**Case Study: News Publishing System**

**Objective:**

Develop a menu-based console application to assess your proficiency in Core Java, MySQL, and JDBC. The application will simulate a news publishing system for a communications and media company, allowing users to manage news categories, articles, and comments.

**Functionalities:**

1. **News Category Management:**
   * Add a new news category
   * View news category details
   * Update news category information
   * Delete a news category
2. **Article Management:**
   * Add a new article to a category
   * View article details
   * Update article information
   * Delete an article
3. **Comment Management:**
   * Add a comment to an article
   * View comments for an article
   * Update a comment
   * Delete a comment

**Database Schema:**

* **Category Table:**
  + category\_id (Primary Key)
  + name
  + description
* **Article Table:**
  + article\_id (Primary Key)
  + category\_id (Foreign Key references Category Table)
  + title
  + content
  + author
  + publish\_date
* **Comment Table:**
  + comment\_id (Primary Key)
  + article\_id (Foreign Key references Article Table)
  + user\_id (Foreign Key references User Table)
  + content
  + comment\_date
* **User Table:**
  + user\_id (Primary Key)
  + username
  + email
  + date\_of\_birth
  + registration\_date

**Requirements:**

* Develop a menu-based console application using Core Java.
* Use JDBC for interactions with the MySQL database.
* Implement menu options for managing news categories, articles, and comments.
* Ensure that the application updates comment statuses and handles user, category, and article data efficiently.
* Handle exceptions effectively and provide user-friendly error messages.
* Ensure the application code is clean, well-documented, and follows standard coding conventions.

**Submission:**

* Submit the complete source code along with a README file that provides setup and usage instructions.
* Share your project by uploading it to a public GitHub repository.
* Provide the link to the GitHub repository to the coaches.