Backend (Laravel + MySQL)

1. Set Up the Project:

o Install Laravel via Composer:

```
composer create-project --prefer-dist laravel/laravel subscription-platform
```

• Set up your .env file to configure the database connection.

2. Database Configuration:

• Create the necessary tables using migrations:

```
php artisan make:migration
create_subscriptions_table php artisan
make:migration create posts table
```

• Define the schema in the migration files and run the migrations:

```
php artisan migrate
```

3. Models and Relationships:

• Create models for Subscription and Post:

```
php artisan make:model
Subscription php artisan
make:model Post
```

• Define relationships in the models.

4. API Endpoints:

• Create controllers for handling subscriptions and posts:

```
php artisan make:controller
SubscriptionController php artisan
make:controller PostController
```

o Define routes in routes/api.php for subscribing to websites and creating posts.

5. Email Notifications:

- o Set up email configuration in .env.
- Use Laravel's Mail facade to send emails.
- Implement queues using Laravel's queue system to handle email sending in the background:

```
php artisan
queue:table php
artisan
queue:work
```

6. Commands and Scheduling:

• Create Artisan commands to schedule email sending:

```
php artisan make:command SendEmails
```

o Schedule the command in app/Console/Kernel.php.

7. Test-Driven Development (TDD):

• Write tests for all features using Laravel's testing tools:

```
php artisan make:test
SubscriptionTest php artisan
make:test PostTest
```

Frontend (Vue.js)

1. Set Up the Project:

• Initialize a Vue.js project within the Laravel application:

```
npm install vue@next
npm install vue-
router@next npm
install axios
```

2. Create Components:

- **Subscription Form:** A form to allow users to subscribe to websites.
- **Post Form:** A form to create new posts.

3. API Integration:

• Use axios to connect the frontend with the backend APIs.

4. UI Enhancements:

• Use a CSS framework like Tailwind CSS for styling.