Cloud Book Writer Platform

Objective: Build a next-generation cloud-based platform where users can write, save, and collaborate on books. The platform should prioritize seamless collaboration and cloud storage, ensuring users don't need to manage local files.

Core Features:

1. Unlimited Sections and Subsections:
    - Users should be able to create an unlimited number of sections within their books.
    - Each section can contain multiple subsections, and these subsections can further contain their own child subsections. This nesting can go to infinite levels.
    - For instance, a section titled "Introduction" might have subsections like "Intro to Platform" and "Intro to Book Writing." The "Intro to Platform" subsection might further contain its own subsection titled "Intro to Platform (Menu Bar)."
2. User Authentication.
3. Permissions & Roles:
    - Implement roles such as Author and Collaborator.
    - Only Author should have the ability to create new sections/subsections. However, both Author and Collaborator can edit them.
    - Author should be able to grant or revoke access to specific collaborators.

Bonus (optional):

1. Writing Test Cases
2. Caching results for swift response times.
3. Use PEP-8 coding style.
4. Use Django Framework

Documentation Clarity:
It's essential that the documentation for your solution is crystal clear. We understand that there might be instances where certain specifications could be ambiguous. In such cases, please make your best assumption and proceed. However, it's crucial to clearly document these assumptions in your submission. This helps us understand your thought process and ensures that all parties are on the same page.

Submission:
Provide the source code, database schema, API documentation, and a brief overview of how you've approached and implemented the task. Mention any trade-offs or decisions you made during the implementation.