

Project specification

Web Application Development Team 1
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1. Product Owner:

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2. Product Backlog

- Register function
New customers can register a new account to use this Yummy application. Also, users may also choose to log in using their Google account. To register, users need to type in their first name, last name, password, username, and phone number.
- Login function
Customers can log in using their username and password. After logging in, users will be automatically directed to the menu page, where they can place an order or reserve a table or just browse the menu.
- Reservation function
Customers can reserve a table after typing in the number of people in the group, reservation time, and date. After making a reservation, the admin user (host) will receive a message about the reservation details.
- Order function
If the customers choose to order, there are two buttons where they can choose to take out or dine in. If the customer selected dine-in, the page will prompt the user to enter the table number. After submitting the table number, the website will redirect the user to the order page. Customers can add a dish to their order by clicking the “+” button and clicking the “favorite” button to add the dish to their favorite list under the logged-in user identity
- View dish detail
Customers can check the detailed information about the specific dish. Users are allowed to make comments under the dishes, add the dishes to their order or use the “favorite” button to collect the dishes.
- Check out function
Customers can view their order summary, including the quantity, unit price, and total price, and send the order to the restaurant. Users on this page could modify the quantity of dishes they ordered or remove dishes they do not want.

3. First Sprint Backlog

Task	People in charge of this task
Create models and forms	All four members
Register and login function	Yanyu Chen
UI - Home page and Menu page	Yuxuan Wu and Xin Wang
UI - Reserve page and Dish page	Yanyu Chen
UI - Option page and Summary page	Kylie Hsieh

4. Implementation of Models

Please see the appendix screenshots for detailed implementations of Django models

Model	Description
Profile	This model is for saving customer information, including customer name and phone number.
Category	This model represents the category that a dish belongs to, including appetizers, meat, vegetable, soup, dessert, and snacks.
Food	This model saves all the dishes in a restaurant, including dish name, price, description, calories, is the dish spicy or not, and is the dish vegan food or not.
Comment	This model saves customers' comments for each dish.
FoodSet	This model saves the dish and its corresponding quantity for an order that a customer placed
Order	This model is for saving customers' orders.
Table	This model saves the table information in the restaurant, including the related orders, the occupied customer, and open time.
Reservation	This model saves the customers' reservation information.

4. HTML mockups

Login Page

Yummy!

[Register](#) [Login](#)

Login

Username:
Password:

Submit

Register Page

Yummy!

[Register](#) [Login](#)

Register

Username:
Password:
Confirm Password:
First Name:
Last Name:
Phone Number:

Submit

Home page

Yummy!

[Register](#) [Login](#)

Team 1 restaurant

We have the best Chinese cuisine here!

Appetizer



Loaded with cherry tomatoes, red onions, chicken and more with a bright lemony flavor!

Menu page

Vegetable



A healthy vegetables dish with light and refreshing taste.

Favorite +

20\$



A popular dish from Sichuan, offering you a special and spicy experience.

Favorite +

20\$

Meat



A Beijing dish with roasted duck meat and crispy skin wrapped in a thin crepe.



Cubed pork deep-fried until golden brown, then add sweet and sour sauce.



Thin Sliced Pork Belly, Leek, Red Pepper, and Black Bean.

Dish detail page

Yummy!

[b.b](#)

[Logout](#)

Cucumber Salad 🥒



Loaded with cherry tomatoes, red onions, chickpeas and more, with a bright, lemony flavor!

300kcal

\$20.00

Favorite +

Comments:

This is so delicious! - Yanyu Chen

Reservation page

Yummy!

b.b

[Logout](#)

Reserve Your Table

Enjoy your food

Step 1: find a table

Date:
Time:
#people:

[Find](#)

Step 2: your details

First Name:
Last Name:
Phone Number:
Special Comment:

[Reserve](#)

Option page

Yummy!

b.b

[Logout](#)

Team 1 restaurant

Is this order take-out or dine in?

[Take Out](#) [Dine In](#)

Please enter your table number if you are dining in: [Submit](#)

Order summary page

Yummy!



b.b

[Logout](#)

Cart

[Menu](#)

Table 1

Image	Dish Name	Quantity	Price	
	Fried Pork Dumplings	<input type="text" value="1"/>	\$10	Remove
	Scallion Pancakes	<input type="text" value="1"/>	\$15	Remove

Appendix: Django Models

```
1 from django.db import models
2 from django.contrib.auth.models import User
3
4
5 class Profile(models.Model):
6     user = models.OneToOneField(User, default=None, on_delete=models.PROTECT)
7     phone_number = models.CharField(max_length=200, editable=True, blank=True)
8
9
10 class Category(models.Model):
11     name = models.CharField(max_length=500)
12
13
14 class Food(models.Model):
15     name = models.CharField(max_length=500)
16     price = models.FloatField()
17     description = models.CharField(max_length=500)
18     picture = models.ImageField()
19     content_type = models.CharField(max_length=50)
20     category = models.ForeignKey(Category, on_delete=models.PROTECT)
21     calories = models.FloatField()
22     # 1 for spicy and 0 for non-spicy
23     is_spicy = models.BooleanField(default=False)
24     is_vegetarian = models.BooleanField(default=False)
25
26
27 class Comment(models.Model):
28     text = models.CharField(max_length=500)
29     creation_time = models.DateTimeField()
30     creator = models.ForeignKey(User, on_delete=models.PROTECT)
31     post_under = models.ManyToManyField(Food, related_name="comments")
32
33
34 # handle quantities of different foods
35 class FoodSet(models.Model):
36     food = models.ForeignKey(Food, on_delete=models.PROTECT)
37     quantity = models.IntegerField()
38
39
40 class Order(models.Model):
41     foods = models.ManyToManyField(FoodSet, related_name="orders")
42     customer = models.ForeignKey(User, on_delete=models.PROTECT)
43     order_time = models.DateTimeField()
44     # whether the food is take out or not
45     is_takeout = models.BooleanField(default=False)
46     is_paid = models.BooleanField(default=False)
47     total_price = models.FloatField()
48
49
50 class Table(models.Model):
51     orders = models.ManyToManyField(Order, related_name="table")
52     customer = models.ForeignKey(User, on_delete=models.PROTECT)
53     open_time = models.DateTimeField()
54
55 class Reservation(models.Model):
56     num_customers = models.IntegerField(blank=False)
57     table = models.ForeignKey(Table, on_delete=models.PROTECT)
58     first_name = models.CharField(max_length=200, editable=True, blank=False)
59     last_name = models.CharField(max_length=200, editable=True, blank=False)
60     phone_number = models.CharField(max_length=200, editable=True, blank=False)
61     comment = models.CharField(max_length=200, editable=True, blank=True)
62
```