Assignment-2: Advanced Features for Event Management System

Objective:

Extend the Event Management System built in **Assignment-1** by implementing user authentication, role-based access control (RBAC), email-based account activation, Django signals, and RSVP functionality.

Requirements & Instructions:

1. Authentication (10 Marks)

- Implement **user authentication** features:
    - User signup with username, email and password, first_name, last_name.
    - Login and logout functionality.

2. Role-Based Access Control (RBAC) (30 Marks)

- Define roles for users:
    - **Admin**: Full access to all features. Only the admin can change roles, create groups, delete groups, and delete participants.
    - **Organizer**: Can create, update, and delete **events** and categories
    - **Participant**: Replace Participant model with **User model**. Participants can only view events.
- Use **Django Groups** to assign roles to users.
- Restrict access to views based on roles using **decorators.**

3. RSVP System (25 Marks)

- Participants must be able to **RSVP to events** they are interested in.
- Store RSVP responses in a **ManyToMany relationship** between Users and Events.
- Ensure that a user **cannot RSVP more than once** for the same event.
- Add a **confirmation email** when a user RSVPs for an event.
- Provide a way for users to **view events they have RSVP'd to** in their **Participant Dashboard**.

4. Email Activation (15 Marks)

- Upon signup, send an **activation email** to the user.
- Include a **secure activation link** in the email.
- Prevent unactivated users from logging in.
- Use Django's **default_token_generator** for activation.

5. Django Signals & Media Files(15 Marks)

- Automate processes using **signals**:
  - Send an **email notification** to participants when they RSVP'd an event
  - Send account **activation email** to registered email
- Add ImageField For Event Model. Must give a d**efault value with a default image**

6. Maintain User-Specific Dashboards (5 Marks)

- Redirect users to their respective dashboards after login:
  - **Admin Dashboard**: Manage all events, participants, and categories.
  - **Organizer Dashboard**: Manage only **events and categories**.
  - **Participant Dashboard**: View **events they have RSVP'd to**.

Grading Breakdown:

Section	Marks
Authentication	10
Role-Based Access Control (RBAC)	30
RSVP System	25
Email Activation	15
Django Signals	15
User-Specific Dashboards	5
Total	**100 Marks**

Submission Guidelines:

1. **Branch Create:** Create a new git branch named `assignment-2` and commit all changes here
2. **Code Submission**: Push your Django project to **GitHub** and provide the repository `assignment-2` branch link.
   a. Command to push specific branch `git push origin assignment-2`
3. **Live Link:** Deploy your project and provide the live link
   a. Checkout to main branch `git checkout main`
   b. Merge to main: `git merge assignment-2`
   c. Push to main branch: `git push origin main`
   d. Then deploy it using **manual deploy** on render

Assignment Deadlines:

- If you submit by **February 5, 2025, at 11:59 PM**, your total mark will be **100**.
- If you submit by **February 7, 2025, at 11:59 PM**, your total mark will be **90**.
- If you submit **after February 7, 2025, at 11:59 PM**, your total mark will be **80**.