

## Kong - Fast Track coding exercise

Feel free to reach out to [thijs@konghq.com](mailto:thijs@konghq.com) with any questions you have about the use case or Kong usage/pdk.

Documentation links:

- Local test environment: <https://github.com/kong/kong-pongo>
- Plugin template: <https://github.com/Kong/kong-plugin>
- Plugin development: <https://docs.konghq.com/latest/plugin-development> (slightly outdated)
- <https://docs.konghq.com/> for documentation on Kong Services, Routes, Upstreams and Targets
- PDK (plugin development kit): <https://docs.konghq.com/2.2.x/pdk/> (please note that there is an index on the left as well as on the right of this page)

When setting up the development environment it may be helpful to use some external services like <http://mockbin.org> or <http://httpbin.org> to provide a test backend for your plugin (or the one that comes with the Kong test setup, see existing tests for examples).

### Task:

Create a plugin. Upon receiving a request in Kong the plugin will reach out to a remote server, with a header from the incoming request. If the remote server returns a “200 OK”, the request is allowed to be proxied, on anything else the client should get the proper “40x” response.

### Use Case:

Create an authentication plugin.

### Requirements:

The remote server URL, and the incoming header are configurable. At a minimum there is 1 integration test.

### Extra credit requirements:

- Solid test coverage
- Cache the response, for a configurable TTL
- Retrieve a key (assume a JWT) from the remote server response and include that in a (configurable) header so it is proxied with the request to the backend.

We recommend using <https://github.com/Kong/kong-pongo> for your development environment and you may also use <https://github.com/Kong/kong-plugin> as a template for your custom plugin.

There are a number of publicly available plugins (in their own Github repos, or in the Kong repo) that can also serve as examples for you to follow for this exercise.