

# Hotel Order Web Application

17-637 Web Application Development  
Team 8 - Project Specification

Team 8  
Jiaqi Liu  
Jie Zhu  
Ron Zhu

# Background



# Background

Hilton



# Project Backlog

## Registration and Log in

- **Registration:** The user inputs the information to register before using the web application.
- **Log in & out:** The user can log in and out.

(After logging in)

## Make Order

- **Display Available RoomList:** Users will input the searching keyword ('requirement', like num\_people, start\_date, end\_date ...), and the model returns a list of available rooms type to the page
- **Room Selection:** Users can select a room on the Order Page. Once a room is selected, the 'shopping cart' will refresh and update the newest total amount.
- **Room Details:** Users can view room details by clicking the URL of the room title on the RoomList, they will be directed to the Page with the room's detailed information.

## Payment

- **Checkout:** After clicking the checkout button, it will be directed to the Payment Page. Users can select the payment method.

## Manage Order

- **View Orders:** Users can view their orders, including previous orders and processing orders, on the Order Management Page.
- **Cancel Order:** Users can see the order details and cancel the order.

# Sprint Backlog – Sprint #1

Product Owner: Ron Zhu

Andrew ID: haorong2

All

- Established the models.py. Database design and implementation.

Jiaqi Liu

- Established the frontend HTML file of the 'Make Order Page' and the backend function.
- Function realization – 'Display Available Room(type) List' at the Make Order Page
- Function realization – 'Updated Order Cart ' at the Make Order Page

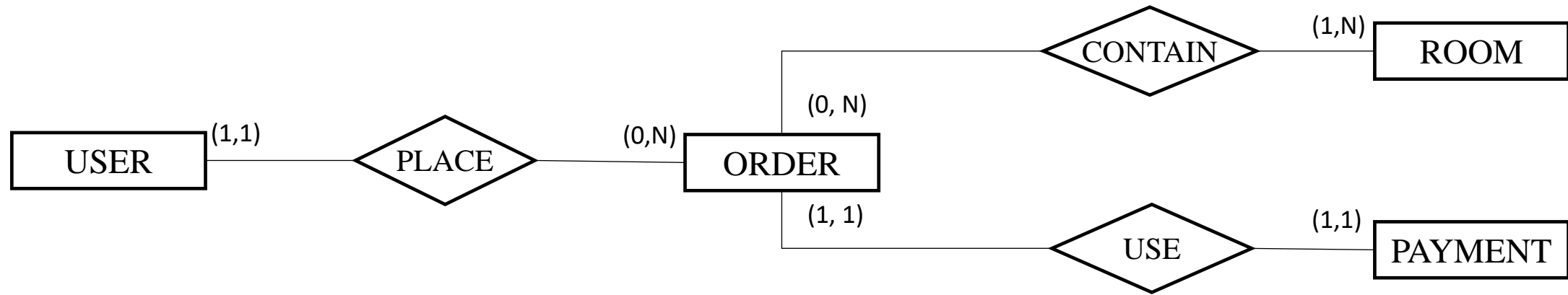
Jie Zhu

- Established the Manage Order Page and the backend function.
- Function realization – 'View Orders
- Function realization – 'Cancel Orders'
- Try to implement the available third-party payment interface and 'plug in' the application

Ron Zhu

- Established the frontend HTML files (Home Page, Room Details Page, User Profile Page, Payment Successful/Failed Page)
- Function realization – 'Registration' + 'log in & out'
- Function realization – 'Modified User Profile'

# Models



**USER** (user\_id, username, password, first\_name, last\_name, phone, email, age, gender, user\_type, national\_id)

**ORDER** (order\_id, room\_id@, start\_date, end\_date, price, customer\_id@, order\_status, payment\_id@ )

**ROOM** (room\_id, room\_type, room\_capacity, occupancy, room\_num, room\_price, direction, )

**PAYMENT** (payment\_id, total\_amount)

## Assumption:

A user can register and might not make any orders yet.

A user can check out an order with multiple rooms. One order\_id can be associated with multiple room\_id.

We don't accept divided payments. Order will be done by only one payment method.



# Models - Codes

```
1  from enum import Enum
2  from django.contrib.auth.models import User
3  from django.core.validators import MinValueValidator
4  from django.db import models
5
6  class Client(models.Model):
7      user = models.ForeignKey(User, on_delete=models.PROTECT)
8      age = models.PositiveIntegerField()
9      gender = models.CharField(null=True, blank=True)
10     tele = models.CharField(max_length=20)
11
12     class Payment(models.Model):
13         class Status(models.TextChoices):
14             Unpaid = 'Unpaid'
15             Paid = 'Paid'
16             Canceled = 'Canceled'
17
18         price = models.FloatField(validators=[MinValueValidator(0)],)
19         status = models.CharField(
20             max_length=8,
21             choices=Status.choices,
22             default=Status.Unpaid,
23         )
24
```

```
25     class Room(models.Model):
26         class Type(models.TextChoice):
27             Standard = 'Standard',
28             Deluxe = 'Deluxe',
29             Connecting = 'Connecting',
30             Suite = 'Suite',
31         class Direction(models.TextChoices):
32             North = 'North',
33             South = 'South',
34             East = 'East',
35             West = 'West',
36         type = models.CharField(
37             max_length = 10,
38             choices=Type.choices,
39             default=Type.Standard,
40         )
41         occupancy = models.PositiveIntegerField(validators=[MinValueValidator(1)])
42         roomNum = models.CharField(max_length=5)
43         direction = models.CharField(
44             max_length=12,
45             choices=Direction.choices,
46             default='All'
47         )
48         price = models.FloatField(validators=[MinValueValidator(0)],)
49
50     class Order(models.Model):
51         roomList = models.ForeignKey(Room, on_delete=models.PROTECT)
52         client = models.ForeignKey(Client, on_delete=models.PROTECT)
53         payment = models.ForeignKey(Payment, on_delete=models.PROTECT)
54         startTime = models.DateField(null=True, blank=True)
55         endTime = models.DateField(null=True, blank=True)
```

# Pages – Log in Page


Welcome Back to the xxxHotel!


Register


Username:

Password:

Log in Button









# Pages – Registration Page

Welcome to the xxxHotel Family!

Log in

Username:

Password:

Password2:

Email:

Name:

Register Button

# Pages – Home Page

Home	Reservation	View Orders	Username Log out
Welcome!!!			
<div>Picture Album</div> <div><div><div></div><div></div><div></div><div></div><div></div></div></div>			
<div>Hotel Introduction</div> <div><div>Contact</div><div>About Us</div></div>			

# Pages – Make Order Page

Home	Reservation	View Orders	Username Log out		
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Number of guests Textfield

Start date

End date

Search Button

	Type	Capacity	Description	Price	Quantity
<input checked="" type="checkbox"/>	<a href="#">Single</a>				
<input checked="" type="checkbox"/>	<a href="#">Double</a>				
<input type="checkbox"/>	<a href="#">Triple</a>				
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					

Single×1      \$120

Double×1      \$100

Total Amount:      \$220

Check out Button

# Pages – Room Details Page

Home	Reservation	View Orders	Username Log out
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Picture

Description

Return Button

# Pages – Payment Page

Third-party Payment Processing Page...

# Pages – Process Successfully or Failed Page

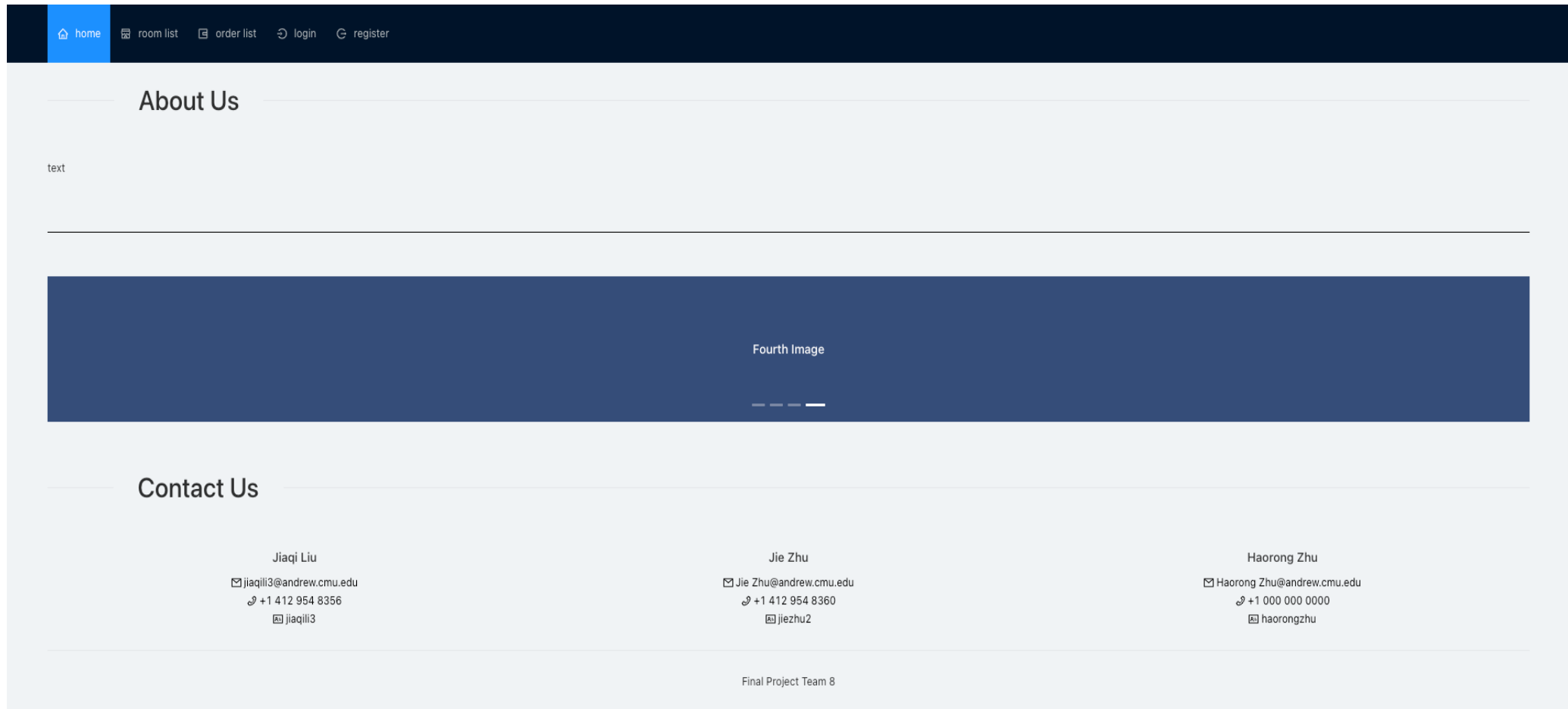
Home	Reservation	View Orders	Username Log out
Your order was finished..../ fail to verify payment....			

# Pages – Manage Order Page

Home	Reservation	View Orders	Username Log out	
Order id	Order Status			
		Cancel Button		
		Cancel Button		
		Cancel Button		



# Unfinished Demo ...



# Thank you

Team 8 - Hotel Order Web Application

Jiaqi Liu, Jie Zhu, Ron Zhu