Implement Bulit-in Permissions

Tuesday, February 27, 2024 10:55 AM

Purpose

Learn how to implement role-based access control permissions

Scope

Covers the following topics:

- Updating model attributes
- Creating groups in

Procedure

Step 1: In the *models.py* file of you django app - import the user model class from Django authentication library

- `from django.contrib.auth.models import User`

Step 2: Write a "user" (or any other name you'd like to give it) attribute to the model you want to give permission to

- `user = models.OneToOneField(User, null=True, on_delete=models.CASCADE)`

```
class Organization(models.Model):
    user = models.OneToOneField(User, null=True, on_delete=models.CASCADE)
```

Step 3: Migrate model changes to database

- `python manage.py makemigrations`
- `python manange.py migrate`

Step 4: In the forms.py file, create a form for user creation

```
class CreateUserForm(UserCreationForm):
    class Meta:
        model = User
        fields =['username', 'email', 'password1', 'password2']
```

Step 5: In views.py create the view to be rendered for creation of the

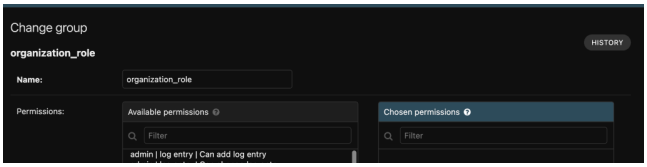
```
def registerPage(request):
Click to collapse the range.
    teUserForm()

    if request.method =='POST':
        form = CreateUserForm(request.POST)
        if form.is_valid():
            user = form.save()
            username = form.cleaned_data.get('username')
            group = Group.objects.get(name='organization_role')
            user.groups.add(group)
            organization = Organization.objects.create(user=user,)
            organization.save()

            messages.success(request, 'Account was created for ' + username)
            return redirect('login')

    context = {'form': form}
    return render(request, 'registration/register.html', context)
```

Step 6: From the admin page of your app, create a group for your



Resources

Step by step model updating and how to control from terminal	https://permify.co/post/rbac-in-django/
Concept explanations	https://theswed.se/implementing-permissions-and-user-roles-in-django-4/
Implementing control through it's own models	https://medium.com/@subhamx/role-based-access-control-in-django-the-right-features-to-the-right-users-9e93feb8a3b1
What is it	https://www.digitalguardian.com/blog/what-role-based-access-control-rbac-examples-benefits-and-more