**QT Practical Test for Software Developers (Interns)**

**Task:** Develop a simple blog application

**Duration:** 6-8 hours

**Technologies Recommended:**

* **Database:** MariaDB or PostgreSQL
* **Backend:** Java Spring Boot/Node JS/Python(Django)
* **Frontend:** React JS or Angular

**Requirements:**

**Backend:**

1. User Authentication:
   * Implement user registration and login.
   * Use Django's built-in user model.
2. Blog Post Management:
   * Create models for Post and Comment.
   * A Post should have a title, content, author, and timestamps.
   * A Comment should be linked to a Post, have content, author, and timestamps.
3. API Endpoints:
   * CRUD operations for Post and Comment.
   * Authentication endpoints (login, register).

**Frontend:**

1. Authentication:
   * Create login and registration forms.
   * Store authentication tokens securely.
2. Blog Post Management:
   * Display a list of posts.
   * View a single post with its comments.
   * Add, edit, and delete posts (only if authenticated).
   * Add comments to a post (only if authenticated).

**Submission Requirements:**

* Submit the complete source code of the application, including any configuration files.
* Provide a SQL script to create the necessary database tables and insert sample data.
* Include a README file with instructions on how to set up and run the application.
* Document the authentication process, including how to add new users and assign roles.

**Evaluation Criteria**

**Code Quality:**

* Clear and concise code with proper comments.
* Proper use of Git for version control.

**Functionality:**

* All required features are implemented correctly.
* Proper error handling.

**User Interface:**

* Clean and user-friendly interface.
* Responsive design.

**Documentation:**

* Clear instructions on how to set up and run the project.
* Brief explanation of the project's structure and components.

Good luck, and we look forward to your innovative solutions!