

NC STATE UNIVERSITY

CROP AND SOIL SCIENCES

CS 590 Special Topics
Programming and Data Science for Applied Research

GitHub Repository Exercise

Goal: Create a new GitHub repository for course exercises and render .ipynb notebooks using binder *README.md*, *environment.yml* (Python), *install.R* (R) and *runtime.txt* (R) files.

Step 1: Sign-up for a GitHub

GitHub.com > Create Account

User: **UnityID**

Email: **UnityID@ncsu.edu**

Create New Repository > **CS590**

*** If you have an existing, non-UnityID account, please forward the account information

Step 2: Render Binder launch icon for README.md file for GitHub

Mybinder.org > Enter GitHub information for repository ex. Jcdunne/CS590

If you have created a branch, make sure the Git branch, tag or commit has been included

Copy the text below



next to the



icon.

Create a README.md file in the master branch of the GitHub repository

Paste the text within the README.md file and commit the changes

Step 3: Determine the environment (Python) or (R) for rendering the Docker image in Binder

For Python: Create environment.yml file > Download from NBViewer on Course GitHub

For R: Create runtime.txt file > Download from NBViewer on Course GitHub

Create install.R (specify packages) > Download from NBViewer on Course GitHub

Step 4: Check Binder setup using NBViewer > Search *UnityID/Repository*

The GitHub repository and Binder Launch is for uploading the exercises each week for grading