



# 2023 Zowe Python SDK Mentorship

Fernando Rijo Cedeno  
Timothy Johnson

Aaditya Sinha  
Abdul Samad Siddiqui

# Icebreaker



- Share your background and something fun about yourself :)

# Timeline



## Summer Term: June 1st - August 31st

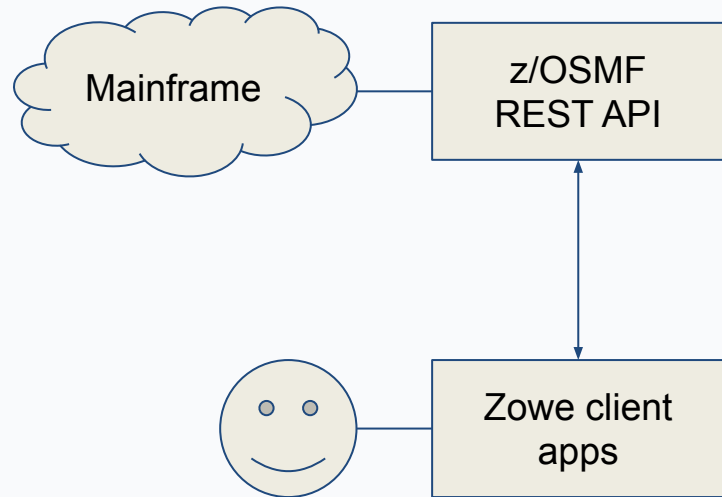
- Week of June 5: Introductory meeting with mentors and mentees
- Week of July 3: Mentors and Mentorship team will meet to discuss midterm evaluations and overall program.
- Week of July 10: Midterm mentee evaluations due and first stipend payment (50% of the total amount) approvals.
- Week of August 14: Mentors and Mentorship team will meet to discuss final evaluations and overall program.
- Week of August 21: Final mentee evaluations and mentee feedback/blog submission due, and second stipend payment (50% of the total amount) approvals.

# Expectations



- Around 15-20 hours per week
- Test coverage (90% line, 80% branch)
- Weekly progress report on GitHub
  - Just a short summary will suffice
  - Track time spent ([Clockify](#) is useful for this)
- Weekly sync up meeting (or more frequent as needed)
- Project planning document
- Writing blogs is encouraged but not required
- Final presentation showing achievements

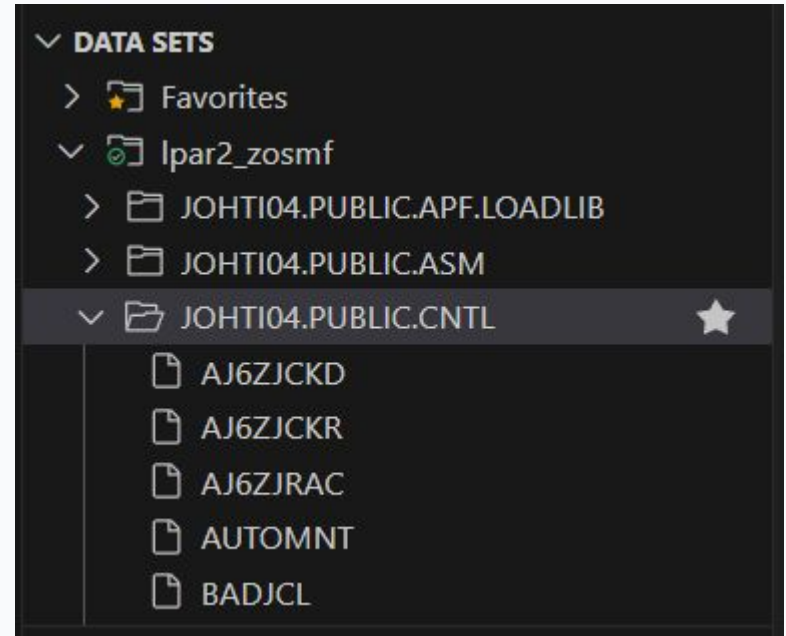
- Integrated and extensible open source framework for z/OS
- z/OS - IBM operating system for the mainframe
- Mainframe services
  - z/OSMF - z/OS Management Facility REST API
  - CICS, DB2 - z/OS Database APIs
  - Endevor - Mainframe source control
- Zowe client apps
  - Zowe CLI - Command Line Interface
  - Zowe Explorer - VS Code extension
  - Zowe SDKs - Node.js, Python, etc
- [Overview of Zowe project](#)



# z/OS Data Sets

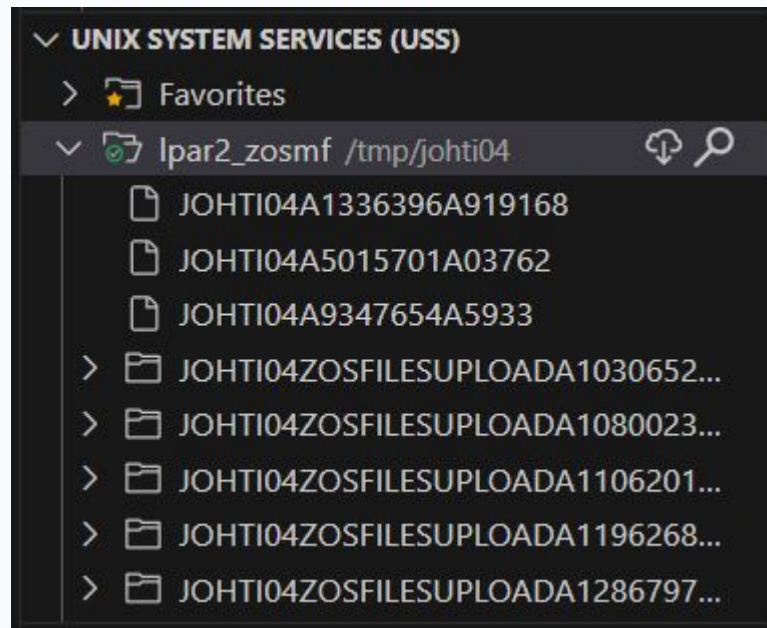


- Data sets are part of the mainframe file system
- Types:
  - Sequential
  - Partitioned
  - zFS
- Contain record or binary data
- Stored on volumes



## Unix like filesystem (and SSH)

- Files
- Folders
- Symbolic links
- Permissions are like Unix
- Additional file attributes
  - Program Control
  - Encoding tags

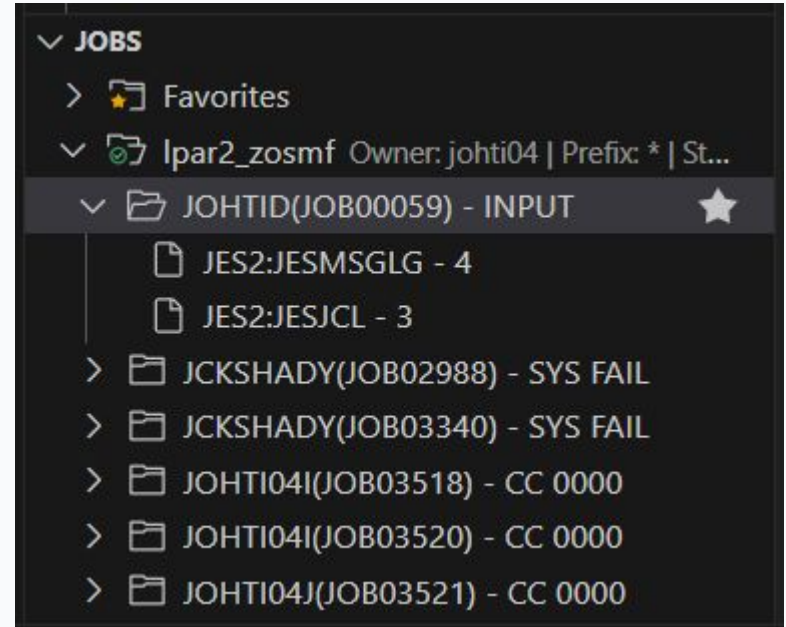


# z/OS Jobs



Batch jobs processed by JES (Job Entry Subsystem)

- Different job classes
- Output goes to spool files
- IEFBR14 = “do nothing” job





# Zowe Profiles

- Store connection details for connecting to mainframe services like z/OSMF
- Can be created with Zowe CLI or Zowe Explorer
- Are supported by all client apps including the Python SDK

Choose "Create new..." to define or select a profile to add to the DATA SETS Explorer

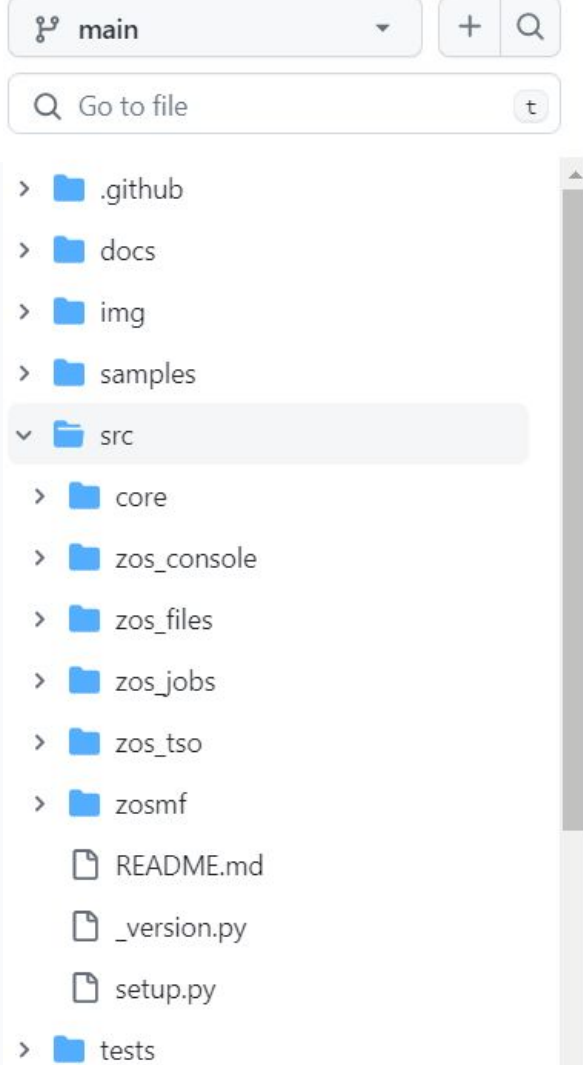
+ Create a New Team Configuration File

← Edit Team Configuration File

```
1  {
2    "$schema": "./zowe.schema.json",
3    "profiles": {
4      "lpar1_zosmf": {
5        "type": "zosmf",
6        "properties": {
7          "port": 443
8        },
9        "secure": []
10     },
11     "base": {
12       "type": "base",
13       "properties": {
14         "host": "example.com",
15         "rejectUnauthorized": true
16       },
17       "secure": [
18         "user",
19         "password"
20       ]
21     }
22   },
23   "defaults": {
24     "zosmf": "lpar1_zosmf",
25     "base": "base"
26   },
27   "autoStore": true
28 }
```

# Zowe Python SDK

- Core SDK - Common utilities
  - SDK API base class
  - Profile loading methods
- Console SDK
- Files SDK
- Jobs SDK
- TSO SDK
- z/OSMF SDK



# Project Plan



- Get acquainted with the project
- Start with an issue from the REST API milestone
  - [z/OSMF Files and Jobs APIs](#)
- Focus mainly on team config enhancements
  - [Zowe v2 Team Configuration](#)
- (Stretch) Create sample Python SDK
  - [zowe/zowe-cli#1674](#)

# Action Items



- Mentees: Get acquainted with the project
  - Learn about Zowe and z/OSMF
  - Set up coding environment
  - Install Zowe Explorer
  - Pick up a REST API issue
- Mentors: Grant access
  - Send links to relevant docs
  - GitHub access to Python SDK and mentorship repo
  - Mainframe access to z/OSMF