EAS 5830: BLOCKCHAINS

Codio and Git

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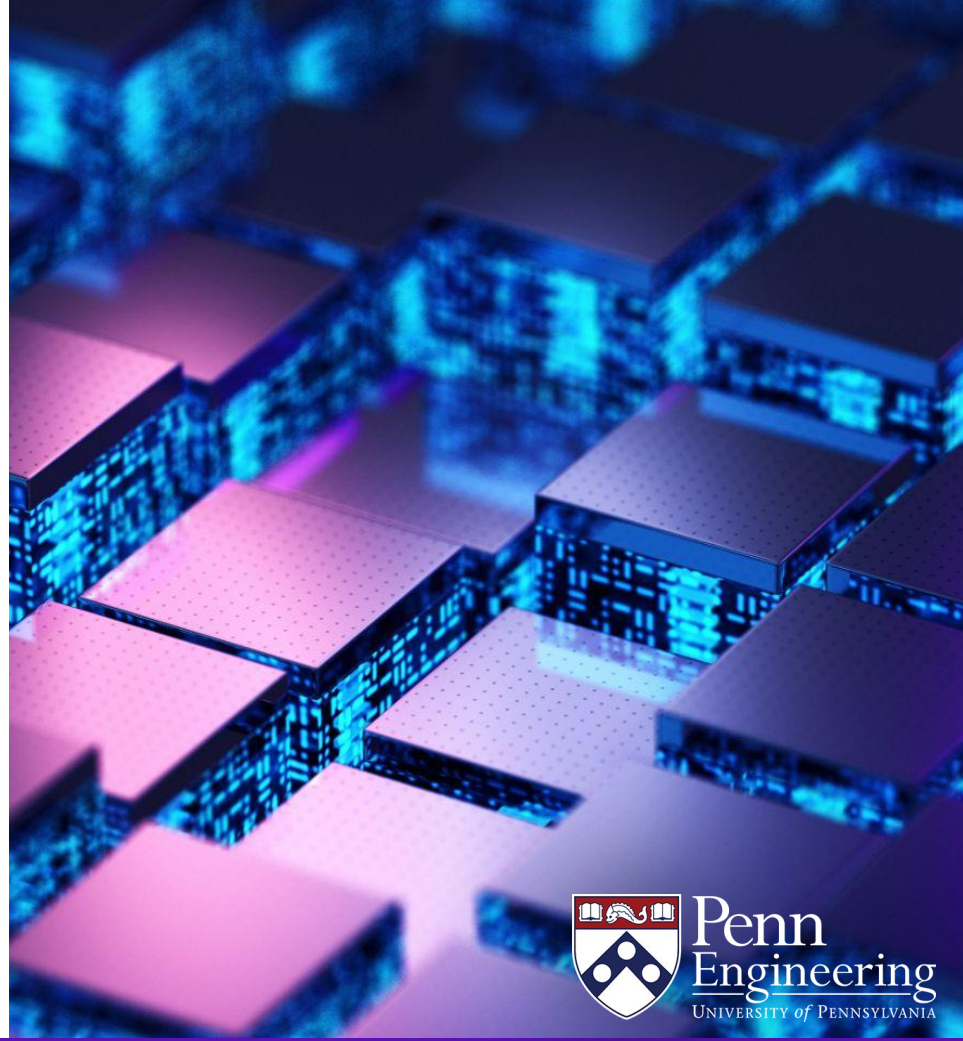


Codio

- Coding assignments submitted through Codio
- Virtual environments provide all necessary software
  - Foundry
  - Python3
  - Python libraries
    - web3

Git

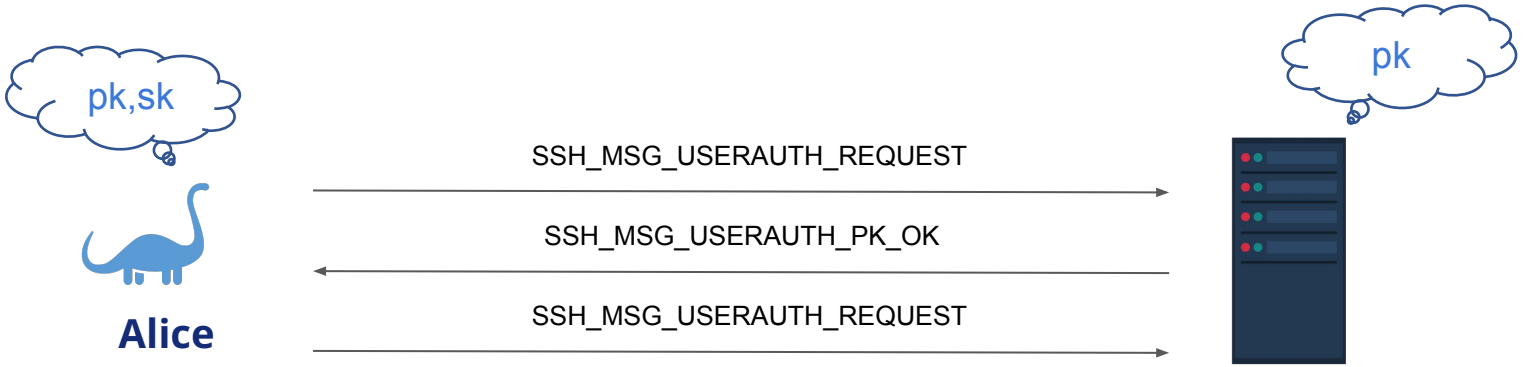
- Create a Github account
- Create a repository for your work in this class
  - (Or repo for each assignment)
- Add “deploy key” to the repo
- The Codio autograder will
  - Clone your repo (authenticating itself with deploy key)
  - Run the autograder against the cloned files

SSH Keys

```
cd ~/workspace
mkdir ssh_keys
ssh-keygen -t ed25519 -f ~/workspace/ssh_keys/id_mcit5830
```

- Creates
  - ssh_keys/id_mcit5830
  - ssh_keys/id_mcit5830.pub
- Add id_mcit5830.pub as github deploy key
- ssh-keygen documentation

Public-Key Authentication

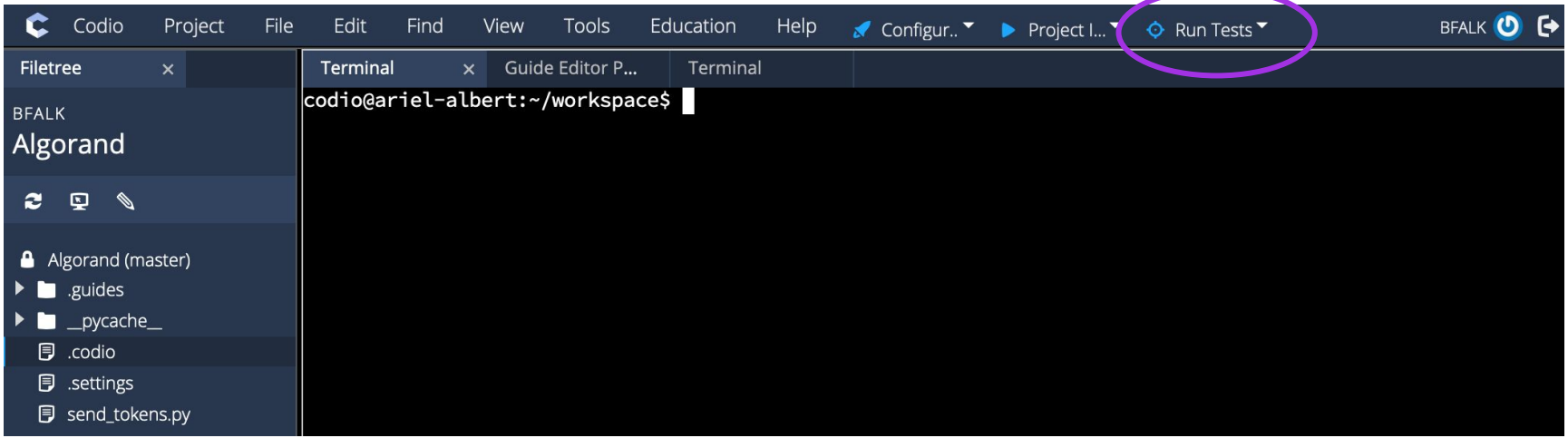


- User signs a message with
  - Public-key
  - Username
  - Session ID
- Server checks signature

Codio

- All Coding assignments in Python or Solidity
- Graders are written in Python or Solidity
  - Grader clones repo to get files
  - Imports homework file (filename is important!)
  - Tests I/O behavior of function

Codio


Codio
Project
File
Edit
Find
View
Tools
Education
Help
Configur..
Project I...
Run Tests
BFALK
Filetree
BFALK
Algorand
Algorand (master)
.guides
__pycache__
.codio
.settings
send_tokens.py
Terminal
Guide Editor P...
Terminal
codio@ariel-albert:~/workspace$