

## Project Timeline (Wed → Sun)

### Day 1 – Wednesday (Today)

**Goal:** Dataset ready, preprocessing pipeline started.

- **Member 1 (Dataset Manager)**
    - Download dataset, check integrity, remove corrupted/mislabeled files. **(Deadline: tonight)**
    - Provide folder structure to the whole team.
  - **Member 2 (Preprocessing Lead)**
    - Start resizing, normalization code.
    - Test 2–3 augmentation strategies on sample images.
    - Share augmentation results with team by tonight.
  - **Member 6 (Documentation Lead)**
    - Create shared Google Doc/Notion page for project notes.
    - Add dataset description, project goal, and initial plan.
- 

### Day 2 – Thursday

**Goal:** Preprocessing finalized, models selected & ready for training.

- **Member 1 & 2:** Finalize preprocessing pipeline (train/val/test ready). **(Deadline: 3 PM)**
  - **Member 3 (Model Architect)**
    - Choose 2 pretrained models (e.g., ResNet50 & MobileNetV2) and 1 small custom CNN.
    - Write model code skeletons. **(Deadline: end of day)**
  - **Member 6:** Document preprocessing steps, dataset stats.
- 

### Day 3 – Friday

**Goal:** Model training begins.

- **Member 4 (Training Lead)**
    - Train ResNet50 & MobileNetV2 with callbacks.
    - Monitor validation performance & save best models.
  - **Member 3:** Support Member 4 with model hyperparameter tuning.
  - **Member 5 (Explainability Lead)**
    - Prepare Grad-CAM/heatmap code and test on a few images.
  - **Member 6:** Write “Model Architecture” section in the report.
- 

#### **Day 4 – Saturday**

**Goal:** Model evaluation, visualizations, and report drafting.

- **Member 4:** Final model evaluation → confusion matrix, classification report, ROC curves.
  - **Member 5:** Generate Grad-CAM heatmaps for:
    - Correct predictions
    - Misclassifications
    - Sample from each class
  - **Member 6:** Write “Results & Analysis” section in report.
  - **All Members:** Share findings & figures in shared folder.
- 

#### **Day 5 – Sunday (Presentation & Submission)**

**Goal:** Finalize everything.

- **Member 6:** Compile final report & slides. **Deadline: 12 PM**
- **All members:** Review slides & practice presentation.
- **Member 5:** Add final visualizations to slides.
- **Member 3 & 4:** Prepare to answer model-related questions.
- **Submission: Before 6 PM**

