

# **Blog Platform with AI Content Moderation**

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A Django-based web application with AI-driven content moderation

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# Project Overview

A blog platform enabling users to create, view, and manage posts

Features AI-powered content moderation to flag inappropriate content

Built with Django, Bootstrap, and Python

Focus on user experience, security, and scalability

# Problem Statement

Regex issues in moderation (fixed empty string matches)

Template URL errors (e.g., 'admin\_dashboard' not found)

Form field compatibility (e.g., TagField errors)

Media file handling for avatars and post images

Git push issues due to large files (resolved with filter-repo)

# Class Diagram



# Content Moderation

OpenAI based content moderation

Flagging system with confidence scores (e.g., 0.9)

Custom moderation dashboard (/admin/moderation/)

Stores flagged content with reasons and user details

# Slug uniqueness

The base slug is generated by the following code :

```
base_slug = normalize_and_slugify(title)
max_length = 60
if len(base_slug) > max_length:
    base_slug = truncate_to_last_word_boundary(base_slug, max_length)
```

then the following code is used for uniqueness verification loop:

```
candidate_slug = base_slug
counter = 1
while slug_exists_in_database(candidate_slug) do:
    if updating_existing_post and candidate_slug == post.current_slug:
        return candidate_slug # Allow post to keep its own slug
    suffix = "-" + str(counter)
    if length(base_slug) + length(suffix) > max_length:
        # Truncate base to fit suffix
        truncated = base_slug[0:(max_length - length(suffix))]
        truncated = remove_trailing_hyphen(truncated)
        candidate_slug = truncated + suffix
    else:
        candidate_slug = base_slug + suffix
    counter = counter + 1
return candidate_slug
```

# Lessons Learned

Importance of precise implementation of OpenAI moderation API for moderation

Need for thorough URL pattern validation

Effective use of Django forms and widgets

Value of responsive design for user accessibility

Git best practices for managing project size

# Conclusion

A robust blog platform with AI moderation

Enhanced user experience and admin functionality

Scalable foundation for future features

Ready for further development and deployment

Thank you for your attention!