Assignment for AI/ML Specialist Position

Task Description:

Develop and integrate AI models for automated content generation and personalized recommendations for an e-commerce platform. Your solution should include:

1. Content Generation:
- Use OpenAI GPT (or another language model) to generate product descriptions based on provided product attributes.
- Create a script to input product attributes and output generated descriptions.

2. Personalized Recommendations:
- Develop a recommendation system using TensorFlow or PyTorch that suggests products to users based on their browsing history and preferences.
- Create a dataset with user interactions (e.g., views, clicks, purchases) to train the recommendation model.

3. A/B Testing Framework:
- Implement an A/B testing framework to evaluate the performance of different content generation strategies or recommendation algorithms.
- Include methods for tracking and analyzing user interactions with generated content or recommendations.

4. Mock API Integrations:
- Create mock APIs to simulate interactions with external services like user data retrieval and product databases.
- Ensure the mock APIs provide realistic data for testing your AI models.

5. Documentation and Testing:
- Provide clear documentation on how to set up and run your scripts.
- Include unit tests to ensure the correctness of your AI models and integration.

Submission Guidelines:

- **Deadline**: Please submit your completed task by *June 27, 2024, 5:00 PM IST*.

- **Format**: Submit your solution as a GitHub repository link.

- **Email**: Send the repository link to [info@myindiaa.com].

Evaluation Criteria:

Your submission will be evaluated based on the following criteria:

1. Content Generation (1-10): Effectiveness of using AI to generate product descriptions.

2. Personalized Recommendations (1-10): Accuracy and relevance of the recommendation system.

3. A/B Testing Framework (1-10): Implementation and usability of the A/B testing framework.

4. Mock API Integrations (1-10): Correctness and completeness of the mock API implementations.

5. Documentation and Testing (1-10): Clarity of documentation and robustness of testing.