Objective

Implement a web application that allows users to store, and 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 a 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 (Angular 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").

Delivery

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