

Real-World Problem

- People new to the area or recent grads lack an easy way to find fun, local restaurants
- No way to meet other foodies!
- Small businesses struggle to compete against the trendy chains and get their name out there





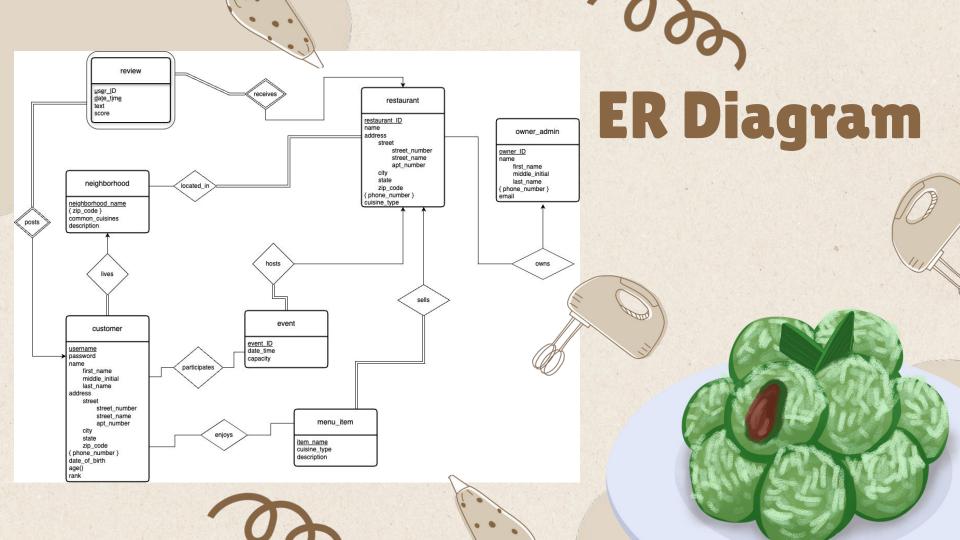






Restaurants can host events with special discounts

explore the Boston restaurant scene



Key Features

```
CREATE TABLE IF NOT EXISTS user (

user_id INTEGER PRIMARY KEY AUTOINCREMENT,

username TEXT NOT NULL UNIQUE,

password TEXT NOT NULL,

role TEXT CHECK(role IN ('customer', 'owner')) NOT NULL,

is_logged BOOLEAN NOT NULL DEFAULT 0

1);
```

- Changes to the schema as we built out our product
- One user table
 - Users can be customer or owners
 - Different privileges
 - Owners manage restaurants
 - Customers leave reviews







Database Schema

```
CREATE TABLE restaurant (
           restaurant_ID INTEGER PRIMARY KEY,
          name TEXT NOT NULL,
           street_number TEXT NOT NULL,
           street_name TEXT NOT NULL,
           apt_number TEXT,
           city TEXT NOT NULL,
           state TEXT NOT NULL,
           zip_code TEXT NOT NULL,
11
           cuisine_type TEXT,
12
          FOREIGN KEY (zip_code) REFERENCES neighborhood_zip(zip_code)
13
      );
15
       CREATE TABLE restaurant_phone (
17
           restaurant_ID INTEGER,
          phone_number TEXT,
19
          PRIMARY KEY (restaurant_ID, phone_number),
          FOREIGN KEY (restaurant_ID) REFERENCES restaurant(restaurant_ID),
          CHECK (phone_number LIKE '___ -_ ')
21
22
      );
```



```
CREATE TABLE owner admin (
25
          owner ID INTEGER PRIMARY KEY,
          first_name TEXT NOT NULL,
26
          middle_initial TEXT,
27
28
          last_name TEXT NOT NULL,
29
          email TEXT NOT NULL UNIQUE
30
      );
31
      CREATE TABLE owner_phone (
32
33
          owner_ID INTEGER,
34
          phone_number TEXT,
          PRIMARY KEY (owner_ID, phone_number),
35
          FOREIGN KEY (owner_ID) REFERENCES owner_admin(owner_ID),
36
37
          CHECK (phone_number_LIKE '_____')
38
      );
39
40
      CREATE TABLE event (
41
          event_ID INTEGER PRIMARY KEY,
42
          date_time DATETIME,
43
          capacity INTEGER CHECK (capacity > 0)
44
      );
45
```

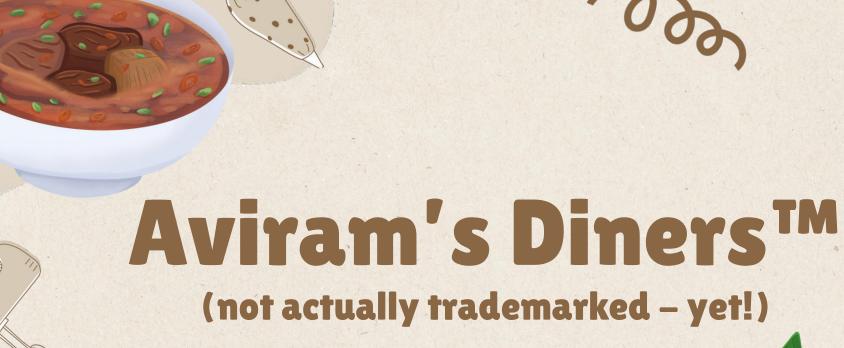






```
CREATE TABLE menu item (
47
           restaurant ID INTEGER,
           item_name TEXT,
           cuisine_type TEXT,
           description TEXT,
           PRIMARY KEY (restaurant_ID, item_name),
52
           FOREIGN KEY (restaurant_ID) REFERENCES restaurant(restaurant_ID)
53
      );
54
55
       CREATE TABLE review (
56
           user ID TEXT,
57
           date_time DATETIME,
58
          text TEXT,
59
           score REAL CHECK (score BETWEEN 0.0 AND 5.0),
           PRIMARY KEY (user_ID, date_time),
61
           FOREIGN KEY (user_ID) REFERENCES customer(username)
62
      );
63
       CREATE TABLE neighborhood (
           neighborhood name TEXT PRIMARY KEY.
           common cuisines TEXT,
           description TEXT
       );
69
       CREATE TABLE neighborhood_zip (
71
           neighborhood_name TEXT,
72
           zip code TEXT NOT NULL,
73
           PRIMARY KEY (neighborhood_name, zip_code),
           FOREIGN KEY (neighborhood_name) REFERENCES neighborhood(neighborhood_name)
75
      );
```

```
CREATE TABLE customer (
78
          username TEXT PRIMARY KEY,
79
          password TEXT NOT NULL CHECK (LENGTH(password) >= 8),
80
          first name TEXT NOT NULL,
          middle initial TEXT,
81
82
          last_name TEXT NOT NULL,
83
          street_number TEXT NOT NULL,
84
          street_name TEXT NOT NULL,
85
          apt number TEXT,
          city TEXT NOT NULL,
86
87
          state TEXT NOT NULL,
88
          zip_code TEXT NOT NULL,
89
          date_of_birth DATE,
          FOREIGN KEY (zip_code) REFERENCES neighborhood_zip(zip_code),
91
          CHECK (zip_code >= '02108' AND zip_code <= '02467')
92
93
      CREATE TABLE customer phone (
          username TEXT.
95
96
          phone_number TEXT,
          PRIMARY KEY (username, phone_number),
          FOREIGN KEY (username) REFERENCES customer(username),
          CHECK (phone_number LIKE '___-_') -- Replace this with regex in application code
99
```



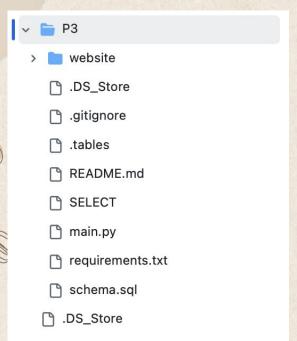


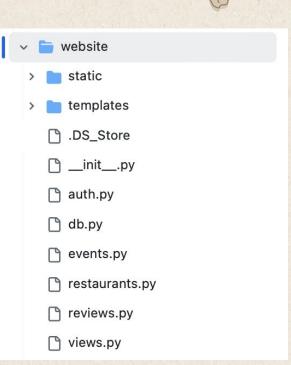


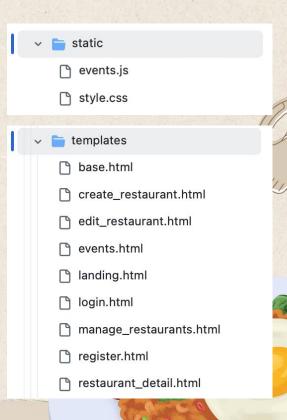




File Organization









```
@auth.route("/register", methods=["GET", "POST"])
56
57 V
      def register():
                                                                                                 auth.py
          if request.method == "POST":
58
59
              username = request.form.get("username")
              password = request.form.get("password")
60
              role = request.form.get("role")
61
              verification = request.form.get("verification")
62
63
              if role == "owner" and verification != current_app.config['VERIFICATION_CODE']:
64
                  return "Wrong verification code", 400
65
66
              conn = get db connection()
67
68
              cursor = conn.cursor()
69
              cursor, execute(
70
                  "INSERT INTO user (username, password, role, is_logged) VALUES (?, ?, ?, ?)",
                  (username, password, role, 1)
71
72
73
              # Get the user id of the inserted user
              user id = cursor.lastrowid
74
                                                                       def create app():
              conn.commit()
76
              conn.close()
                                                                            app = Flask(__name__)
77
78
                                                                            app.secret_key = "mysecretkey"
              # Set user ID in session
79
                                                                            app.config['VERIFICATION_CODE'] = "foodies"
              session['user_id'] = user_id
80
81
82
              return redirect(url_for('auth.landing_page'))
          return render_template("register.html")
83
84
```

Further Implementations

Event suggestions based on past activity

Social networking features - users can

create groups, check activity feeds

Loyalty programs

 Include details about different Boston neighborhoods and their unique cuisines







