

## **Topic 1 Journal Step-by-step Guide**

### **Using GitHub for Your Learning Journal**

**Objective:** To familiarise yourself with GitHub, an essential tool for data engineers, by creating and maintaining a learning journal throughout the course. This will solidify your learning and help you apply your new knowledge.

#### **Stage A: Account Creation and Exploration (15 minutes)**

1. Go to [github.com](https://github.com) and create a new account by providing your personal details and choosing a unique username
2. Once your account is set up, take some time to explore GitHub's interface and various sections
3. Navigate to the "Repositories" section, where you'll be able to create and manage your code repositories
4. Check out the "Explore" section to discover popular repositories, topics, and resources on GitHub

#### **Step 2: Setting Up Directory Structure (10 minutes)**

1. In the "Repositories" section, click on the "New" button to create a new repository
2. Give your repository a descriptive name, such as "Learning-Journal"
3. Choose to make your repository "Public" or "Private" based on your preference
4. Once created, navigate to your repository's main page
5. Click on the "Add file" button and then "Create new file"
6. In the "Name your file..." field, type in the name of the first folder you want to create, followed by a forward slash (e.g., "1. Data Fundamentals/")
7. Repeat this process to create separate folders for all modules, ensuring a clear and organized structure

#### **Step 3: Creating a Markdown File (20 minutes)**

Within the "1. Data Fundamentals" folder, click on the "Add file" button and then "Create new file"

In the "Name your file..." field, provide a descriptive name for your Markdown file, such as "Data-Fundamentals-Notes.md"

In the file editor, start compiling your notes from the first webinar using Markdown format

Refer to the Markdown guidance: <https://docs.github.com/en/get-started/writing-on-github/getting-started-with-writing-and-formatting-on-github/basic-writing-and-formatting-syntax>

Use headings (e.g., # Heading 1, ## Heading 2) to structure your notes

Utilize bullet points or numbered lists for organization

Highlight important terms and definitions using bold or italic formatting

Summarize complex ideas in your own words

Incorporate visual aids like diagrams or mind maps by adding images (drag and drop or copy/paste the image URL)

### **Structuring Learning from a Webinar:**

Begin your notes with a section titled "Objectives" and list the key learning objectives for the webinar

Create a "Key Concepts" section and summarize the main topics and ideas covered

Under a "Questions" section, note any questions or areas you need further clarification on

Use resources provided during the webinar, external research, or discussions with peers/instructors to find answers to your questions, and update your notes accordingly

End your notes with a "Reflections" section, where you can reflect on how the webinar's content fits into your overall learning goals and any real-world applications you can envision or plan to apply the knowledge to

### **Technical guidance**

For markdown guidance, please follow:

<https://docs.github.com/en/get-started/writing-on-github/getting-started-with-writing-and-formatting-on-github/basic-writing-and-formatting-syntax>

### **Tips for Success:**

- Regularly commit your changes to your GitHub repository to maintain a version history of your work
- Use a special color (e.g., red) to highlight sections that require your further research or more focus
- Share your learning journal with classmates or instructors to get feedback and engage in collaborative learning
- Keep your notes organized and up-to-date, as your learning journal will be a valuable resource throughout your apprenticeship

**Benefits of Keeping a Learning Journal:**

- Deepens your understanding by forcing you to reflect on and actively engage with the material
- Boosts your memory by creating a written record of key information and actively jotting down information
- Tracks your progress and growth over time, allowing you to see how far you've come and identify areas for improvement
- Boosts confidence by providing a tangible representation of your learning journey
- Helps you decide what to focus on next by identifying knowledge gaps or areas of interest for further exploration