

## Updated: SRE Coding Challenge - Pre-interview Challenge

Building an exceptional Platform Operations team at Altais is critical to ignite an exceptional healthcare system that cultivates the health and well-being of physicians, patients, and the clinical community. While building an exceptional team is multidimensional and there is no one thing to get right, ensuring that Altais is a great fit for our incoming candidates and with our team is paramount. How we select candidates is just the beginning. Welcome to the Altais Universe, we are glad you are here!

As part of our interview process, we ask that candidates complete an at-home coding challenge. This will help us formulate some technical questions during the next phase of your interview. The intent of the challenge is for it to take less than 2 hours, though it is not timed. Please create a branch off main and commit your code to our public github repo with a README. **Please check in code regularly, not just at the end of the assignment.** <https://github.com/AltaisCorp/sre-coding-challenge>

### Requirements:

- Use recent versions of Terraform, Ansible etc .
- Use opensource templates, modules etc. when appropriate.
- Publish a basic architectural drawing for your project.
- The project should be deployable into another AWS account w/out errors.
- Create a branch off main, and commit your challenge to our public github repo with a README. <https://github.com/AltaisCorp/sre-coding-challenge>

**Tasks:** For task 1-4 below, use any Infrastructure as code language such as Terraform or Ansible. (Please check in code regularly to our public repo).

- 1) Upload a text file to a AWS S3 bucket
- 2) On upload, trigger some type of alert (SNS, Email, Slack, text, etc)
- 3) Write at least one unit test using a framework and/or linters such as Inspec, Terratest, SAM, pytest, checkov, cfn-python-lint etc
- 4) Create the following **through Terraform**:
  - VPC, IGW, Route table, subnet & security group
  - Create an EC2 instance running a webserver (e.g apache or tomcat) associated with the above components.

Task 5 is a Kubernetes task and should not be done through terraform (use helm charts or K8's manifests).

5) Write helm chart/k8s manifests to deploy a microservice

- If possible demonstrate using minikube/kind cluster on your local laptop

Feel free to reach out if you have any questions.

Good luck and most importantly, have fun!