TASK LIST

Task List for Data Science Intern at **Skill Spire Technologies**:

Level Easy

1. Explore and clean a dataset using Python libraries like Pandas and NumPy. Perform basic data preprocessing tasks such as handling missing values, removing duplicates, and standardizing data.

2. Visualize the distribution of a dataset using matplotlib or seaborn in Python. Create histograms, scatter plots, and box plots to understand the data's characteristics.

3. Implement a simple linear regression model using scikit-learn to predict a target variable based on one or more predictor variables.

4. Perform sentiment analysis on a collection of text data using Python libraries like NLTK or TextBlob. Analyze the sentiment polarity of each text document.

Level Medium

1. Build a classification model using scikit-learn to classify images in a dataset. Use techniques like SVM (Support Vector Machines) or Random Forests for classification.

2. Create a recommendation system using collaborative filtering techniques such as user-based or item-based recommendation. Implement the recommendation algorithm using Python and evaluate its performance.

Level Hard

1. Develop a deep learning model using TensorFlow or PyTorch to classify images in a dataset. Build a convolutional neural network (CNN) architecture and train it on the dataset.

Note: Remember, the intern needs to select any one level to complete based on their understanding and comfort level.

TASK SUBMISSION GUIDELINES

To submit your task, please follow the guidelines below:

1. **Select Your Task Level:** Choose one task level from the provided options - Easy (Level 4), Medium (Level 3), or Hard (Level 2).

2. **Complete the Task:** Implement the chosen task using Python programming language. Ensure that your code meets the requirements specified in the task list.

3. **Record Your Work:** Record a video showcasing your code implementation and the output generated by your program. Clearly demonstrate how your code functions and the results it produces.

4. **LinkedIn Video Upload:** Upload the recorded video on your LinkedIn profile, mentioning Skill Spire Technologies as the company you are interning with. Include relevant hashtags such as #SkillSpireTech and any others you find appropriate.

5. **GitHub Repository Creation:** Create a GitHub repository named "SSTech_[YourID]", where "[YourID]" should be replaced with your unique identifier (e.g., SSTech_001). Upload all your task code files to this repository.

6. **Submission Link:** By the last week of your internship, we will provide a submission link where you can submit your GitHub repository link and LinkedIn video link.

7. **Final Submission:** Submit your GitHub repository link and LinkedIn video link through the provided submission link by the specified deadline.

8. **Review and Feedback:** Our team will review your submission and provide feedback accordingly.

If you have any questions or need clarification on any aspect of the task submission process, please don't hesitate to reach out to your supervisor.