Database design

FoodOptions
{food_name (primary key), food_type}

FoodPreferences
{student_name, dietary_type, favorite_food}

FoodWaste
{entry_id, date_served, food, meal, waste_amount}

FoodOptions.food_name is a foreign key for FoodPreferences.favorite_food
FoodOptions.food_name is a foreign key for FoodWaste.food

Database design in Django

```
from django.db import models

class FoodOption(models.Model):
  food_name = models.CharField(max_length = 200)
  def __str__(self):
        return self.food_name
  veg = models.BooleanField()
  vegan = models.BooleanField()
  gluten_free = models.BooleanField()

class FoodPreference(models.Model):
    student_name = models.CharField(max_length = 200)
    def __str__(self):
        return self.student_name
    is_vegetarian = models.BooleanField()
    is_vegan = models.BooleanField()
    favorite_food = models.ForeignKey(FoodOption, on_delete=models.CASCADE)

class FoodWaste(models.Model):
    date_served = models.DateTimeField("date")
    def __str__(self):
        x = str(self.date_served.date()) + " " + self.food.food_name + " " + self.meal
        return x
    food = models.ForeignKey(FoodOption, on_delete=models.CASCADE)
    meal = models.CharField(max_length = 20)
    waste_amount = models.IntegerField(default = 0)
```