**Week 1 – Instructor Lecture Notes README.md, LICENSE, and CITATION.cff**

**Week 1 – Instructor Lecture Notes**

**Topic:** Creating README.md, LICENSE, and CITATION.cff and organizing them into a reproducible project directory.

These notes are designed to accompany the Week 1 class lab:

* README.MD
* License.txt
* CITATION.cff

Students will practice generating real repository files (Markdown/YAML/text) in VS Code and uploading them to Google Drive, placing them into a standard project layout ready for GitHub and use in Colab.

**Learning Objectives**

1. Understand what information belongs in README.md, LICENSE, and CITATION.cff for this project.
2. Learn a VS Code → Google Drive workflow to create and save real files (local → repository files).
3. Organize a clean project directory structure with third‑party license texts.
4. Validate that files are correctly formatted (Markdown/YAML) and accessible in Colab.

**Prerequisites**

* Basic familiarity with Markdown and YAML.
* A Google account and access to Google Colab.

**Reference Components (for attribution & licensing)**

* Dataset: NVIDIA Stock Dataset – Kaggle (Adil Shamim), CC0 1.0 Universal (Public Domain Dedication).
* Model: FinBERT – ProsusAI, Apache License 2.0. Not an official Prosus product; intern research project. Contacts: Dogu Araci (dogu.araci@prosus.com), Zulkuf Genc (zulkuf.genc@prosus.com).

We will incorporate these into the three repository files.

**Recommended Project Layout**

Use a single top‑level folder for the repository. Students should reproduce this layout locally or in Drive.

project-root/-Nvidia\_Stock\_Market\_History

├─ training/

├─ensemble\_inputs

├─365D

├─270D

├─180D

├─90D

├─60D

├─30D

├─14D

├─1D

├─Meta\_Model\_Trained

├─news\_cache

│ ├─ NSMH\_EDA\_Feature\_Engineering\_Week1.ipynb

│ ├─ Nvidia\_Stock\_Market\_History\_SimpleAttention\_1D\_Week2.ipynb

│ ├─ Nvidia\_Stock\_Market\_History\_SimpleAttention\_14D\_Week3.ipynb

│ ├─ Nvidia\_Stock\_Market\_History\_SimpleAttention\_30D\_Week3.ipynb

│ ├─ Nvidia\_Stock\_Market\_History\_SimpleAttention\_60D\_Week3.ipynb

│ ├─ Nvidia\_Stock\_Market\_History\_SimpleAttention\_90D\_Week3.ipynb

│ ├─ Nvidia\_Stock\_Market\_History\_SimpleAttention\_180D\_Week3.ipynb

│ ├─ Nvidia\_Stock\_Market\_History\_SimpleAttention\_270D\_Week3.ipynb

│ ├─ Nvidia\_Stock\_Market\_History\_SimpleAttention\_365D\_Week2.ipynb

│ ├─ Nvidia\_Next\_Day\_Closing\_Meta\_Model\_Train\_Week4.ipynb

│ └─ Nvidia\_Next\_Day\_Closing\_Meta\_Model\_Prediction\_w\_API\_Call\_Week5.ipynb

├─ docs/

│ └─ (optional extras like architecture diagrams, syllabus excerpts)

├─ LICENSE

├─ README.md

├─ CITATION.cff

└─ LICENSES/

├─ Apache-2.0.txt # FinBERT full license text

└─ CC0-1.0.txt # CC0 full legal text for dataset

**Why a LICENSES/ folder?** While linking to license URLs in your README is fine, many projects also include the full license texts to make compliance easy when the repo is cloned offline.

**Create in VS Code and Upload to Google Drive**

Students must author README.md, LICENSE, and CITATION.cff in VS Code and place them into the project directory in their respective Google Drive.

**Workflow (VS Code → Drive → Colab)**

1. Create locally in VS Code with the exact filenames and content.
2. Match the repo layout shown in *Recommended Project Layout* (root-level README.md, LICENSE, CITATION.cff; optional LICENSES/ folder).
3. **Upload to Google Drive**:
   * Use Google Drive for desktop to sync the project folder; or
   * Use drive.google.com → New → Folder upload to upload the entire project folder (e.g., My Drive/Nvidia\_Stock\_Market\_History/).

**Instructor Note:** For Week 1, students should not generate these files from Colab cells. Create them in VS Code and upload them to Drive.

**Upload Checklist (Drive)**

* **Root files present:** README.md, LICENSE, CITATION.cff at repository root.
* **Optional:** LICENSES/ contains Apache-2.0.txt (FinBERT) and CC0-1.0.txt (dataset) full texts.
* **If structure is wrong:** Reorganize via Drive web UI (drag files into correct folders) and refresh Colab Files pane.

**Third-Party Licenses**

1. NVIDIA Stock Dataset — CC0 1.0 Universal (Public Domain Dedication)
   * License text: <https://creativecommons.org/publicdomain/zero/1.0/>
2. FinBERT (ProsusAI) — Apache License 2.0
   * License text: <https://www.apache.org/licenses/LICENSE-2.0>
   * Notes: FinBERT is not an official Prosus product; intern research project. '''

**4)** Include full third‑party license texts in **LICENSES/**

**Instructor Tip:** For brevity in class, we can reference the license URLs. For full compliance examples, have one group paste the full legal texts into those placeholders and save them.

**Opening and Verifying in Colab**

1. Click the **folder** icon in Colab.
2. Browse to (e.g., My Drive/Nvidia\_Stock\_Market\_History/.)
3. Confirm that:
   * README.md, LICENSE, CITATION.cff are at the root.
   * LICENSES/ (if used) contains the full texts.
4. Optional: open files in Colab's editor to preview formatting (Markdown/YAML).

**Classroom Walkthrough (Suggested Flow)**

1. **5 min** — Why these files matter (legal compliance, attribution, reproducibility).
2. **10 min** — Review the reference components and license obligations.
3. **15 min** — Live demo in **VS Code**: create README.md, LICENSE, CITATION.cff using provided templates.
4. **10 min** — Upload the project folder to **Google Drive** (My Drive/ My Drive/Nvidia\_Stock\_Market\_History/).
5. **10 min** — (Optional) Add LICENSES/ full texts.

**Rubric (Week 1 Deliverable)**

* **README.md (40%)**
  + Includes project overview, data/model sources, license links, and citation pointer.
* **LICENSE (40%)**
  + MIT (or chosen OSS license) present; third‑party notices included.
* **CITATION.cff (20%)**
  + Valid YAML; includes dataset and model references with licenses and URLs.

Bonus: LICENSES/ folder with full texts.

**Instructor Notes**

* Provide a **starter template pack** (VS Code snippets) for README.md, LICENSE, and CITATION.cff.
* Share a consistent Drive path pattern for students (e.g., My Drive/Nvidia\_Stock\_Market\_History/).
* Include a quick YAML validation reminder for CITATION.cff (indentation is the #1 cause of issues).