for the payment, make sure you room type, quantity, days, date is correct press Pay! Button to do the payment.

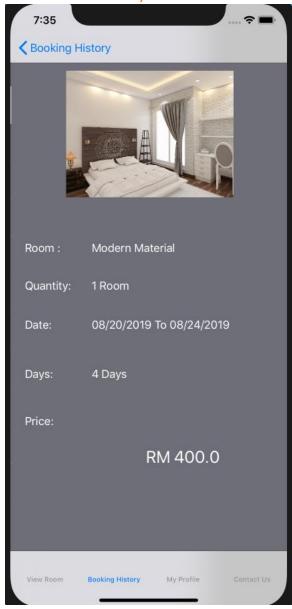


After payment you can go to booking history to see your booking details.



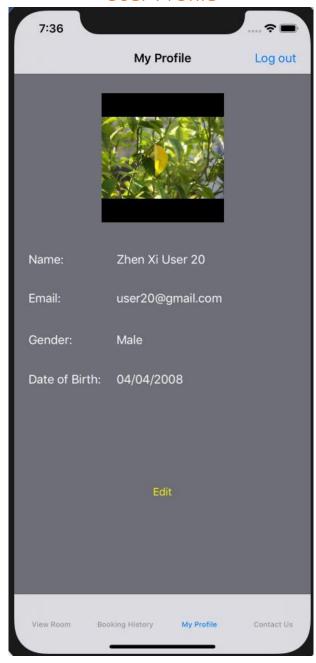
Here is your booking history all the booking you have done before will show here. Select the list of room history you want to check details.





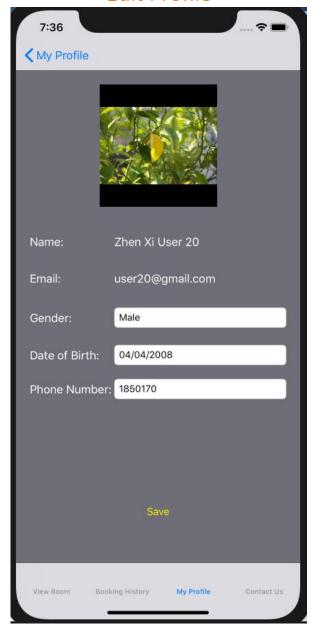
Here is the history details that you selected room in booking history with quantity, Date, Days, price that you booked.

## User Profile



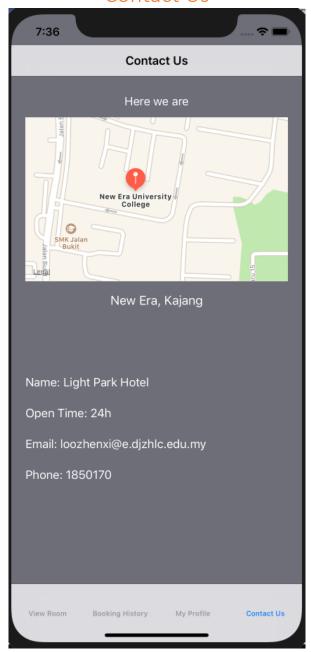
It page show your information about you self and you can edit it by pressing edit button.

Edit Profile



Here you can edit your gender, date of birth and phone number in case that you insert wrong information in register or your phone number had changes.

#### Contact Us



Here is the page provide our hotel information email, Location, Phone, Open Hour.

#### Coding

```
ViewController (Login)
```

```
// ViewController.swift
// Final
//
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class ViewController: UIViewController {
  @IBOutlet weak var emailtxt: UITextField!
  @IBOutlet weak var passwordtxt: UITextField!
  override func viewDidLoad() {
     super.viewDidLoad()
     // Do any additional setup after loading the view.
   @IBAction func loginbtn(_ sender: Any) {
     let appDelegate = UIApplication.shared.delegate as! AppDelegate
     let db = appDelegate.persistentContainer.viewContext
     let request: NSFetchRequest</br>
NSFetchRequest(entityName: "Useraccount")
     let predicate = NSPredicate(format: "email = '\(emailtxt.text!\)'")
     request.predicate = predicate
       let result = try db.fetch(request) as! [NSManagedObject]
       if(result.count > 0){
          let account = result[0] as! Useraccount
          if(account.password == passwordtxt.text!){
            UserDefaults.standard.set(emailtxt.text!, forKey: "email")
            let storyboard = UIStoryboard(name: "Main", bundle: nil)
            let usertabBar = storyboard.instantiateViewController(withIdentifier: "user") as! UITabBarController
            present(usertabBar,animated: true,completion: nil)
          else{
            let alert = UIAlertController(title: "Login Fail", message: "Email or Password is incorrect",
preferredStyle: .alert)
            let action = UIAlertAction(title: "ok", style: .default, handler: nil)
            alert.addAction(action)
            present(alert,animated: true,completion: nil)
       else{
          let alert = UIAlertController(title: "Login Fail", message: "Account didn't exists, Please Register First",
preferredStyle: .alert)
          let action = UIAlertAction(title: "ok", style: .default, handler: nil)
          alert.addAction(action)
          present(alert,animated: true,completion: nil)
```

```
catch let error as NSError{
       print(error)
  }
SignupViewController
// SignUpViewController.swift
// Final
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class SignUpViewController: UIViewController, UIPickerViewDataSource, UIPickerViewDelegate{
  @IBOutlet weak var gendertxt: UITextField!
  @IBOutlet weak var emailtxt: UITextField!
   @IBOutlet weak var passwordtxt: UITextField!
  @IBOutlet weak var cpasswordtxt: UITextField!
  @IBOutlet weak var nametxt: UITextField!
  @IBOutlet weak var phonetxt: UITextField!
  @IBOutlet weak var dateofbirthtxt: UITextField!
  var gendertype = ["Male","Female"]
  var selectedgender: String?
  var used = 0;
  var datePicker: UIDatePicker?
  override func viewDidLoad() {
     super.viewDidLoad()
     //Gender Picker
     createPicker()
     //date picker
     datePicker = UIDatePicker()
     datePicker?.datePickerMode = .date
     datePicker?.addTarget(self, action: #selector(SignUpViewController.dateChanged(datePicker:)),
for: .valueChanged)
     let tapGesture = UITapGestureRecognizer(target: self, action:
#selector(SignUpViewController.viewTapped(gestureRecognizer:)))
     view.addGestureRecognizer(tapGesture)
     dateofbirthtxt.inputView = datePicker
  }
   @objc func viewTapped(gestureRecognizer: UITapGestureRecognizer){
     view.endEditing(true)
  @objc func dateChanged(datePicker: UIDatePicker){
     let dateFormatter = DateFormatter()
     dateFormatter.dateFormat = "MM/dd/yyyy"
     dateofbirthtxt.text = dateFormatter.string(from: datePicker.date)
```

```
}
   @IBAction func submitbtn(_ sender: Any) {
     let email = emailtxt.text!
     let password = passwordtxt.text!
     let cpassword = cpasswordtxt.text!
     let gender = gendertxt.text!
     let name = nametxt.text!
     let phone = phonetxt.text!
     let date = dateofbirthtxt.text!
     if (email == "" || password == "" || cpassword == "" || gender == "" || name == "" || phone == "" || date == "") {
       let alert = UIAlertController(title: "Fail", message: "Please fill in all the blank", preferredStyle: .alert)
       let action = UIAlertAction(title: "ok", style: .default, handler: nil)
       alert.addAction(action)
       present(alert, animated: true, completion: nil)
     }else{
       //check email exist
       let appDelegate = UIApplication.shared.delegate as! AppDelegate
       let db = appDelegate.persistentContainer.viewContext
       let request : NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Useraccount")
       let predicate = NSPredicate(format: "email = '\(email)'")
       request.predicate = predicate
       do{
          let result = try db.fetch(request) as! [NSManagedObject]
          if(result.count > 0){
            used = 1:
          }
       catch let error as NSError{
          print(error)
       //check password and confirm paasword
       if(password != cpassword){
          let alert = UIAlertController(title: "Fail", message: "Password and ConfirmPassword not match",
preferredStyle: .alert)
          let action = UIAlertAction(title: "ok", style: .default, handler: nil)
          alert.addAction(action)
          present(alert,animated: true,completion: nil)
       }else if(used == 1){
          let alert = UIAlertController(title: "Email existed", message: "This is already registered, Please choose
another one", preferredStyle: .alert)
          let action = UIAlertAction(title: "ok", style: .default, handler: nil)
          alert.addAction(action)
          present(alert,animated: true,completion: nil)
          used = 0
       else{
          let appDelegate = UIApplication.shared.delegate as! AppDelegate
          let db = appDelegate.persistentContainer.viewContext
          let entity = NSEntityDescription.entity(forEntityName: "Useraccount", in: db)
          let object = NSManagedObject(entity: entity!, insertInto: db) as! Useraccount
          object.email = email
          object.password = password
          object.gender = gender
          object.name = name
```

```
object.phone = phone
         object.dateofbirth = date
          do{
            try db.save()
            let alert = UIAlertController(title: "Successful", message: "Account Registed", preferredStyle: .alert)
            let action = UIAlertAction(title: "ok", style: .default, handler: successful(alert:))
            alert.addAction(action)
            present(alert,animated: true,completion: nil)
            used = 0
         }
          catch let error as NSError{
            print(error)
       }
    }
  }
  func successful(alert: UIAlertAction){
     let storyboard = UIStoryboard(name: "Main", bundle: nil)
     let LoginPage = storyboard.instantiateViewController(withIdentifier: "Login")
     present(LoginPage,animated: true,completion: nil)
  }
  //Gender Picker
  func createPicker() {
     let picker = UIPickerView()
     picker.delegate = self
     gendertxt.inputView = picker
  func numberOfComponents(in pickerView: UIPickerView) -> Int {
  func pickerView(_pickerView: UIPickerView, numberOfRowsInComponent component: Int) -> Int {
     return gendertype count
  func pickerView(_ pickerView: UIPickerView, titleForRow row: Int, forComponent component: Int) -> String? {
     return gendertype[row]
  func pickerView(_ pickerView: UIPickerView, didSelectRow row: Int, inComponent component: Int) {
     selectedgender = gendertype[row]
     gendertxt.text = selectedgender
Admintab1ViewController
// Admintab1ViewController.swift
// Final
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
```

}

```
//
import UIKit
import CoreData
class Admintab1ViewController: UIViewController, UITableViewDelegate, UITableViewDataSource{
  var array : [NSManagedObject] = []
  @IBOutlet weak var tbview: UITableView!
  override func viewDidLoad() {
    super.viewDidLoad()
  }
  override func viewWillAppear(_ animated: Bool) {
    let appDelegate = UIApplication.shared.delegate as! AppDelegate
    let db = appDelegate.persistentContainer.viewContext
    let request: NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Room")
    do {
      let result = try db.fetch(request) as! [NSManagedObject]
      array = result
      tbview.reloadData()
    catch let error as NSError {
      print(error)
    }
  func tableView(_tableView: UITableView, numberOfRowsInSection section: Int) -> Int {
    return array.count
  func tableView(_ tableView: UITableView, cellForRowAt indexPath: IndexPath) -> UITableViewCell {
    let cell = tableView.dequeueReusableCell(withIdentifier: "admincell")
    let object = array[indexPath.row] as! Room
    cell?.textLabel?.textColor = UIColor.white
    cell?.detailTextLabel?.textColor = UIColor.white
    cell?.textLabel?.text = "Room type: \(object.type!)"
    let image : Ullmage = Ullmage(data: object.image!)!
    cell?.imageView?.image = image
    return cell!
  override func prepare(for segue: UIStoryboardSegue, sender: Any?) {
    if(seque.identifier == "details"){
      let destination = segue.destination as! EditRoomViewController
      let index = tbview.indexPathForSelectedRow
      destination.room = array[index!.row] as! Room
    }
```

}

}

#### Admintab2ViewController

```
// Admintab2ViewController.swift
// Final
//
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class Admintab2ViewController: UIViewController{
  var email = UserDefaults.standard.string(forKey: "adminemail")
  @IBOutlet weak var adminnamelbl: UILabel!
  @IBOutlet weak var imageView: UlImageView!
  override func viewDidLoad() {
     super.viewDidLoad()
  }
  override func viewWillAppear(_ animated: Bool) {
     let appDelegate = UIApplication.shared.delegate as! AppDelegate
     let db = appDelegate.persistentContainer.viewContext
     let request: NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Useraccount")
     let predicate = NSPredicate(format: "email='\(email!)\)")
     request.predicate = predicate
     do{
       let result = try db.fetch(request) as! [NSManagedObject]
       if(result.count > 0){
          let object = result[0]
          adminnamelbl.text = object.value(forKey: "name") as! String
          let image = object.value(forKey: "image") as? Data
          if(image != nil){
             let imagec : Ullmage = Ullmage(data: image!)!
            imageView.image = imagec
          }
       }
     catch let error as NSError{
       print(error)
     }
  }
   @IBAction func Logoutbtn(_ sender: Any) {
     let alert = UIAlertController(title: "LogOut", message: "Are You Sure Want To LogOut", preferredStyle: .alert)
     let action = UIAlertAction(title: "LogOut", style: .default, handler: logout(alert:))
     let action2 = UIAlertAction(title: "Cancel", style: .cancel, handler: nil)
     alert.addAction(action)
     alert.addAction(action2)
     present(alert,animated: true,completion: nil)
  }
  func logout(alert: UIAlertAction){
     let storyboard = UIStoryboard(name: "Main", bundle: nil)
```

```
let logout = storyboard.instantiateViewController(withIdentifier: "Login") as! UINavigationController
     present(logout,animated: true,completion: nil)
  }
  override func prepare(for segue: UIStoryboardSegue, sender: Any?) {
     if(seque.identifier == "admind"){
       let destination = segue.destination as! adminaccountViewController
       let index = email!
       let name = adminnamelbl.text!
       destination.adminemail = index.description
       destination.adminname = name.description
    }
  }
}
AddhotelViewController
// AddhotelViewController.swift
// Final
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class AddhotelViewController: UIViewController ,UIImagePickerControllerDelegate,
UINavigationControllerDelegate{
  @IBOutlet weak var roomtypetxt: UITextField!
  @IBOutlet weak var quantitytxt: UITextField!
   @IBOutlet weak var pricetxt: UITextField!
  @IBOutlet weak var detailstxt: UITextField!
  @IBOutlet weak var guesttxt: UITextField!
  @IBOutlet weak var imageView: UlImageView!
  var existed = 0;
  override func viewDidLoad() {
     super.viewDidLoad()
     let tapGestureRecognizer = UITapGestureRecognizer(target: self, action:
#selector(imageTapped(tapGestureRecognizer:)))
     imageView.isUserInteractionEnabled = true
     imageView.addGestureRecognizer(tapGestureRecognizer)
  }
   @objc func imageTapped(tapGestureRecognizer: UITapGestureRecognizer)
     let tappedImage = tapGestureRecognizer.view as! UIImageView
     if(UllmagePickerController.isSourceTypeAvailable(UllmagePickerController.SourceType.photoLibrary)){
       let imag = UIImagePickerController()
       imag.delegate = self
       imag.sourceType = UIImagePickerController.SourceType.photoLibrary;
       imag.allowsEditing = false
       present(imag, animated: true, completion: nil)
```

```
}
  func imagePickerController(_picker: UllmagePickerController, didFinishPickingMediaWithInfo info:
[UIImagePickerController.InfoKey: Any]) {
     let selectedImage: UIImage = info[UIImagePickerController.InfoKey.originalImage] as! UIImage
     imageView.image=selectedImage
     self.dismiss(animated: true, completion: nil)
  }
  func imagePickerControllerDidCancel(_ picker: UllmagePickerController) {
     self.dismiss(animated: true, completion: nil)
   @IBAction func addbtn(_ sender: Any) {
     let type = roomtypetxt.text!
     let quantity = quantitytxt.text!
     let price = pricetxt.text!
     let details = detailstxt.text!
     let maxquest = questtxt.text!
     if(type == "" || quantity == "" || price == "" || details == "" || imageView.image == nil){
       let alert = UIAlertController(title: "Fail", message: "Please fill in all the blank", preferredStyle: .alert)
       let action = UIAlertAction(title: "ok", style: .default, handler: nil)
       alert.addAction(action)
       present(alert,animated: true,completion: nil)
    else{
       let appDelegate = UIApplication.shared.delegate as! AppDelegate
       let db = appDelegate.persistentContainer.viewContext
       let request: NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Room")
       let predicate = NSPredicate(format: "type='\((roomtypetxt.text!)\)")
       request.predicate = predicate
          let result = try db.fetch(request) as! [NSManagedObject]
          if(result.count > 0){
            existed = 1;
            let alert = UIAlertController(title: "Room Exsits", message: "This Room Is Already Exsits!, Please
Rename", preferredStyle: .alert)
            let action = UIAlertAction(title: "ok", style: .default, handler: nil)
            alert.addAction(action)
            present(alert,animated: true,completion: nil)
          else{
            existed = 0;
       catch let error as NSError{
          print(error)
       if(existed != 1){
          let imgData : Data = imageView.image!.pngData()! as Data;
          let appDelegate = UIApplication.shared.delegate as! AppDelegate
          let db = appDelegate.persistentContainer.viewContext
          let entity = NSEntityDescription.entity(forEntityName: "Room", in: db)
          let object = NSManagedObject(entity: entity!, insertInto: db) as! Room
          object.type = type
```

```
object.quantity = Int16(quantity)!
         object.price = Float(price)!
         object.details = details
         object.guest = Int16(maxguest)!
         object.image = imgData
         do{
            try db.save()
            let alert = UIAlertController(title: "Add Succeful", message: "Room Added", preferredStyle: .alert)
            let action = UIAlertAction(title: "ok", style: .default, handler: backtotab(alert:))
            alert.addAction(action)
            present(alert,animated: true,completion: nil)
          catch let error as NSError{
            print(error)
    }
  func backtotab(alert: UIAlertAction){
     let storyboard = UIStoryboard(name: "Main", bundle: nil)
     let tabbar = storyboard.instantiateViewController(withIdentifier: "admin") as! UITabBarController
     present(tabbar,animated: true,completion: nil)
  }
}
Usertab1ViewController
// Usertab1ViewController.swift
// Final
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class Usertab1ViewController: UIViewController, UITableViewDelegate, UITableViewDataSource{
  @IBOutlet weak var tbview: UITableView!
  var array : [NSManagedObject] = []
  override func viewDidLoad() {
     super.viewDidLoad()
  }
  override func viewWillAppear(_ animated: Bool) {
     let appDelegate = UIApplication.shared.delegate as! AppDelegate
     let db = appDelegate.persistentContainer.viewContext
     let request : NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Room")
     do{
       let result = try db.fetch(request) as! [NSManagedObject]
```

```
array = result
      tbview.reloadData()
    }
    catch let error as NSError{
      print(error)
  }
  func tableView(_tableView: UITableView, numberOfRowsInSection section: Int) -> Int {
    return array.count
  }
  func tableView(_tableView: UITableView, cellForRowAt indexPath: IndexPath) -> UITableViewCell {
    let cell = tableView.dequeueReusableCell(withIdentifier: "usercell")
    let object = array[indexPath.row] as! Room
    cell?.textLabel?.textColor = UIColor.white
    cell?.detailTextLabel?.textColor = UIColor.white
    cell?.textLabel?.text = "Room type: \(object.type!)"
    let image : Ullmage = Ullmage(data: object.image!)!
    cell?.imageView?.image = image
    return cell!
  }
  override func prepare(for segue: UIStoryboardSegue, sender: Any?) {
    if(segue.identifier == "userdetail"){
      let destination = segue.destination as! UserViewRoomViewController
      let index = tbview.indexPathForSelectedRow
      destination.room = array[index!.row] as! Room
    }
 }
EditRoomViewController
// EditRoomViewController.swift
// Final
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class EditRoomViewController: UIViewController,UIImagePickerControllerDelegate,
UINavigationControllerDelegate {
  @IBOutlet weak var roomtypelbl: UILabel!
  @IBOutlet weak var quantitytxt: UITextField!
  @IBOutlet weak var pricetxt: UITextField!
  @IBOutlet weak var detailstxt: UITextField!
  @IBOutlet weak var guesttxt: UITextField!
```

}

```
@IBOutlet weak var imageView: UllmageView!
  var room: Room?
  override func viewDidLoad() {
    super.viewDidLoad()
    roomtypelbl.text = room!.type!
    quantitytxt.text = room!.quantity.description
    pricetxt.text = room!.price.description
    detailstxt.text = room!.details!
    guesttxt.text = room!.guest.description
    let image : Ullmage = Ullmage(data: room!.image!)!
    imageView.image = image
    let tapGestureRecognizer = UITapGestureRecognizer(target: self, action:
#selector(imageTapped(tapGestureRecognizer:)))
    imageView.isUserInteractionEnabled = true
    imageView.addGestureRecognizer(tapGestureRecognizer)
  }
  @objc func imageTapped(tapGestureRecognizer: UITapGestureRecognizer)
    let tappedImage = tapGestureRecognizer.view as! UlImageView
    if(UllmagePickerController.isSourceTypeAvailable(UllmagePickerController.SourceType.photoLibrary)){
       let imag = UllmagePickerController()
       imag.delegate = self
       imag.sourceType = UllmagePickerController.SourceType.photoLibrary;
       imag.allowsEditing = false
       present(imag, animated: true, completion: nil)
    }
  func imagePickerController(_ picker: UllmagePickerController, didFinishPickingMediaWithInfo info:
[UIImagePickerController.InfoKey: Any]) {
    let selectedImage: UlImage = info[UlImagePickerController.InfoKey.originalImage] as! UlImage
    imageView.image=selectedImage
    self.dismiss(animated: true, completion: nil)
  }
  func imagePickerControllerDidCancel(_ picker: UllmagePickerController) {
    self.dismiss(animated: true, completion: nil)
  @IBAction func updatebtn(_ sender: Any) {
    let appDelegate = UIApplication.shared.delegate as! AppDelegate
    let db = appDelegate.persistentContainer.viewContext
    let request : NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Room")
    let predicate = NSPredicate(format: "type="\((roomtypelbl.text!)\)")
    request.predicate = predicate
    do{
       let result = try db.fetch(request) as! [NSManagedObject]
       if(result.count > 0){
         let object = result[0]
         let imgData : Data = imageView.image!.pngData()! as Data;
         object.setValue(imgData, forKey: "image")
         object.setValue(Int16(quantitytxt.text!), forKey: "quantity")
         object.setValue(Float(pricetxt.text!), forKey: "price")
         object.setValue(detailstxt.text!.description, forKey: "details")
         object.setValue(Int16(guesttxt.text!), forKey: "guest")
         try db.save()
```

```
let alert = UIAlertController(title: "Update Successful", message: "Data Updated", preferredStyle: .alert)
       let action = UIAlertAction(title: "ok", style: .default, handler: backtotab(alert:))
       alert.addAction(action)
       present(alert,animated: true,completion: nil)
  catch let error as NSError{
     print(error)
}
@IBAction func DeleteBtn(_ sender: Any) {
  let alert = UIAlertController(title: "Delete", message: "Delete This Room?", preferredStyle: .alert)
  let action = UIAlertAction(title: "Delete", style: .destructive, handler: deleteroom(alert:))
  let action2 = UIAlertAction(title: "Cancel", style: .cancel, handler: nil)
  alert.addAction(action)
  alert.addAction(action2)
  present(alert,animated: true,completion: nil)
}
func deleteroom(alert:UIAlertAction){
  let appDelegate = UIApplication.shared.delegate as! AppDelegate
  let db = appDelegate.persistentContainer.viewContext
  let request: NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Room")
  let predicate = NSPredicate(format: "type='\(roomtypelbl.text!)'")
  request.predicate = predicate
  do{
     let result = try db.fetch(request) as! [NSManagedObject]
     if(result.count > 0){
        let object = result[0]
       db.delete(object)
       try db.save()
       let alert = UIAlertController(title: "Delete Successful", message: "Room Deleted!", preferredStyle: .alert)
       let action = UIAlertAction(title: "ok", style: .default, handler: roomdeleted(alert:))
       alert.addAction(action)
       present(alert,animated: true,completion: nil)
  }
  catch let error as NSError{
     print(error)
}
func roomdeleted(alert:UIAlertAction){
  let storyboard = UIStoryboard(name: "Main", bundle: nil)
  let Checkroom = storyboard.instantiateViewController(withIdentifier: "admin")
  present(Checkroom,animated: true,completion: nil)
}
func backtotab(alert: UIAlertAction){
  let storyboard = UIStoryboard(name: "Main", bundle: nil)
```

```
let tabbar = storyboard.instantiateViewController(withIdentifier: "admin") as! UITabBarController
present(tabbar,animated: true,completion: nil)
}
```

#### Usertab3ViewController

```
// Usertab3ViewController.swift
// Final
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class Usertab3ViewController: UIViewController {
  var email: String = UserDefaults.standard.string(forKey: "email")!
  var array : [NSManagedObject] = []
  @IBOutlet weak var namelbl: UILabel!
  @IBOutlet weak var emaillbl: UILabel!
  @IBOutlet weak var genderlbl: UILabel!
  @IBOutlet weak var birthdatelbl: UILabel!
  @IBOutlet weak var imageView: UlImageView!
  override func viewDidLoad() {
     super.viewDidLoad()
     // Do any additional setup after loading the view.
  override func viewWillAppear(_ animated: Bool) {
     let appDelegate = UIApplication.shared.delegate as! AppDelegate
     let db = appDelegate.persistentContainer.viewContext
     let request : NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Useraccount")
     let predicate = NSPredicate(format: "email='\(email.description)\)")
     request.predicate = predicate
     do{
       let result = try db.fetch(request) as! [NSManagedObject]
       if(result.count > 0){
          let tresult = result[0]
          namelbl.text = tresult.value(forKey: "name") as! String
          emaillbl.text = tresult.value(forKey: "email") as! String
          genderlbl.text = tresult.value(forKey: "gender") as! String
          birthdatelbl.text = tresult.value(forKey: "dateofbirth") as! String
          let image = tresult.value(forKey: "image") as? Data
          if(image != nil){
            let imagec : Ullmage = Ullmage(data: image!)!
            imageView.image = imagec
          }
```

```
catch let error as NSError{
       print(error)
  override func prepare(for segue: UIStoryboardSegue, sender: Any?) {
     if(seque.identifier == "editprofile"){
       let destination = segue.destination as! usereditViewController
       let index = emaillbl.text!
       destination.email = index.description
    }
  }
  @IBAction func logoutbtn(_ sender: Any) {
     let alert = UIAlertController(title: "LogOut", message: "Are You Want To LogOut?", preferredStyle: .alert)
     let action = UIAlertAction(title: "Yes", style: .default, handler: logout(alert:))
     let action2 = UIAlertAction(title: "Cancel", style: .cancel, handler: nil)
     alert.addAction(action)
     alert.addAction(action2)
     present(alert,animated: true,completion: nil)
  }
  func logout(alert: UIAlertAction){
     let storyboard = UIStoryboard(name: "Main", bundle: nil)
     let Login = storyboard.instantiateViewController(withIdentifier: "Login") as! UINavigationController
     present(Login,animated: true,completion: nil)
  }
}
usereditViewController
// usereditViewController.swift
// Final
// Created by ZhenXi on 31/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class usereditViewController: UIViewController ,UIPickerViewDelegate , UIPickerViewDataSource,
UIImagePickerControllerDelegate, UINavigationControllerDelegate{
  @IBOutlet weak var namelbl: UILabel!
  @IBOutlet weak var emaillbl: UILabel!
  @IBOutlet weak var gendertxt: UITextField!
  @IBOutlet weak var dateofbirthlbl: UITextField!
  @IBOutlet weak var phonelbl: UITextField!
  @IBOutlet weak var imageView: UlImageView!
  var email: String?
  var datePicker: UIDatePicker?
```

```
var gendertype = ["Male","Female"]
  var selectedgender: String?
  override func viewDidLoad() {
    super.viewDidLoad()
    createPicker()
    //onclick imageview
    let tapGestureRecognizer = UITapGestureRecognizer(target: self, action:
#selector(imageTapped(tapGestureRecognizer:)))
    imageView.isUserInteractionEnabled = true
    imageView.addGestureRecognizer(tapGestureRecognizer)
    //core data
    let appDelegate = UIApplication.shared.delegate as! AppDelegate
    let db = appDelegate.persistentContainer.viewContext
    let request: NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Useraccount")
    let predicate = NSPredicate(format: "email='\(email!)'")
    request.predicate = predicate
    do{
       let result = try db.fetch(request) as! [NSManagedObject]
       if(result.count > 0){
         let tresult = result[0]
         namelbl.text = tresult.value(forKey: "name") as! String
         emaillbl.text = tresult.value(forKey: "email") as! String
         gendertxt.text = tresult.value(forKey: "gender") as! String
         dateofbirthlbl.text = tresult.value(forKey: "dateofbirth") as! String
         phonelbl.text = tresult.value(forKey: "phone") as! String
         let imagec = tresult.value(forKey: "image") as? Data
         if(imagec != nil){
            let image : Ullmage = Ullmage(data: imagec!)!
            imageView.image = image
         }
       }
    }
    catch let error as NSError{
       print(error)
    //date picker
    datePicker = UIDatePicker()
    datePicker?.datePickerMode = .date
    datePicker?.addTarget(self, action: #selector(usereditViewController.dateChanged(datePicker:)),
for: .valueChanged)
    let tapGesture = UITapGestureRecognizer(target: self, action:
#selector(usereditViewController.viewTapped(gestureRecognizer:)))
    view.addGestureRecognizer(tapGesture)
    dateofbirthlbl.inputView = datePicker
  }
  @objc func imageTapped(tapGestureRecognizer: UITapGestureRecognizer)
    let tappedImage = tapGestureRecognizer.view as! UlImageView
    if(UllmagePickerController.isSourceTypeAvailable(UllmagePickerController.SourceType.photoLibrary)){
       let imag = UllmagePickerController()
       imag.delegate = self
```

```
imag.sourceType = UIImagePickerController.SourceType.photoLibrary;
       imag.allowsEditing = false
       present(imag, animated: true, completion: nil)
    }
  }
  func imagePickerController(_ picker: UllmagePickerController, didFinishPickingMediaWithInfo info:
[UllmagePickerController.InfoKey : Any]) {
     let selectedImage : UIImage = info[UIImagePickerController.InfoKey.originalImage] as! UIImage
     imageView.image=selectedImage
     self.dismiss(animated: true, completion: nil)
  }
  func imagePickerControllerDidCancel(_ picker: UllmagePickerController) {
     self.dismiss(animated: true, completion: nil)
  @objc func viewTapped(gestureRecognizer : UITapGestureRecognizer){
     view.endEditing(true)
  @objc func dateChanged(datePicker : UIDatePicker){
     let dateFormatter = DateFormatter()
     dateFormatter.dateFormat = "MM/dd/yyyy"
     dateofbirthlbl.text = dateFormatter.string(from: datePicker.date)
  }
  @IBAction func savebtn(_ sender: Any) {
     let appDelegate = UIApplication.shared.delegate as! AppDelegate
     let db = appDelegate.persistentContainer.viewContext
     let request : NSFetchRequest</br>
NSFetchRequest(entityName: "Useraccount")
     let predicate = NSPredicate(format: "email='\(emaillbl.text!)'")
     request.predicate = predicate
     do{
       let result = try db.fetch(request) as! [NSManagedObject]
       if(result.count > 0){
         let object = result[0]
          let imgData : Data = imageView.image!.pngData()! as Data;
         object.setValue(gendertxt.text!, forKey: "gender")
         object.setValue(dateofbirthlbl.text!, forKey: "dateofbirth")
         object.setValue(phonelbl.text!, forKey: "phone")
         object.setValue(imgData, forKey: "image")
         try db.save()
         let alert = UIAlertController(title: "Update Successful", message: "Your Profile Is Saved!",
preferredStyle: .alert)
         let action = UIAlertAction(title: "ok", style: .default, handler: nil)
         alert.addAction(action)
         present(alert,animated: true,completion: nil)
       }
     catch let error as NSError{
       print(error)
     }
  }
  //Gender Picker
  func createPicker() {
```

```
let picker = UIPickerView()
    picker.delegate = self
    gendertxt.inputView = picker
  }
  func numberOfComponents(in pickerView: UIPickerView) -> Int {
    return 1
  }
  func pickerView(_ pickerView: UIPickerView, numberOfRowsInComponent component: Int) -> Int {
    return gendertype count
  func pickerView(_ pickerView: UIPickerView, titleForRow row: Int, forComponent component: Int) -> String? {
    return gendertype[row]
  func pickerView(_ pickerView: UIPickerView, didSelectRow row: Int, inComponent component: Int) {
    selectedgender = gendertype[row]
    gendertxt.text = selectedgender
  }
}
contactusViewController
// contactusViewController.swift
// Final
//
// Created by ZhenXi on 01/08/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import MapKit
class contactusViewController: UIViewController {
  @IBOutlet weak var mapView: MKMapView!
  override func viewDidLoad() {
    super.viewDidLoad()
    let location = CLLocationCoordinate2DMake(2.986704, 101.792639)
    let span = MKCoordinateSpan(latitudeDelta: 0.2,longitudeDelta: 0.2)
    let region = MKCoordinateRegion(center: location, span: span)
    mapView.setRegion(region, animated: true)
    let dropPin = MKPointAnnotation()
    dropPin.coordinate = location
    dropPin.title = "New Era University College"
    mapView.addAnnotation(dropPin)
  }
}
adminloginViewController
// adminloginViewController.swift
// Final
```

```
// Created by ZhenXi on 02/08/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
class adminloginViewController: UIViewController {
   @IBOutlet weak var admintxt: UITextField!
  override func viewDidLoad() {
     super.viewDidLoad()
     // Do any additional setup after loading the view.
  }
  @IBAction func loginbtn(_ sender: Any) {
     if(admintxt.text! == "Admin185"){
       let storyboard = UIStoryboard(name: "Main", bundle: nil)
       let admintabBar = storyboard.instantiateViewController(withIdentifier: "admin") as! UITabBarController
       present(admintabBar,animated: true,completion: nil)
    }
     else{
       let alert = UIAlertController(title: "Login Fail", message: "Code incorrect", preferredStyle: .alert)
       let action = UIAlertAction(title: "ok", style: .default, handler: nil)
       alert.addAction(action)
       present(alert,animated: true,completion: nil)
    }
  }
}
UserViewRoomViewController
// UserViewRoomViewController.swift
// Final
// Created by ZhenXi on 02/08/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class UserViewRoomViewController: UIViewController {
  @IBOutlet weak var roomtypelbl: UILabel!
  @IBOutlet weak var quantitylbl: UILabel!
  @IBOutlet weak var pricelbl: UILabel!
  @IBOutlet weak var detaillbl: UITextView!
  @IBOutlet weak var imageView: UllmageView!
  var room: Room?
  override func viewDidLoad() {
     super.viewDidLoad()
```

```
roomtypelbl.text = room!.type!
     quantitylbl.text = room!.quantity.description
     pricelbl.text = room!.price.description
     detaillbl.text = room!.details!
     let imagec = room!.image
     if(imagec != nil){
       let image : Ullmage = Ullmage(data: imagec!)!
       imageView.image = image
    }
  }
  override func prepare(for segue: UIStoryboardSegue, sender: Any?) {
     if(segue identifier == "order"){
       let destination = segue.destination as! OderRoomViewController
       destination.thisroom = room
    }
  }
}
OrderRoomViewController
// OderRoomViewController.swift
// Final
// Created by ZhenXi on 02/08/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class OderRoomViewController: UIViewController {
  var thisroom: Room?
  var datePicker: UIDatePicker?
  @IBOutlet weak var roomtypelbl: UILabel!
  @IBOutlet weak var quantitylbl: UILabel!
  @IBOutlet weak var guest: UILabel!
  @IBOutlet weak var startnametxt: UITextField!
  @IBOutlet weak var daylbl: UILabel!
  @IBOutlet weak var pricelbl: UILabel!
  @IBOutlet weak var showquantity: UILabel!
   @IBOutlet weak var datetxt: UITextField!
  @IBOutlet weak var enddate: UILabel!
  @IBOutlet weak var paymentbtn: UIButton!
  @IBOutlet weak var imageView: UllmageView!
  var day : Int = 0
  var quantity : Int = 0
  override func viewDidLoad() {
     super.viewDidLoad()
     paymentbtn.isEnabled = false
     roomtypelbl.text = thisroom!.type!
     quantitylbl.text = thisroom!.quantity.description
     guest.text = thisroom!.guest.description
```

```
daylbl.text = day.description
     let imagec = thisroom!.image
     if(imagec != nil){
       let image: Ullmage = Ullmage(data: imagec!)!
       imageView.image = image
     //date picker
     datePicker = UIDatePicker()
     datePicker?.datePickerMode = .date
     datePicker?.minimumDate = Date()
     datePicker?.addTarget(self, action: #selector(OderRoomViewController.dateChanged(datePicker:)),
for: .valueChanged)
     let tapGesture = UITapGestureRecognizer(target: self, action:
#selector(OderRoomViewController.viewTapped(gestureRecognizer:)))
     view.addGestureRecognizer(tapGesture)
     datetxt.inputView = datePicker
  }
  @objc func viewTapped(gestureRecognizer: UITapGestureRecognizer){
     view.endEditing(true)
  }
  @objc func dateChanged(datePicker: UIDatePicker){
     let dateFormatter = DateFormatter()
     dateFormatter.dateFormat = "MM/dd/yyyy"
     datetxt.text = dateFormatter.string(from: datePicker.date)
     let endday = Calendar.current.date(byAdding: .day, value: day, to: datePicker.date)
     enddate.text = dateFormatter.string(from: endday!)
  }
  @IBAction func addbtn(_ sender: Any) {
     if(day != 14 && datetxt.text != ""){
       day+=1
       daylbl.text = day.description
     pricelbl.text = ((thisroom!.price * Float(day)) * Float(quantity)).description
       let endday = Calendar.current.date(byAdding: .day, value: day, to: datePicker!.date)
       let dateFormatter = DateFormatter()
       dateFormatter.dateFormat = "MM/dd/yyyy"
       enddate.text = dateFormatter.string(from: endday!)
       if(day == 0 || quantity == 0){}
         paymentbtn.isEnabled = false
       else{
         paymentbtn.isEnabled = true
    }
    else{
       if(day == 14){
          let alert = UIAlertController(title: "Max Days Reach!!", message: "Max Days Of Booking Is 14 Days",
preferredStyle: .alert)
         let action = UIAlertAction(title: "ok", style: .default, handler: nil)
         alert.addAction(action)
         present(alert,animated: true,completion: nil)
       if(datetxt.text! == ""){
```

```
let alert = UIAlertController(title: "Date is Blank!!", message: "Please Select Date First",
preferredStyle: .alert)
          let action = UIAlertAction(title: "ok", style: .default, handler: nil)
          alert.addAction(action)
          present(alert,animated: true,completion: nil)
    }
  }
   @IBAction func minbtn(_ sender: Any) {
     if(day != 0){
       day-=1
       daylbl.text = day.description
     pricelbl.text = ((thisroom!.price * Float(day)) * Float(quantity)).description
     let endday = Calendar.current.date(byAdding: .day, value: day, to: datePicker!.date)
     let dateFormatter = DateFormatter()
     dateFormatter.dateFormat = "MM/dd/yyyy"
     enddate.text = dateFormatter.string(from: endday!)
     if(day == 0 \parallel \text{quantity} == 0){
       paymentbtn.isEnabled = false
     else{
       paymentbtn isEnabled = true
     }
   @IBAction func addquantity(_ sender: Any) {
     if(quantity != 3){
       quantity+=1
       showquantity.text = quantity.description
       pricelbl.text = ((thisroom!.price * Float(day)) * Float(quantity)).description
       if(day == 0 \parallel quantity == 0){
          paymentbtn.isEnabled = false
       else{
          paymentbtn.isEnabled = true
     else{
       let alert = UIAlertController(title: "Max Quantity Reach!", message: "Max Quantity Of Rooms Booking Is 3
Rooms", preferredStyle: .alert)
       let action = UIAlertAction(title: "ok", style: .default, handler: nil)
       alert.addAction(action)
       present(alert,animated: true,completion: nil)
     }
  }
   @IBAction func minquantity(_ sender: Any) {
     if (quantity != 0) {
       quantity-=1
       showquantity.text = quantity.description
       pricelbl.text = ((thisroom!.price * Float(day)) * Float(quantity)).description
       if(day == 0 || quantity == 0){
          paymentbtn.isEnabled = false
       else{
```

```
paymentbtn.isEnabled = true
       }
    }
  }
  override func prepare(for segue: UIStoryboardSegue, sender: Any?) {
     if(segue.identifier == "payment"){
       let destination = segue.destination as! paymentViewController
       let index = pricelbl.text!.description
       let days = daylbl.text!
       destination.total = index.description
       destination.bookingroom = thisroom
       destination.day = Int16(days)
       destination.date = datetxt.text! + " To " + enddate.text!
       destination.quantity = Int16(showquantity.text!)
    }
  }
}
paymentViewController
// paymentViewController.swift
// Final
// Created by ZhenXi on 02/08/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class paymentViewController: UIViewController {
  @IBOutlet weak var totalprice: UILabel!
  var email : String = UserDefaults.standard.string(forKey: "email")!
  var bookingroom : Room?
  var total : String?
  var day: Int16?
  var date: String?
  var quantity: Int16?
  @IBOutlet weak var roomtypelbl: UILabel!
  @IBOutlet weak var daylbl: UILabel!
  @IBOutlet weak var datelbl: UILabel!
  @IBOutlet weak var quantitylbl: UILabel!
  @IBOutlet weak var ictxt: UITextField!
  @IBOutlet weak var nametxt: UITextField!
  @IBOutlet weak var ages: UITextField!
   @IBOutlet weak var phonetxt: UITextField!
  @IBOutlet weak var cvvtxt: UITextField!
  @IBOutlet weak var emaillbl: UILabel!
  override func viewDidLoad() {
     super.viewDidLoad()
```

```
totalprice.text = "RM" + total!.description
     roomtypelbl.text = bookingroom!.type!
     daylbl.text = day!.description
     emaillbl text = email description
     datelbl.text = date!.description
     quantitylbl.text = quantity!.description
   @IBAction func paybtn( sender: Any) {
     let ic = ictxt.text!
     let name = nametxt.text!
     let age = ages.text!
     let phone = phonetxt.text!
     let cvv = cvvtxt.text!
     if(ic == "" || name == "" || age == "" || phone == "" || cvv == "" ){
       let alert = UIAlertController(title: "Payment Fail", message: "Please Fill In All The Blank",
preferredStyle: .alert)
       let action = UIAlertAction(title: "ok", style: .default, handler: nil)
       alert.addAction(action)
       present(alert,animated: true,completion: nil)
     }
     else{
       let appDelegate = UIApplication.shared.delegate as! AppDelegate
       let db = appDelegate.persistentContainer.viewContext
       let entity = NSEntityDescription.entity(forEntityName: "Booked", in: db)
       let object = NSManagedObject(entity: entity!, insertInto: db) as! Booked
       object.email = emaillbl.text!
       object.day = day!
       object.ic = ictxt.text!
       object.phone = phonetxt.text!
       object.room = roomtypelbl.text!
       object.price = totalprice.text!
       object.date = datelbl.text!
       object.quantity = quantity!
       object.image = bookingroom!.image
       do{
          try db.save()
          update()
          let alert = UIAlertController(title: "Payment Successful", message: "Payment Done, Please Check Your
Booking History for details", preferredStyle: .alert)
          let action = UIAlertAction(title: "ok", style: .default, handler: backtotab(alert:))
          alert.addAction(action)
          present(alert,animated: true,completion: nil)
       catch let error as NSError{
          print(error)
     }
  }
  func update(){
     let appDelegate = UIApplication.shared.delegate as! AppDelegate
     let db = appDelegate.persistentContainer.viewContext
     let request : NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Room")
     let predicate = NSPredicate(format: "type='\((roomtypelbl.text!)\)")
     request.predicate = predicate
     do{
       let result = try db.fetch(request) as! [NSManagedObject]
```

```
if(result.count > 0){
          let object = result[0]
          let oldguantiy = object.value(forKey: "quantity") as! Int16
          let newquantity = oldquantiy - quantity!
          print(newquantity.description + "Here")
          object.setValue(newquantity, forKey: "quantity")
          try db.save()
       }
     catch let error as NSError{
       print(error)
  func backtotab(alert: UIAlertAction){
     let storyboard = UIStoryboard(name: "Main", bundle: nil)
     let userTabbar = storyboard.instantiateViewController(withIdentifier: "user") as! UITabBarController
     present(userTabbar,animated: true,completion: nil)
}
viewhistoryViewController
// viewhistroyViewController.swift
// Final
// Created by ZhenXi on 03/08/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class viewhistroyViewController: UIViewController {
  var history: Booked?
  @IBOutlet weak var roomlbl: UILabel!
  @IBOutlet weak var datelbl: UILabel!
  @IBOutlet weak var dayslblb: UILabel!
  @IBOutlet weak var totallbl: UILabel!
  @IBOutlet weak var quantitylbl: UILabel!
  @IBOutlet weak var imageView: UllmageView!
  override func viewDidLoad() {
     super.viewDidLoad()
     roomlbl.text = history!.room!
     datelbl.text = history!.date!
     dayslblb.text = history!.day.description + " Days"
     totallbl.text = history!.price!
     quantityIbl.text = history!.quantity.description + " Room"
     let image : Ullmage = Ullmage(data: history!.image!)!
     imageView.image = image
  }
```

```
adminaccountViewController
// adminaccountViewController.swift
// Final
// Created by ZhenXi on 03/08/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class adminaccountViewController: UIViewController, UIImagePickerControllerDelegate,
UINavigationControllerDelegate, UIPickerViewDelegate, UIPickerViewDataSource{
  @IBOutlet weak var adminnametxt: UITextField!
  @IBOutlet weak var imageView: UlImageView!
  @IBOutlet weak var gendertxt: UITextField!
  @IBOutlet weak var dateofbirthtxt: UITextField!
  @IBOutlet weak var phonetxt: UITextField!
  @IBOutlet weak var emailtxt: UILabel!
  var adminemail: String?
  var adminname: String?
  var gendertype = ["Male", "Female"]
  var selectedgender: String?
  var datePicker: UIDatePicker?
  override func viewDidLoad() {
    super.viewDidLoad()
    adminnametxt.text = adminname!
    createPicker()
    //onclick imageview
    let tapGestureRecognizer = UITapGestureRecognizer(target: self, action:
#selector(imageTapped(tapGestureRecognizer:)))
    imageView.isUserInteractionEnabled = true
    imageView.addGestureRecognizer(tapGestureRecognizer)
    //date picker
    datePicker = UIDatePicker()
    datePicker?.datePickerMode = .date
    datePicker?.addTarget(self, action: #selector(usereditViewController.dateChanged(datePicker:)),
for: .valueChanged)
    let tapGesture = UITapGestureRecognizer(target: self, action:
#selector(usereditViewController.viewTapped(gestureRecognizer:)))
    view.addGestureRecognizer(tapGesture)
    dateofbirthtxt.inputView = datePicker
    //core data
    let appDelegate = UIApplication.shared.delegate as! AppDelegate
    let db = appDelegate.persistentContainer.viewContext
    let request: NSFetchRequest</br>
NSFetchRequest(entityName: "Useraccount")
    let predicate = NSPredicate(format: "email='\(adminemail!)\'")
```

}

```
request.predicate = predicate
    do{
       let result = try db.fetch(request) as! [NSManagedObject]
       if(result.count > 0){
         let object = result[0]
         adminnametxt.text = object.value(forKey: "name") as! String
         emailtxt.text = object.value(forKev: "email") as! String
         gendertxt.text = object.value(forKey: "gender") as! String
         dateofbirthtxt.text = object.value(forKey: "dateofbirth") as! String
         phonetxt.text = object.value(forKey: "phone") as! String
         let imagec = object.value(forKey: "image") as? Data
         if(imagec != nil){
            let image: Ullmage = Ullmage(data: imagec!)!
            imageView.image = image
       }
    catch let error as NSError{
       print(error)
  }
  @objc func imageTapped(tapGestureRecognizer: UITapGestureRecognizer)
    let tappedImage = tapGestureRecognizer.view as! UlImageView
    if(UllmagePickerController.isSourceTypeAvailable(UllmagePickerController.SourceType.photoLibrary)){
       let imag = UllmagePickerController()
       imag.delegate = self
       imag.sourceType = UIImagePickerController.SourceType.photoLibrary;
       imag.allowsEditing = false
       present(imag, animated: true, completion: nil)
  func imagePickerController(_ picker: UllmagePickerController, didFinishPickingMediaWithInfo info:
[UIImagePickerController.InfoKey: Any]) {
    let selectedImage : UIImage = info[UIImagePickerController.InfoKey.originalImage] as! UIImage
    imageView.image=selectedImage
    self.dismiss(animated: true, completion: nil)
  }
  func imagePickerControllerDidCancel(_ picker: UllmagePickerController) {
    self.dismiss(animated: true, completion: nil)
  @IBAction func savebtn( sender: Any) {
    let appDelegate = UIApplication.shared.delegate as! AppDelegate
    let db = appDelegate.persistentContainer.viewContext
    let request: NSFetchRequest</br>
NSFetchRequest(entityName: "Useraccount")
    let predicate = NSPredicate(format: "email='\(adminemail!)'")
    request.predicate = predicate
    do{
       let result = try db.fetch(request) as! [NSManagedObject]
       if (result.count > 0) {
         let object = result[0]
         let imgData : Data = imageView.image!.pngData()! as Data;
         object.setValue(adminnametxt.text!, forKey: "name")
         object.setValue(gendertxt.text!, forKey: "gender")
         object.setValue(dateofbirthtxt.text!, forKey: "dateofbirth")
         object.setValue(phonetxt.text!, forKey: "phone")
         object.setValue(imgData, forKey: "image")
```

```
try db.save()
       let alert = UIAlertController(title: "Save Successful", message: "Data Updated!", preferredStyle: .alert)
       let action = UIAlertAction(title: "ok", style: .default, handler: nil)
       alert.addAction(action)
       present(alert,animated: true,completion: nil)
     catch let error as NSError{
       print(error)
    }
  }
  //Gender Picker
  func createPicker() {
     let picker = UIPickerView()
     picker.delegate = self
     gendertxt.inputView = picker
  }
  func numberOfComponents(in pickerView: UIPickerView) -> Int {
     return 1
  }
  func pickerView(_pickerView: UIPickerView, numberOfRowsInComponent component: Int) -> Int {
     return gendertype count
  func pickerView(_ pickerView: UIPickerView, titleForRow row: Int, forComponent component: Int) -> String? {
     return gendertype[row]
  func pickerView(_ pickerView: UIPickerView, didSelectRow row: Int, inComponent component: Int) {
     selectedgender = gendertype[row]
     gendertxt.text = selectedgender
  }
  @objc func viewTapped(gestureRecognizer: UITapGestureRecognizer){
     view.endEditing(true)
  @obic func dateChanged(datePicker: UIDatePicker){
     let dateFormatter = DateFormatter()
     dateFormatter.dateFormat = "MM/dd/yyyy"
     dateofbirthtxt.text = dateFormatter.string(from: datePicker.date)
  }
AdminSigninViewController
// AdminSIgninViewController.swift
// Final
//
// Created by ZhenXi on 05/08/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class AdminSIgninViewController: UIViewController {
```

}

```
@IBOutlet weak var emailtxt: UITextField!
  @IBOutlet weak var passwordtxt: UITextField!
  override func viewDidLoad() {
    super.viewDidLoad()
  }
  @IBAction func loginbtn(_ sender: Any) {
    let appDelegate = UIApplication.shared.delegate as! AppDelegate
    let db = appDelegate.persistentContainer.viewContext
    let request : NSFetchRequest</br>
NSFetchRequest(entityName: "Useraccount")
    let predicate = NSPredicate(format: "email = '\(emailtxt.text!)\)")
    request.predicate = predicate
    do{
       let result = try db.fetch(request) as! [NSManagedObject]
       if(result.count > 0){
         let account = result[0] as! Useraccount
         if(account.password == passwordtxt.text! && account.password == "admin"){
       UserDefaults.standard.set(emailtxt.text!, forKey: "adminemail")
       let storyboard = UIStoryboard(name: "Main", bundle: nil)
       let admintabBar = storyboard.instantiateViewController(withIdentifier: "adminlogin") as! UIViewController
       present(admintabBar,animated: true,completion: nil)
    }
    else{
            let alert = UIAlertController(title: "Fail", message: "Email Or Password is Wrong",
preferredStyle: .alert)
            let action = UIAlertAction(title: "OK", style: .default, handler: nil)
            alert.addAction(action)
            present(alert,animated: true,completion: nil)
       }
    }
    catch let error as NSError{
       print(error)
  }
Usertab2ViewController
// Usertab2ViewController.swift
// Final
// Created by ZhenXi on 29/07/2019.
// Copyright © 2019 ZhenXi. All rights reserved.
import UIKit
import CoreData
class Usertab2ViewController: UIViewController, UITableViewDelegate, UITableViewDataSource {
```

}

```
var email : String = UserDefaults.standard.string(forKey: "email")!
var array : [NSManagedObject] = []
 @IBOutlet weak var thview: UITableView!
override func viewDidLoad() {
   super.viewDidLoad()
   //toremove
   //UserDefaults.standard.removeObject(forKey: "email")
}
override func viewWillAppear(_ animated: Bool) {
   let appDelegate = UIApplication.shared.delegate as! AppDelegate
   let db = appDelegate.persistentContainer.viewContext
   let request: NSFetchRequest<NSFetchRequestResult> = NSFetchRequest(entityName: "Booked")
   let predicate = NSPredicate(format: "email='\(email.description)'")
   request.predicate = predicate
     let result = try db.fetch(request) as! [NSManagedObject]
     if(result.count > 0){
        array = result
        tbview.reloadData()
   }
   catch let error as NSError{
     print(error)
   }
}
func tableView(_ tableView: UITableView, numberOfRowsInSection section: Int) -> Int {
   return array.count
}
func tableView(_tableView: UITableView, cellForRowAt indexPath: IndexPath) -> UITableViewCell {
   let cell = tableView.dequeueReusableCell(withIdentifier: "history")
   let object = array[indexPath.row] as! Booked
   cell?.textLabel?.textColor = UIColor.white
   cell?.detailTextLabel?.textColor = UIColor.white
   cell?.textLabel?.text = "Room: \(object.room!\)"
   cell?.detailTextLabel?.text = "Date :\(object.date!)"
   let image : Ullmage = Ullmage(data: object.image!)!
   cell?.imageView?.image = image
   return cell!
}
override func prepare(for segue: UIStoryboardSegue, sender: Any?) {
   if(segue.identifier == "historydetail"){
     let destination = segue.destination as! viewhistroyViewController
     let index = tbview.indexPathForSelectedRow
     destination.history = array[index!.row] as! Booked
  }
}
```