

You've been asked to build a serverless infrastructure to support a new application, which has the following characteristics and requirements:

- the application will present a REST API (HTTPS with TLS v.1.2) as the consumer interface
- it will be deployed using regional function-as-a-service
- uses a PostgreSQL database at version ~>10
- maintains a cache layer for the database
- requires storage for uploaded data files with a 30-day retention policy
- an automated health check against a test endpoint, scheduled daily
- centralized logging with a 7-day retention policy
- least privilege access model
- the database listener should not be exposed to any other applications or consumers

You've been provided with the function's source code: a single file called **user\_uploads.py** that depends on a **python ~>3.6 runtime**. You've also been given credentials for the database and a client API key used to access a remote service; both should be considered sensitive and only accessible to the application from within the environment.

The application does not require regional redundancy or failover capabilities; otherwise the code should be production-ready, with all of the considerations implied therein.

Using either Terraform or cloud native tooling, create a blueprint for this application. Include any helper scripts you may need to accomplish the task.

The final code should be added to a compressed archive and emailed back when complete.



