

COMS W4156 Advanced Software Engineering (ASE)

December 9, 2021

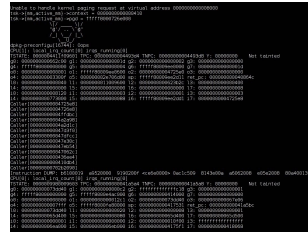
[shared google doc for discussion during class](#)

Troubleshooting the Team Project - no access

I tried to look at every team's github repository, particularly whether their README includes the required information, but in some cases I do not have access

Please add 'gailkaiser' as a collaborator on your repo if not already. I added a comment on T3 for every team where I could not access the repo (note I will need to be able to access all your repos if more than one!)

Troubleshooting the Team Project - invalid input



Your service's API should do something reasonable when given gibberish data, e.g., return an error status code like “-1” or “400 Bad Request” (see [HTTP client error responses](#)). Your API should not crash or hang when it receives bad input

- Recall the minimal test suite consisting of at least three sample inputs: one valid typical, one valid atypical, one invalid
- Recall equivalence partitions, where there are separate partitions for the various categories of invalid as well as valid inputs (and outputs)
- Example: If your API expects a date formatted **YYYY-MM-DD**, it should look for four digits followed by hyphen then two digits followed by hyphen then two more digits, and reject inputs that don't match like **YYYYMMDD**, **MMDDYY**, and **qwertyuiop**. Ideally, it would also check for month between 01 and 12, date between 01 and 31, plausible year, month-date consistency, etc.
- Services should never trust clients to reject invalid user inputs, but your service is not expected to handle attacks (e.g., a hacker mimicking a legit client)

Troubleshooting the Team Project - API documentation

Your README should say what each API function assumes and expects in sufficient detail for a third-party developer to write a client that will use your API

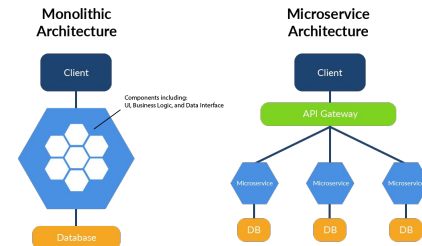
- Example assumption: All API entries assume the client's user already has an account on Facebook and is currently logged into Facebook
- Example expectation: The /do_something endpoint expects a date in **YYYY-MM-DD** format, a length of time in **HH:MM** 24-hour format, and an activity_name string of length **minimum 8 characters and maximum 64 characters**
- Ideally, your documentation should also include a usage example for each API entry with both a request and possible responses (including error codes)
- Ideally, your README would sufficiently describe the functionality of your service for that third-party developer to decide whether your service will actually do what they are looking for
- Swagger and similar support some of this but not all



Troubleshooting the Team Project - what is a client

All of you have used a web browser to connect to some web server to run some web app, such as Courseworks. The web browser is a client and the web server is a service. The web browser client and the web server service are not combined in a single program

- The same web server can communicate with many different clients, e.g., Chrome, Firefox, Safari, Edge, and similarly your service should allow for multiple possible clients - but you only have to implement one (for second iteration)
- While a web browser can communicate with many different web servers, it's ok if your client only knows about your service and not any other services
- Your browser client runs on your laptop, but the <https://courseworks2.columbia.edu> service is not running on localhost on your laptop
- Courseworks is running on Amazon AWS (try “ping coursework2.columbia.edu”)



Brief Team Meetings

Need to organize on the fly for whoever shows up

CVN teams (if any) have priority

Team Project

[Assignment T5: Second Iteration](#) due this Saturday, December 11

[Assignment T6: Second Iteration Demo](#) due next week on Wednesday, December 15
(you can do T6 before submitting T5, contact your IA asap for scheduling)

[Assignment T7: Demo Day](#) on December 20, please sign up for a time slot

Second Individual Assessment will be posted at 12:01am on Thursday, December 16, and due Sunday, December 19 at 11:59pm. There will be another mandatory team participation question - if you do not explain your scoring sufficiently you will get 0 on the assessment