

README

About Project

PrimeNest is a centralized platform that streamlines housing transactions between apartments near educational institutions and students. Currently, while each housing agency operates its own website, there's a notable lack of a unified portal that aggregates multiple apartment listings specifically tailored for students residing near Champaign.

To address this gap, PrimeNest was developed to feature apartments from various agencies, enabling **tenants** to compare prices, locations, reviews, and ratings seamlessly. Additionally, the platform provides **agencies** with tools to display their profiles, post and manage listings, including the ability to adjust timings and pricing effectively.

Prepare the Environment (Optional)

First, ensure that you have Python and pip installed on your system. Then, open your terminal or command prompt and run the following command:

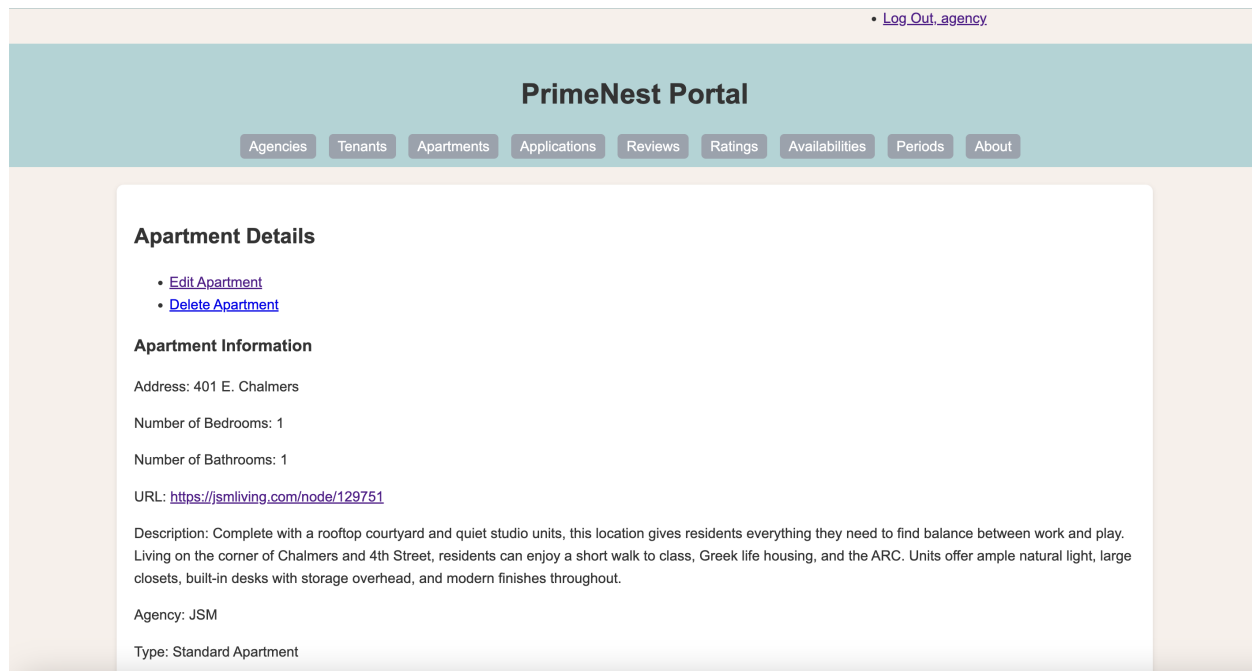
```
pip install -r requirements.txt
```

Run the project

This command will start the Django development server.

```
python manage.py runserver [Port Number]
```

Sample of User Interface



Authentication and Permissions

To support diverse user needs, PrimeNest implements a structured authentication and permission system. We categorize our users into several groups based on their roles and responsibilities within the platform:

1. **SuperUser:** Full access across all functions, capable of viewing and managing all aspects of the platform.
2. **ci_agency:** Agency staff can view, add, change, and delete their agency details and manage listings extensively including creating, updating, and deleting apartments, applications, and availability data.
3. **ci_user:** Typical tenants who can view agency, apartment, and application data. They can apply for apartments but cannot alter agency or apartment listings.
4. **ci_viewer:** Individuals who can view listings and details but cannot make changes or apply, suitable for users just browsing.

5. **tenant:** Similar to ci_user, tenants can view apartments, apply, and rate or review them based on their experience.
6. **agency:** Users belonging to an agency with rights to manage their listings and data.
7. **coworker:** An internal role for users assisting agencies in managing operations without full administrative rights.

This system ensures that each user interacts with PrimeNest in a way that respects their data access needs and security levels. Here is a detailed view of the permissions assigned to each group:

- **ci_user:** Primarily has view permissions.
- **ci_agency:** Can view, add, change, and delete entries related to agency operations and apartment management.
- **ci_viewer:** Restricted to viewing all data without any modification rights.

Username /Group	Password	Active	Staff	Superuser	Group ci_user	Group ci_agency	Group ci_viewer
tester	{iSchoolUI}	X	X	X			
sysadmin	{iSchoolUI}	X	X	X			
tenant	{iSchoolUI}	X	X		X		
agency	{iSchoolUI}	X	X			X	
coworker	{iSchoolUI}	X	X				X

User Groups of PrimeNest

Permission/Group	ci_user	ci_agency	ci_viewer	SuperUser
Period				
View	X	X	X	X
Add		X		X
Change		X		X
Delete		X		X
Agency				
View	X	X	X	X
Add		X		X
Change		X		X
Delete		X		X
Tenant				
View	X	X	X	X
Add	X			X
Change	X			X
Delete	X			X
Application				
View	X	X	X	X
Add	X			X
Change	X			X
Delete	X			X
Apartment				
View	X	X	X	X
Add		X		X
Change		X		X
Delete		X		X
Rating				
View	X	X	X	X
Add	X			X
Change	X			X
Delete	X			X
Review				
View	X	X	X	X
Add	X			X
Change	X			X
Delete	X			X
Availability				
View	X	X	X	X
Add		X		X
Change		X		X
Delete		X		X

Permissions for user Groups of PrimeNest

Testing Instructions

The test data has been integrated into the project. For testing purposes, it is recommended to log in as the superuser, labeled as **'tester'**.

Other Relevant Information

For additional information, please refer to the 'doc' folder, which includes details on the UML diagrams and table designs.