

STOP. It is imperative that you read this entire post before sending any messages to the employer.

### **Summary:**

We have a number of on-going projects and need multiple developers. Specifically, we need back-end developers experienced with Linux and Python. This project is a test of your skills. For this test, you will build a very simple web service that uses GPG to decrypt a message. Your successful completion of this project will allow you to bid on larger projects. Basically, this is an interview that you can get paid for taking.

### **Deliverable:**

1. Your deliverable must be a single file named "app.tar.gz".
2. This is how your deliverable will be used:
  - Our automated build system will extract your deliverable file to "/usr/local/src" on a fresh server instance that exactly matches your assigned server.
  - Our automated build system will run "/usr/local/src/deploy.sh". Make sure your deliverable includes this file.
  - deploy.sh will run with root privileges.
  - Do not assume any specific starting directory when deploy.sh is executed.
3. Your deliverable is only correct if the following is true after our automated build system runs:
  - a. A web service called "createCsr" is hosted by Apache via the server's public IP (e.g. <http://52.11.132.197/createCsr>).
    - i. The web service is built using Flask.
    - ii. The web service accepts a JSON payload with the following parameters:
      1. PassPhrase- The pass phrase to use to decrypt the message.
      2. Message- The GPG encrypted message.
    - iii. The web service can be executed using an HTTP POST or GET.
    - iv. The web service returns a JSON response that is either an error message (if bad input parameters are given) or a single response parameter (if good input parameters are given):
      1. DecryptedMessage- The given message, decrypted using GPG and the given PassPhrase.
  - b. The web service has unit tests that you believe are sufficient.
    - i. All available unit tests are executed by running the following command on the server:

/usr/local/src/run-tests.sh

- ii. After running, details about the tests are output (pass, fail, specific failure messages).
4. Your deliverable must be your original work.

**Rules:**

1. Only bid on this project if you have 20 or more hours available a week. We have significant amounts of work and need developers who are doing this as more than a hobby.
2. Only bid on this project if you are an individual working by yourself. We are not interested in bids from companies. We need to know the work we award in the future will be performed by the same person who completes this project.
3. Only bid on this project if you have never bid on any other project for this employer.
4. Only bid on this project if you can successfully complete Freelancer.com's payment, email, and phone verification process. We are a U.S. company and therefore our government does not allow us to conduct business with, and we will not accept, workers who reside in or perform work from within the following countries: Cuba, Iran, North Korea, Sudan, Syria, or Burma.
5. Future projects will require you to install and use Freelancer.com's time tracking software, or similar.
6. Before you bid on this project, you may ask any questions you like and we will respond as best we can.
7. From the time you submit a bid on this project, until the time your deliverable is accepted, you cannot send any messages to the employer except the following:
  - "Please rebuild my Linux server." The server we assigned you at the start of the project will be terminated and built anew. We will respond with the username and IP address once rebuilt. We strive to complete the rebuild quickly. The time between sending this message and our response will be credited to your due date so long as this is the only rebuild request in the preceding eight hours.
  - "My public SSH key is XXXXX." or "My public SSH key is attached." We will add the new key to the authorized\_keys file on your assigned server and remove any previous keys.
  - "Your system is broken. The problem is XXXXX." We will investigate your claim. If you are correct, we will respond with "Fixed". If we cannot reproduce your claim, we will respond with "Continue". If we respond with "Fixed", the time between your message and our response will be credited to your due date.
  - "Is my hourly rate of \$XXX within your payment range?" We will answer "yes" or "no". You can only ask us this question once at any point before or during this project. We don't want you to waste your time completing this project if we won't be able to afford you for future projects.
  - "Thank you" or "thanks" or "ok." Send this message as often as you like.

8. Your correctly working deliverable **MUST** be uploaded no later than the due date. Time is of the essence and the due date is strictly enforced. No payment will be made for files uploaded after the due date.

9. The project length can be any duration you decide, up to a maximum of five days. The due date is set as the moment in time you accept the project plus the project duration you've chosen. (Bidding on the project does not start the clock. Only acceptance. Acceptance is either accepting the project via this site or actually starting work.)

10. After you submit your deliverable, we will test that it functions correctly. If it functions correctly, we will release the appropriate milestone payments. If it does not, we will send you a message detailing the problem we ran into. Please fix the deliverable, paying close attention to the requirements of this project, and resubmit before the due date. In the case when your deliverable does not function correctly, the time between uploading a deliverable and our evaluation response will be credited to your due date.

11. We will establish three milestones. You will be paid for every milestone for which you meet the definition. You are only guaranteed to receive a milestone payment if you meet the definition. It is possible (and we are hopeful) for you to receive all three:

- Milestone 1: \$25. Submitted a correctly working deliverable before the due date.
- Milestone 2: \$25. Awarded milestone 1, uploaded the deliverable file no more than twice, and violated these rules no more than once.
- Milestone 3: \$25. Awarded milestone 2, uploaded the deliverable file only once, and did not violate these rules.

### **How To Bid:**

1. Your bid must include a message with this exact phrase, "I have read FlaskWebService.pdf in its entirety and agree to its terms."
2. Your bid must be for the amount of \$75.
3. Your bid must set a project duration, not to exceed 5 days.

### **Project Award:**

1. When you accept the project, we will create a Linux server for you that is an exact match of the production environment. Once we receive your public SSH key, we will send you the username and IP address of the server. The flavor will be Amazon Linux. You are highly encouraged to use this server to verify your deliverable before submitting it for review.