Research Environment Setup Guide

This document provides step-by-step instructions for setting up a research environment using Jupyter Notebook, Git for collaboration, and Overleaf for collaborative editing. Each section includes screenshots to help guide you through the process.
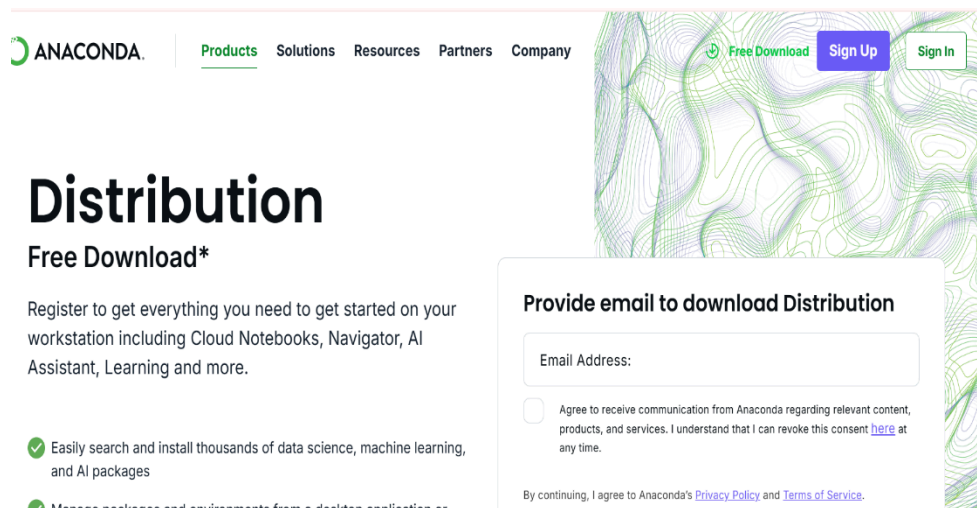
Table of Contents
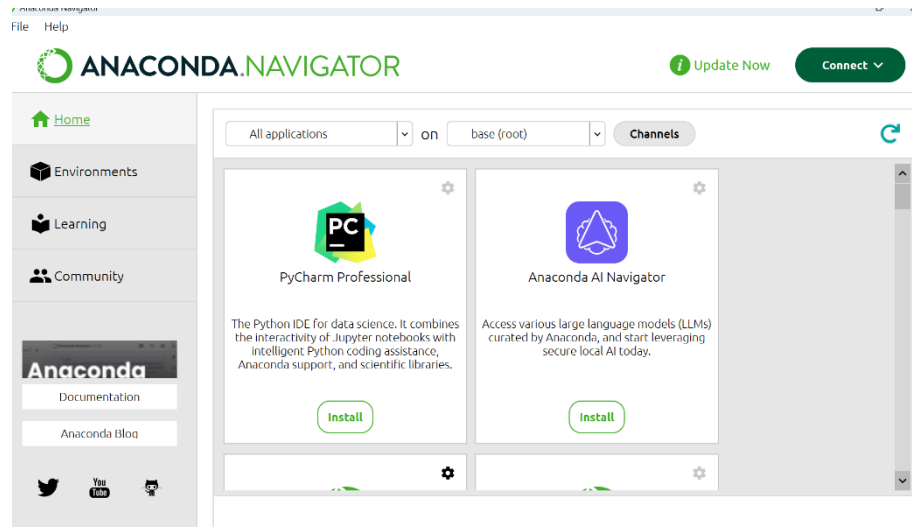
Setting Up Jupyter Notebook

Local Installation

1. **Install Anaconda**:
   - Download Anaconda
   - Follow the installation instructions for your operating system.
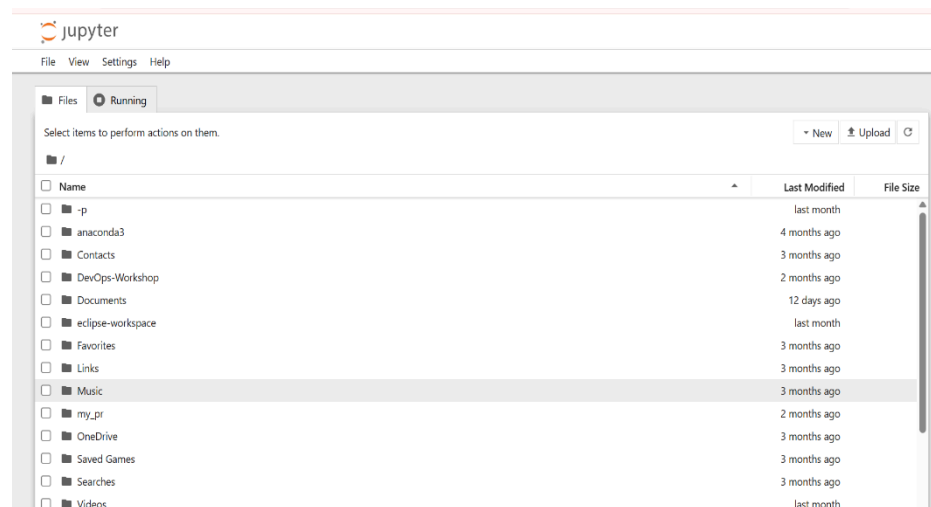

2. **Open Anaconda Navigator**:

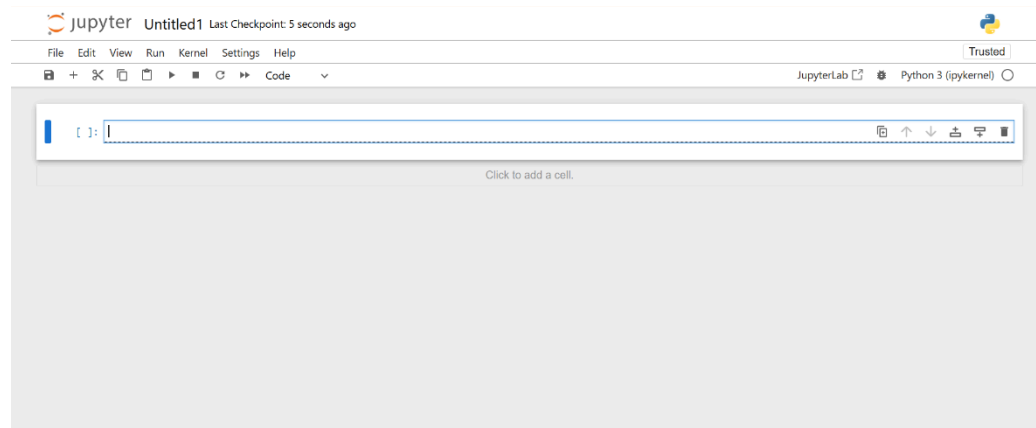- After installation, open Anaconda Navigator from your applications.

3. **Launch Jupyter Notebook**:

- In Anaconda Navigator, click on the "Launch" button under Jupyter Notebook.
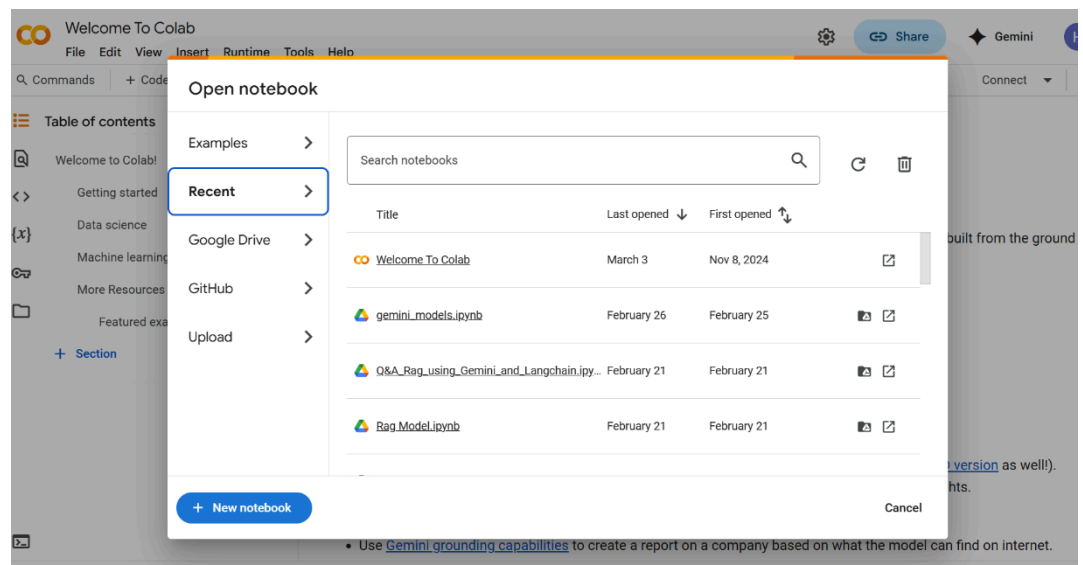

4. **Create a New Notebook**:

- In the Jupyter interface, click on "New" and select "Python 3" to create a new notebook.
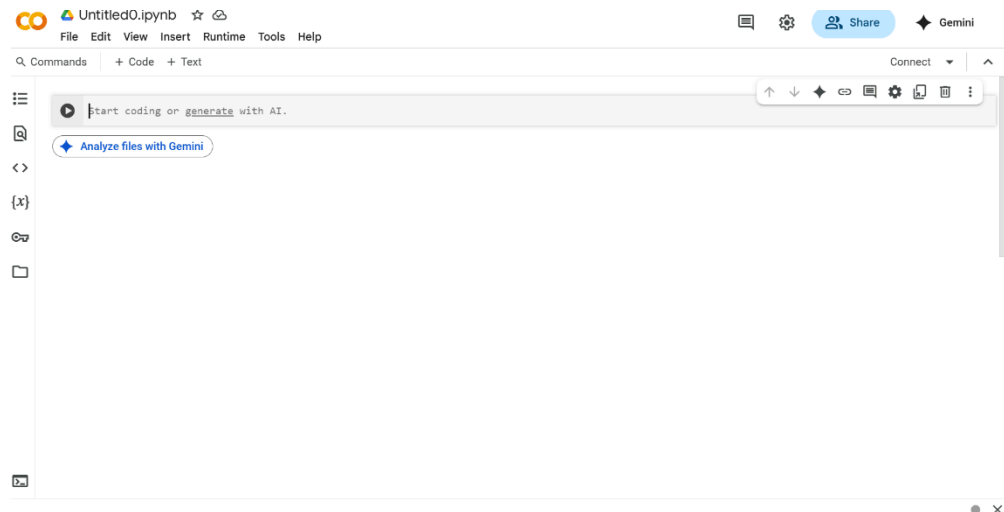

Using Google Colab

1. **Access Google Colab**:

   - Go to Google Colab.

2. **Create a New Notebook**:

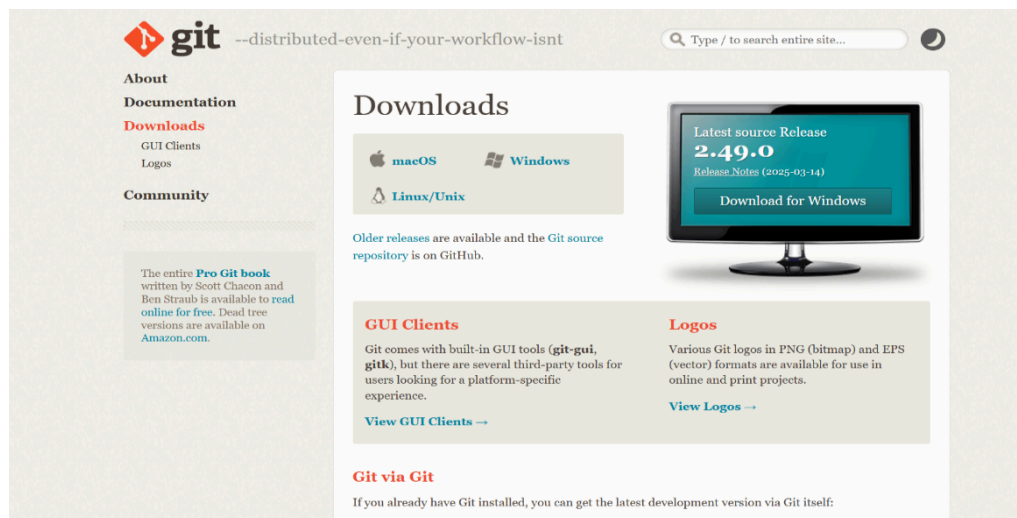- Click on "File" > "New Notebook" to create a new notebook.

3. **Save Your Notebook**:

- You can save your notebook to Google Drive by clicking on "File" > "Save a copy in Drive"

Basic Git Usage for Team Collaboration

1. Install Git:

- Download Git from the [official website](#) and follow the installation instructions.

2. Clone a Repository:

   - Use the command line to clone a repository:

   - git clone https://github.com/username/repository.git

3. Create a Branch:

   - Create a new branch for your work:

   - git checkout -b feature-branch

4. Add and Commit Changes:

   - Stage your changes and commit:

   - git add .

   - git commit -m "Your commit message"

5. Push Changes:

   - Push your changes to the remote repository:
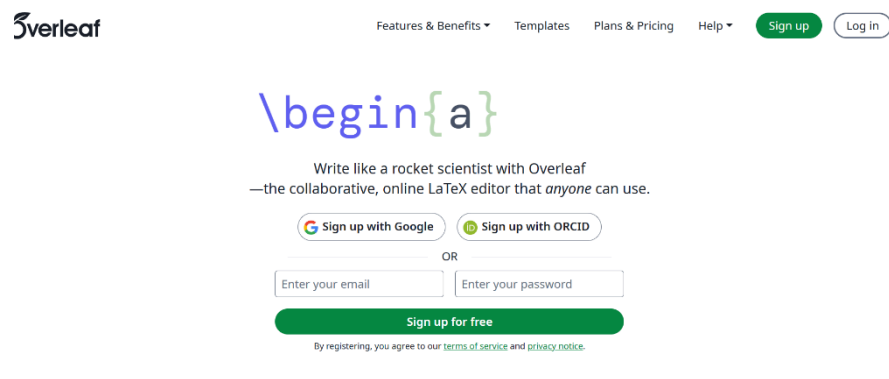
   - git push origin feature-branch

6. Create a Pull Request:

   - Go to your repository on GitHub and create a pull request to merge your changes.

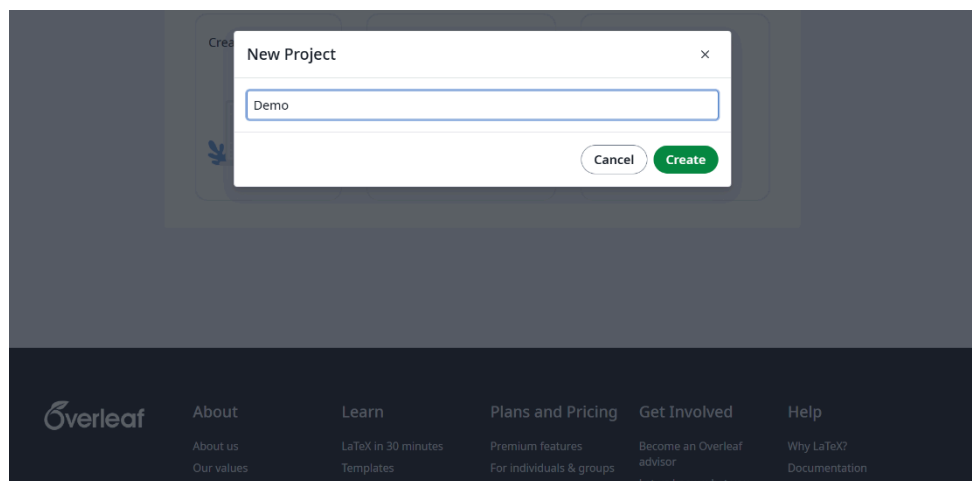## Overleaf Setup Guide for Collaborative Editing

1. Create an Overleaf Account:

- Go to [Overleaf](#) and sign up for a free account.

2. Create a New Project:

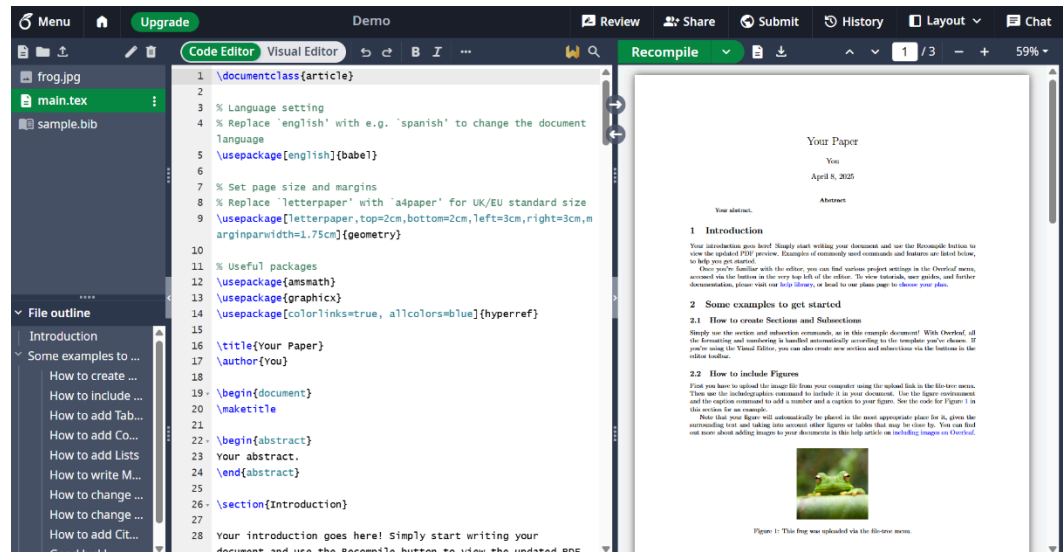- Click on "New Project" and select "Blank Project" or choose a template.

3. Invite Collaborators:

- Click on "Share" in the top right corner and enter the email addresses of your collaborators.

4. Edit and Compile:

- Collaborators can edit the document simultaneously. Click on "Recompile" to see changes.

5. Download the Project:

- Download Git from the official website and follow the installation instructions.