

## **News Application**

This is a documentation for a news application that will allow readers to view and read articles published by publishers and independent journalists.

### **Functional Requirements**

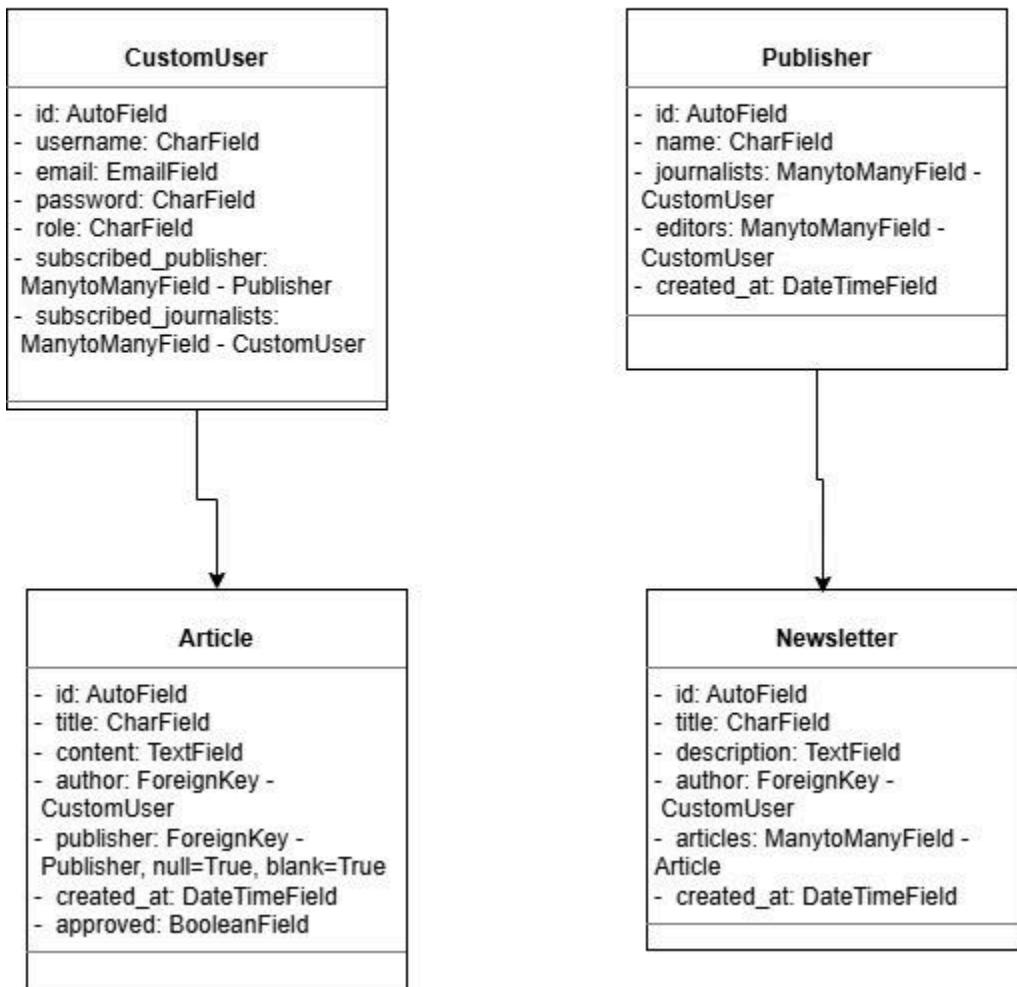
1. All users (readers, journalists, and editors) can register, login and logout.
2. Readers can subscribe to publishers and independent journalists.
3. Journalists can create, edit, and delete their own articles.
4. Journalists can create and manage newsletters.
5. Editors can view, edit, approve and delete articles.
6. Editors can manage newsletters.
7. When an article is approved, an email alert is sent to subscribers and a tweet is posted to Twitter/X
8. The approval logic is handled directly in the approval view function.
9. Readers can view approved articles and newsletters.
10. Build RESTful APIs that will allow the retrieval of articles by publishers and journalists.
11. Third-party API clients can authenticate and subscribe to the API.

### **Non-Functional Requirements:**

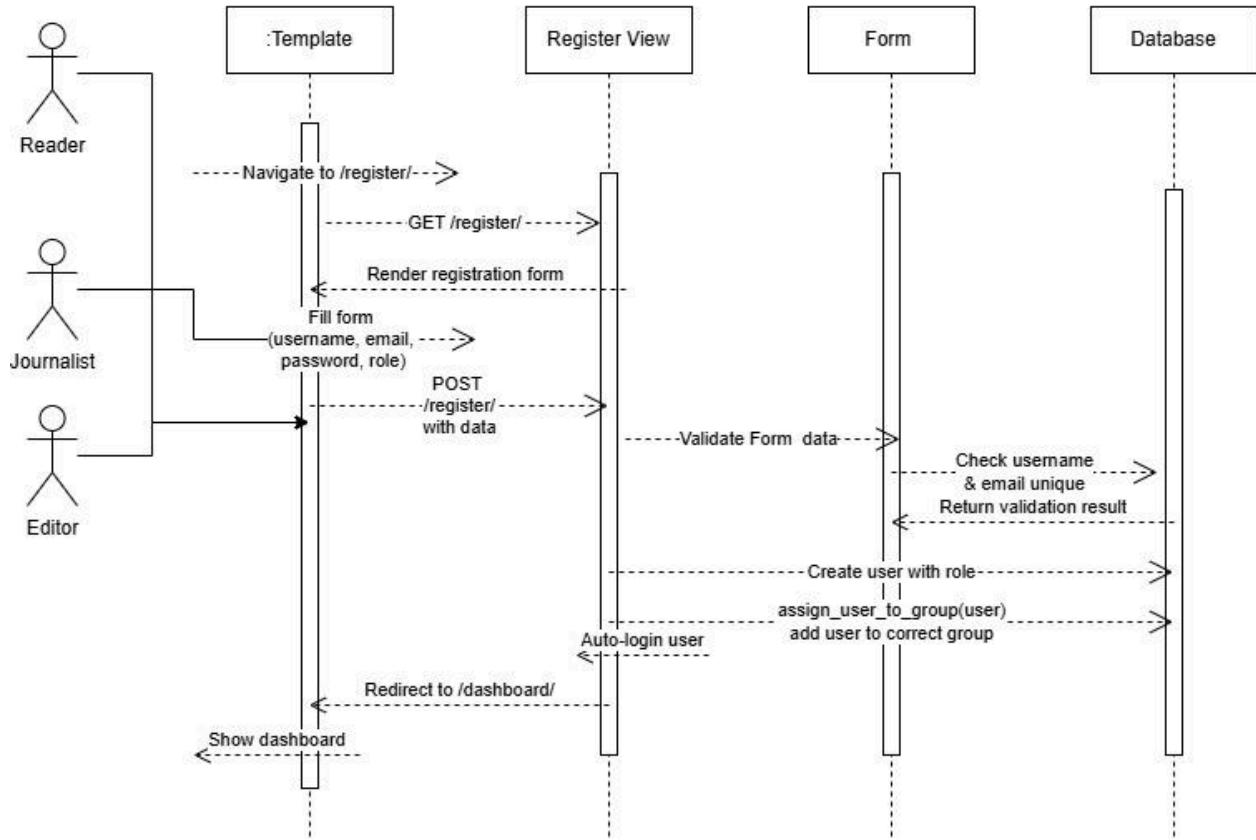
1. Token-based authentication for API access.
2. Code must follow PEP 8 - well formatted and indented
3. We will be using MariaDB as the database backend.
4. We will be writing automated unit tests for the RESTful API using Django's testing framework.
5. Code must be readable - descriptive variable names and adding comments on the code.
6. Code must be modular - functions performing specific tasks.
7. Error handling - validate user input and use exception handling.

## Entity Relationship Diagram

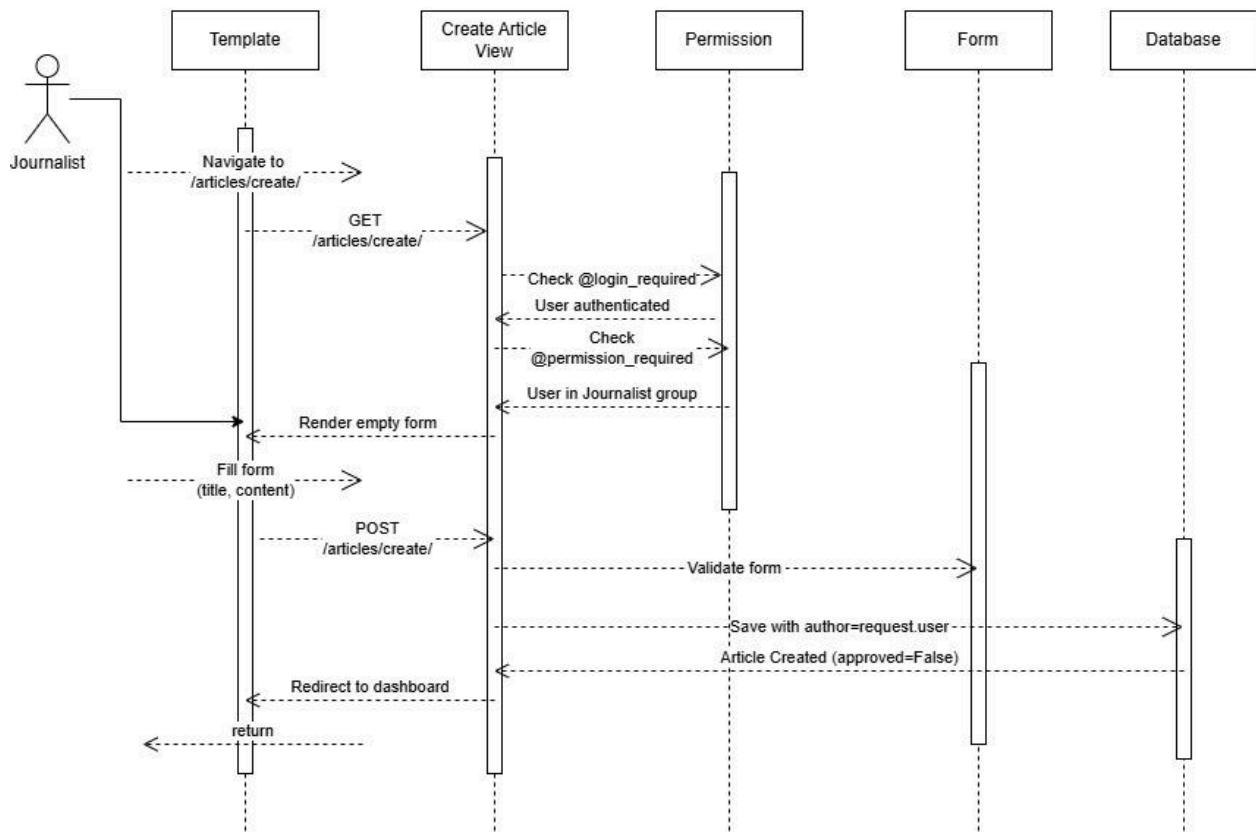
Model Diagram - News Application



### Sequence Diagram - User Registration



**Sequence Diagram - Article Creation**



**Sequence Diagram - Article Approval**

