

Comprehensive Blog API with DRF

You are tasked with building a sophisticated blogging API with the following requirements:

1. User Authentication, Roles, and Permissions:

- Implement JWT (JSON Web Token) authentication for users.
- Create three user roles:
 - Admin (Full access)
 - Author (Can create, update, and delete their own posts)
 - Reader (Can only read posts)
- Implement fine-grained permissions to control access to various API endpoints.

2. Enhanced Blog Post Model:

- Augment the blog post model with the following advanced features:
 - **Title:** The title of the blog post.
 - **Content:** The main textual content of the blog post.
 - **Publication Date:** Track and display the publication date of each blog post.
 - **Categories:** Introduce support for categorizing blog posts.
 - **Attachments:** Enable the inclusion of attachments (e.g., PDFs, documents) associated with a blog post.
 - **Images:** Implement support for including images linked to a blog post, enhancing visual content.

3. API Endpoints (Class based view):

- Create a flexible endpoint that allows CRUD operations for blog posts:
- **List Blog Posts:** Retrieve a list of all blog posts.
- **Retrieve Blog Post:** Retrieve details of a specific blog post.
- **Create Blog Post:** Allow users to create a new blog post.
- **Update Blog Post:** Enable users to update the content, title, and other details of an existing blog post.
- **Delete Blog Post:** Provide functionality to delete a blog post.

- Implement filtering options for the list endpoint:
 - Filter by author(s)
 - Filter by publication date range
 - Filter by categories or tags
- Implement search functionality:
 - Allow users to search for blog posts based on keywords in the title and content.

4. Comments and Likes:

- Add a model for comments on blog posts.
- Users should be able to add comments to a blog post.
- Implement a like/dislike feature for blog posts.

5. Error Message Translation (Arabic):

- Implement a system for translating error messages specifically into Arabic.
- Ensure that error messages are provided in Arabic for a more localized user experience.

6. Documentation:

- Create comprehensive API documentation using tools like Swagger or DRF's built-in documentation.

7. Testing:

- Write thorough unit tests for one of the implemented functionalities.
- Include tests for edge cases and error handling.

Bonus:

- Deploy the project on PythonAnywhere or a similar platform.
- Implement a notification system:
 - Users should receive notifications when a new comment is added to their post.
 - Readers can subscribe to receive notifications for new posts or updates to specific categories.