**Full Stack Engineer Assessment**

Objective

Implement a web application that allows users to store, at later retrieve, files at a specified URL. The application should be composed of two distinct components - frontend JavaScript application, and a backend API.

The backend can be written in Python-based web framework of your choice (Django is our preference).  The backend should act as a JSON API which provides endpoints for the frontend to upload and retrieve files.

The frontend can be written in any modern JavaScript framework of your choice (Aurelia is our preference).

The test solution should include clear instructions on how to build and run both components.

Requirements

Functional

* Stores files of any type and name
* Stores files at any URL
* Does not allow interaction by non-authenticated users
* Does not allow a user to access files submitted by another user
* Allows users to store multiple revisions of the same file at  the same URL
* Allows users to fetch any revision of any file

Non-functional

* Demonstrate knowledge of best-practices in relation to unit testing
* Clear documentation detailing how to build and run the frontend and backend

Example

A user may submit the file "review.pdf" to the application, specifying "/documents/reviews/review.pdf" as the desired URL. The user later submits a new version of the file at the same URL.

The user can now retrieve the latest version of the file by accessing the document URL ("/documents/reviews/review.pdf"). The original version of the file can be accessed at the  URL ("/documents/reviews/review.pdf?revision=0").

Timeframe

Please return your solution within three days of receipt of  the test. If this timeline poses any issues, please reach out to [marieclaire.collins@propylon.com](mailto:marieclaire.collins@propylon.com) to discuss.

Delivery

The solution can either be delivered through a private, shared Git repository, or via email as a Zip file.

In the case of an emailed Zip, zip the project folder and send it to [marieclaire.collins@propylon.com](mailto:marieclaire.collins@propylon.com). Should your email client reject the ZIP for containing source code, please encrypt the ZIP with the password "propylon". This should bypass any checks by the mail server