

How to Run and Test Our Code

You can access the complete project via Google Colab or GitHub:

- Colab Notebook: [Team 20 mRNA Project](#).
- GitHub Repository: [Team 20 mRNA Project Repository](#).

Steps to Run

1. Open the Colab notebook and **click “Run All”**.
2. When prompted in the **“Uploading Given Datasets and Necessary Files from GitHub”** block, upload the following:
 - **test.csv** (Given).
 - **training_class.csv** (Given).
 - **training.fa** (Given).
 - **CNN_best_threshold.txt** (From GitHub – Model & Dataset Folder).
 - **CNN_final_model.h5** (From GitHub – Model & Dataset Folder).
 - **LSTM_model.h5** (From GitHub – Model & Dataset Folder).
3. The notebook will automatically execute:
 - Data cleaning and preprocessing.
 - Feature extraction and engineering.
 - Model training and evaluation.

Model Files and Notes

When the notebook reaches each **“Model Building”** section, follow the instructions provided under that section.

If you haven’t uploaded pre-trained models earlier, you will be prompted to **download** them **from GitHub** and **re-upload** them.

Expected Outputs

After running all cells, you will obtain:

- **Model performance metrics** and **relevant diagrams** under each model implementation block.
- **Combined ROC curves** of all models for comparison.