

Python Programming Test - LeanCloud

[Flask](#) is a framework to build web applications using python, and [flask-restplus is a framework to build RESTful APIs in flask](#). [This example tutorial builds a Todo application](#) (to keep list of todos). Your task is as follows:

1. Implement the storage for tasks, and associated state, in a database such as sqlite or mysql. Preferably, don't use SQL Alchemy, instead, use the native DB API for that database.
2. Add 2 new fields to a task:
 - a. Due by, type date, of when this task should be finished
 - b. Status - Not started, In progress, and Finished
3. Add or modify web methods to change the status of tasks.
4. Implement the following additional end points:
 - a. "GET /due?due_date=yyyy-mm-dd" - this gets a list of tasks which are due to be finished on that specified date
 - b. "GET /overdue" - this gets all tasks which are past their due date, as of the date this query is run
 - c. "GET /finished" - this gets all tasks which are finished
5. **For extra credit**, implement authorization for this web app, with both read and write access. Users with write access can create and change the status of tasks. Users with read access can only view tasks, via the above APIs, but cannot create or modify them.

Rules

1. Each candidate must attempt this on their own, and should not discuss or ask for help from anyone. We will rely on the honour system, and trust that you will not ask others for help. If we determine that this has happened, we will take very serious action.
2. You are free to use any other help, especially, use the web to search for ideas, solutions to sub-problems, etc.
3. Create a free account on github or bitbucket, and check your code in there.
4. When you've finished the assignment, create a screencast of using the system, performing various activities, and upload to some web location like google drive or even check it in.
5. Assignments are **due one week after receiving it**. To submit the assignment, send a link to the git repository, and a link to the screenshot, to vasanth@leancloud.com and vijay@leancloud.com
6. If there are any questions, they can be emailed to the same address.