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| **Step 1** | **Set the goals** |
| **1.1** | **Go through the Overview of the Mentorship** |
|  | * Understand the project requirements and expectations. |
|  | * Familiarize yourself with LSTM and its applications in stock market prediction. |
| **1.2** | **Visualize the final output required for the Mentorship** |
|  | * A trained LSTM model that can predict stock prices based on historical data. |
|  | * Visualization of the prediction results, such as plots of actual vs. predicted prices. |
| **1.3** | **Write down the skills that you will learn by the completion of the Mentorship** |
|  | * Time series analysis |
|  | * Deep learning, specifically LSTM (Long Short-Term Memory) networks |
|  | * Data preprocessing techniques for time series data |
|  | * Model evaluation and performance metrics |
| **1.4** | **Add the learnings you want by the completion of the Mentorship** |
|  | * Understanding how to handle and preprocess stock market data |
|  | * Ability to build and tune LSTM models for time series forecasting |
|  | * Skills to visualize and interpret the results of the predictions |
| **Step 2** | **Describe the major constraints** |
| **2.1** | **Add the major constraints in completing the mentorship** |
|  | * Ensuring the availability of quality historical stock market data |
|  | * Handling the complexity of LSTM networks and tuning hyperparameters |
| **2.2** | **Breakdown the constraints into smaller sections** |
|  | * Data collection: Where to source reliable stock market data |
|  | * Data preprocessing: Handling missing values, normalizing data |
|  | * Model building: Choosing the right architecture and hyperparameters |
|  | * Model evaluation: Selecting appropriate performance metrics |
| **2.3** | **Get assistance on overcoming the constraints in the Mentor Sessions** |
|  | * Seek guidance on best practices for data preprocessing and model tuning |
|  | * Discuss challenges and get feedback on model performance and improvements |
| **2.4** | **Add resources (online links, videos, etc.) to resolve constraints** |
|  | * Online courses on time series analysis and LSTM (e.g., Coursera, Udemy) |
|  | * Research papers and articles on stock market prediction using LSTM |
|  | * Documentation and tutorials on libraries like TensorFlow and Keras |
| **2.5** | **In case you are not able to locate a resource you can request the mentor to provide the resource** |
|  | * If needed, ask the mentor for specific resources or references related to stock market prediction and LSTM networks. |
| **2.6** | **You can update the workplan regularly, add newer constraints and resources** |
|  | * As the project progresses, update the workplan with new constraints and resources as needed |

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| **Step 3** | **Set the schedule for completing the Menternship** |
| **3.1** | **Add the start date for the Mentorship** |
|  | * Start date: [Add your start date] |
| **3.2** | **Check the deadlines for the components and add reminders on your calendar** |
|  | * Data collection and preprocessing: [Add deadline] |
|  | * Model building and training: [Add deadline] |
|  | * Model evaluation and tuning: [Add deadline] |
|  | * Final report and presentation: [Add deadline] |
| **3.3** | **Mark the deadlines as they are completed** |
|  | * Keep track of your progress and mark each task as completed once done |
| **3.4** | **Technical Mentorships require approx. 25 working hours & non-technical mentorships require 15-20 working hours to complete** |
|  | * Plan your schedule accordingly to allocate sufficient time for each phase of the project. |