

# Roles, Groups & Permissions Mapping

## Core Idea

- **Role** = logical label stored on the user (Reader / Editor / Journalist)
- **Group** = Django auth construct that holds permissions
- **Permissions** = what actions a user is allowed to perform

Each **role maps to one group**, and each group has specific permissions.

## Roles → Groups Mapping

Role	Django Group
Reader	Readers
Editor	Editors
Journalist	Journalists

When a user is created:

- Their **role field** is set
- They are automatically added to the **matching group**

## Permission Mapping per Group

### 1. Reader Group

**Purpose:** Consume content only

#### Permissions

- view\_article
- view\_newsletter

#### Restrictions

- Cannot create, edit, or delete articles
- Cannot approve content

## 2. Editor Group

**Purpose:** Moderate and publish content

### Permissions

- view\_article
- change\_article
- delete\_article
- view\_newsletter
- change\_newsletter
- delete\_newsletter
- approve\_article (custom permission)

### Restrictions

- Cannot create articles
- Cannot subscribe to content

## 3. Journalist Group

**Purpose:** Create content

### Permissions

- add\_article
- view\_article
- change\_article
- delete\_article
- add\_newsletter
- view\_newsletter
- change\_newsletter
- delete\_newsletter

### Restrictions

- Cannot approve articles
- Cannot edit other journalists' content

# Custom Permission (Required)

## approve\_article

This permission:

- Is assigned **only to Editors**
- Controls who can approve articles
- Is checked in views/templates before approval actions

# Enforcement Points in the App

## 1. Model Level

- Use Meta.permissions for custom permissions
- Use ForeignKey to restrict ownership

## 2. View Level

- @login\_required
- @permission\_required
- DRF permission classes for API endpoints

## 3. Template Level

- Hide buttons/actions based on permissions
- Prevent UI access even if URL is known

# Automatic Group Assignment Logic

When a user is created:

- If role = Reader → add to Readers group
- If role = Editor → add to Editors group
- If role = Journalist → add to Journalists group

This can be implemented using:

- Django signals (post\_save)
- Or overridden save() method