

Junior Back-end Engineer Technical Assignment

Articles database

Description

Create a proof of concept app of an “Articles database” where users can do CRUD (Create, Read, Update, Delete) operations on Articles, comment on them as well as filter based on their properties.

Required Functionality:

- User can upload an article
 - Articles must contain at the very least the following attributes: identifier, publication date, authors, abstract, title, tags
 - Articles can have multiple authors
 - Articles can have multiple tags - the tags can be anything (e.g. if the article talks about cooking a steak in a grill, they can be something like `Meat, Beef, Grill`)
- User can get a list of all articles uploaded by any user
 - User can filter that list by year, month, author(s), tag(s) and keywords
 - Keyword search can simply check its existence on the abstract and title - feel free to implement any kind of search mechanism you like.
 - Optional - check out more advanced full text search implementations. Some databases offer such functionality, which usually includes some kind of tokenization and stemming.
 - View must be paginated, with a maximum of 100 rows per page
- User can download a CSV of articles by providing a list of identifiers or by filtering in the same way as when listing the articles
- User can update and delete their own articles
- User can CRUD (Create, Read, Update, Delete) comments on any article
 - They should only be able to Update and Delete their own comments

The deliverable must also come with a README file which contains instructions for:

1. Adding sample data to the API's database
2. Running the API

Technical Specifications

- Provide only the API - not any UI
- Design and implement a RESTful API
- Use a framework of your choice (preferably in Python)
- Use a database of your choice
- Provide working and tested code

Notes:

- The previous specs are flexible, feel free to add/change details in order to feel the gaps based on common sense.
- The project should be designed and implemented in a way that presents the candidate's technical skills.
- It is not a problem to over-engineer some parts in order to present technical skills, patterns and designs.
- It is ok to simplify some parts if needed.
- Keep in mind that we don't want just to have a project that runs, we need to understand the depth of your skills.