Team:

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Introduction

Theme: food waste and mitigation!

Description:

Our team has developed a Django app that focuses on the crucial issue of food waste and its mitigation. Our app provides an innovative solution to reduce food waste by enabling users to manage the Restaurant, Recipe, and Manu datasets with ease. The main functionality of the app is to perform CRUD operations on the dataset using the building database. Our app comprises the following features:

- A Home page that provides an overview of the website and its purpose.
- A Restaurant page that enables users to add, edit, update, and delete restaurant data.
- A Recipe page that allows users to add, edit, update, and delete recipe data.
- A Manu page that provides users with the ability to perform CRUD operations on the manu dataset like adding new manu to the restaurants.

Our app provides an efficient way to manage food waste, and the intuitive user interface makes it easy for users to navigate the site and perform CRUD operations. The use of Django app ensures the app is robust, scalable, and easy to maintain, making it an ideal solution for managing food waste data.

Workflow:

The first step in the entire development process is to create the Django app, and for that, we need to run the following set of commands. But before creating the actual app, we create the Python virtual environment with the help of the following command:

virtualenv env

env\Scripts\activate

After successfully creating the virtual environment, we created the Django app using the following set of commands:

django-admin startproject assignment

python manage.py startapp myapp

To start the Django application, use the following command:

python manage.py runserver

Now, our app is successfully running at the following link:

http://127.0.0.1:8000/

Structure of our assignment

>assignment

>assignment

>urls.py

>myapp

>static

>templates

>all html files

>views.py

>manage.py

Rendering the html page

Since we have created four HTML files, the next step is to render those HTML files. For this purpose, we have created a view in the view.py file and added a URL to the urls.py file.

In short, we have a total of three models:

• Restaurant

• Recipe

• Manu

To perform CRUD operations on the above datasets, we have the following views:

For Restaurant:

- Add
- Edit
- Update
- Delete

For Recipe:

- Add_recipe
- Edit_recipe
- Update_recipe
- Delete_recipe

For Manu:

- Add_manu
- Edit_manu
- Update_manu
- Delete_manu

Testing:

During the development process, we implemented rigorous quality assurance measures to ensure the reliability and robustness of our Django website. We conducted unit testing to validate the functionality and usability of our Django app.

Version Control and Collaboration:

With a team of four people, we utilized GitHub as our version control system to streamline collaboration. Continuous pushes to the main branch on GitHub facilitated seamless integration and collaboration.

Effectiveness of our software development process:

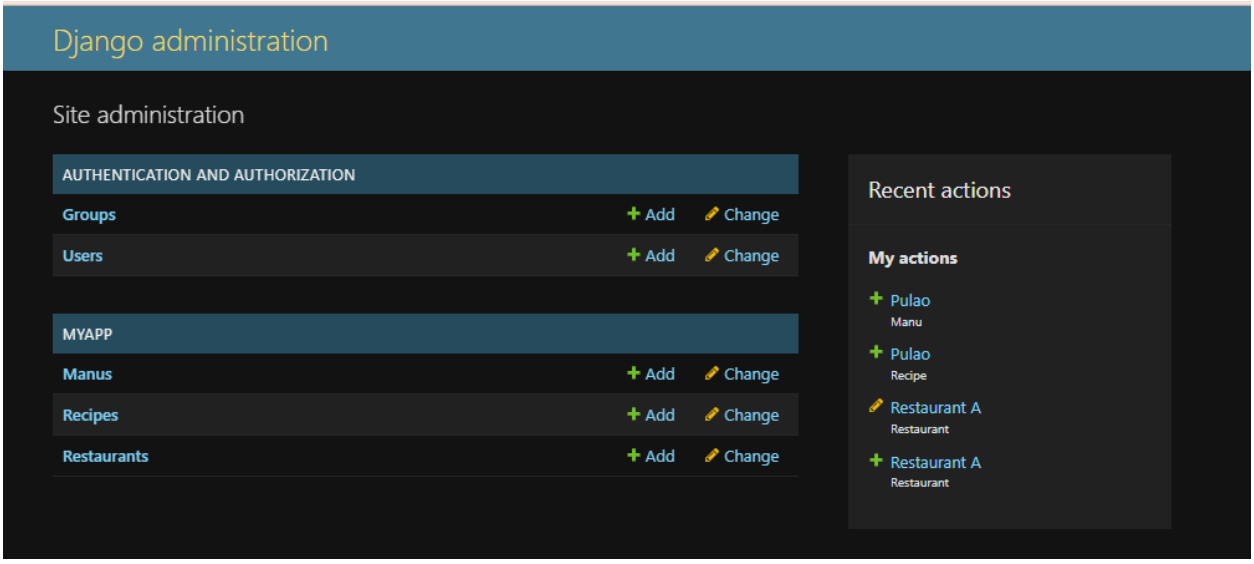
The effectiveness of our software development process was evident through the successful delivery of a functional Django website within the allocated timeframe. Our team consistently met project milestones and timelines, ensuring that we fulfilled the requirements outlined for the website. Overall, our software development process demonstrated its effectiveness in delivering a high-quality solution for food waste management.

UI:

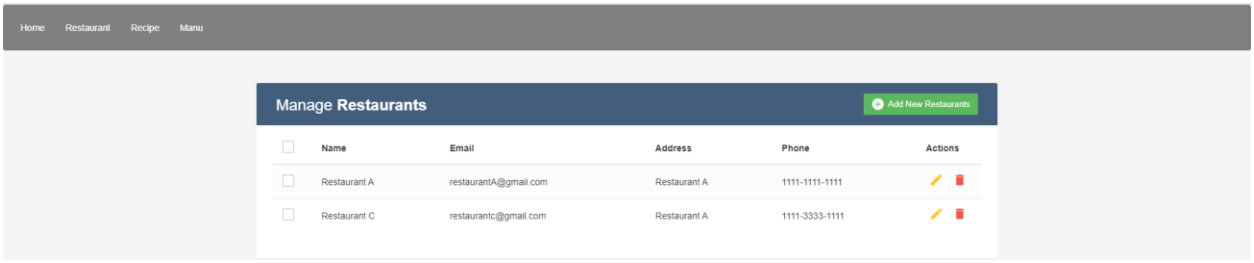
We have the following URLs in the URL pattern that control the entire CRUD operation.

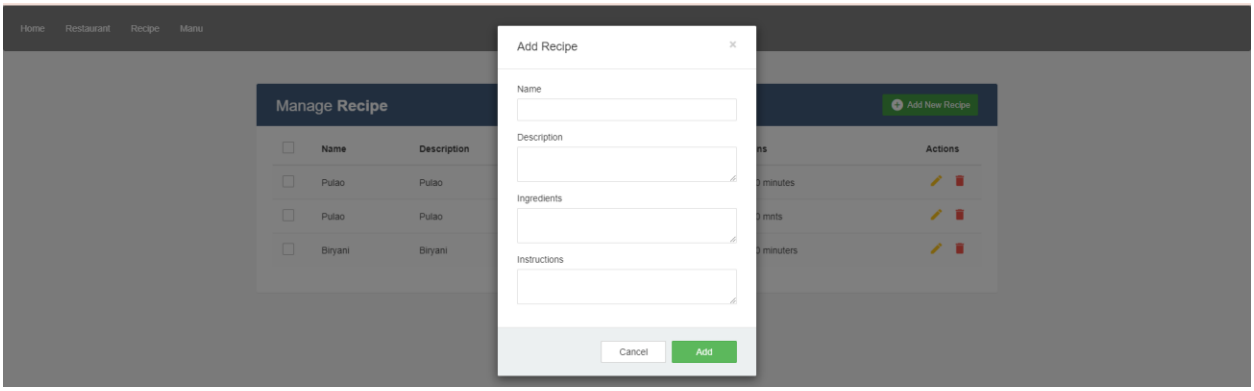
```python
from django.contrib import admin
from django.urls import include, path
from myapp import views

urlpatterns = [
    path('admin/', admin.site.urls),
    path('', include('myapp.urls')),
    path('', views.home, name='home'),
    path('operation/', views.operation, name='operation'),
    path('app/', views.app, name='app'),
    path('add', views.ADD, name='add'),
    path('edit', views.EDIT, name='edit'),
    path('update/<str:id>', views.UPDATE, name='update'),
    path('delete/<str:id>', views.DELETE, name='delete'),
    path('recipe/', views.recipe, name='recipe'),
    path('add_recipe', views.ADD_recipe, name='add_recipe'),
    path('edit_recipe', views.EDIT_recipe, name='edit_recipe'),
    path('update_recipe/<str:id>', views.UPDATE_recipe, name='update_recipe'),
    path('delete_recipe/<str:id>', views.DELETE_recipe, name='delete_recipe'),
    path('manu/', views.manu, name='manu'),
    path('add_manu', views.ADD_manu, name='add_manu'),
    path('edit_manu', views.EDIT_manu, name='edit_manu'),
    path('update_manu/<str:id>', views.UPDATE_manu, name='update_manu'),
    path('delete_manu/<str:id>', views.DELETE_manu, name='delete_manu'),
]
```

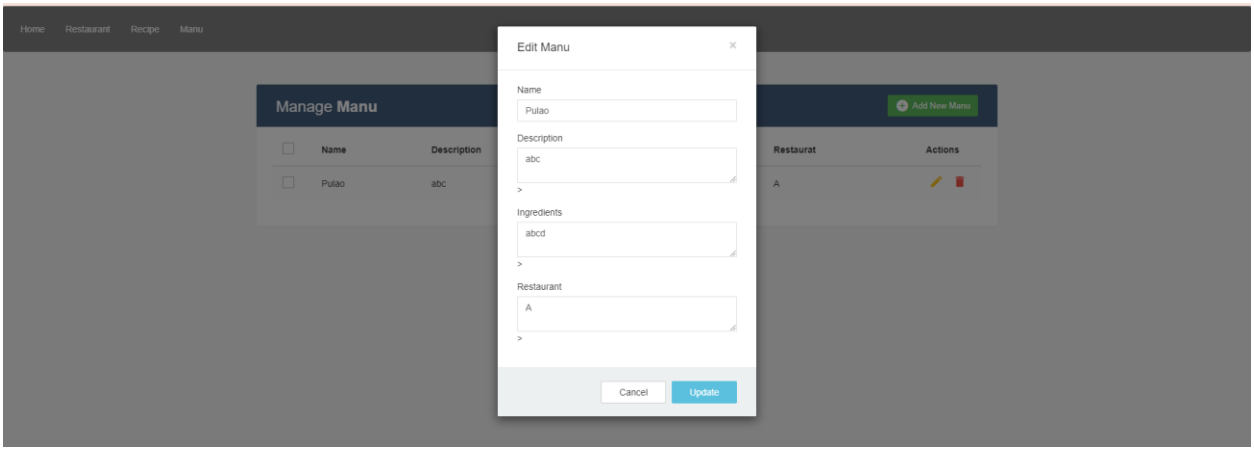
Following are some snapshot of frontend

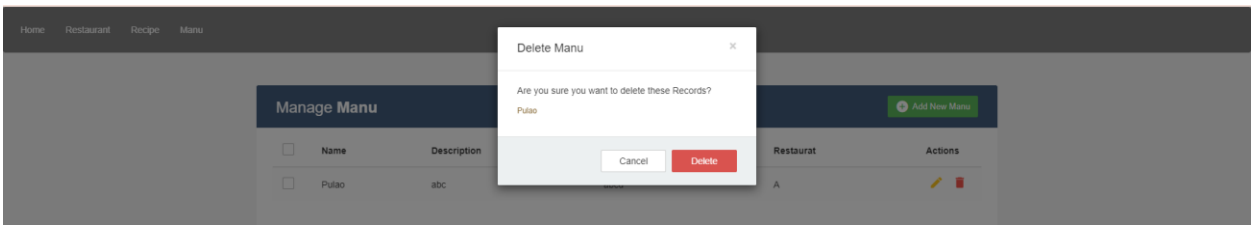



Home
Restaurant
Recipe
Manu
Welcome to Food Waste & Mitigation!
Name
Roll Number
Email
Dheeraj raj
S352704
Dheerajsamtani@gmail.com
Shahzaib Sial
S352614
Shahzaib.sial17@gmail.
Mustafa raza
S347504
mustafa.razking@gmail.com
Muzafar Shah
s343107
Muzafarshah157@gmail.com


Home
Restaurant
Recipe
Manu
Manage Restaurants
Add New Restaurants
Name
Email
Address
Phone
Actions
Restaurant A
restaurantA@gmail.com
Restaurant A
1111-1111-1111
Restaurant C
restaurantc@gmail.com
Restaurant A
1111-3333-1111


Home
Restaurant
Recipe
Manu
Manage Recipe
Add New Recipe
Name
Description
Actions
Pulao
Pulao
Pulao
Pulao
Biryani
Biryani
Add Recipe
Name
Description
Ingredients
Instructions
Cancel
Add


Home
Restaurant
Recipe
Manu
Manage Manu
Add New Manu
Name
Description
Restaurat
Actions
Pulao
abc
A
Edit Manu
Name
Pulao
Description
abc
Ingredients
abcd
Restaurant
A
Cancel
Update


Home
Restaurant
Recipe
Manu
Manage Manu
Add New Manu
Name
Description
Restaurat
Actions
Pulao
abc
A
Delete Manu
Are you sure you want to delete these Records?
Pulao
Cancel
Delete