

Assignment: Frontend Web Application

Objective:

Build a small web application using Angular v19 (Standalone mode) that demonstrates your proficiency in frontend development.

Task Overview:

You are tasked with developing an **E-book customer dashboard** where users can purchase and read online e-books. The application should allow users to sign up, log in, keep track of the latest page the user had read (implementation to be done in LocalStorage), the progress per category, per page and per line. Make sure this is done intuitively.

Requirements:

1. Development:

- **Task Dashboard:**

- You can use Tailwind or any Angular-supported styling system. If you use Angular Material, make sure you use Angular Material 3. If you have gone with the option of using Angular Material, if you use Angular Material 2, **unfortunately, your task will be AUTOMATICALLY DISCARDED.**
- Using Reactive programming is a MUST. If you use Promises instead of NgRx/Rx.js, **your task will be AUTOMATICALLY DISCARDED.**
- Make sure you use boilerplate code to simulate the API requests (login, etc). No real APIs should be used here.
- Make sure authentication is handled via JWT.

- **Generative AI:**

- You **can't** use generative AI to complete this task. We want to benchmark your knowledge, not the machine's. However, we must say we do sometimes use it.

- **VERY IMPORTANT NOTE:** If you didn't know how to do this, but rather decided to Google it and learn, and from there, provide this point, let us know. We can perfectly notice whether you're a beginner or not and we appreciate your honesty.

Submission Guidelines:

- **Code Repository:** At DeepDive, we use Git for our core development operations, along with a set of in-house tools made on our own, so why don't we see your code on GitHub? Ensure the repository is well-organized, follows Git best-practices and includes a README.md file with instructions on how to prepare and setup the web application.
- **Documentation:** Include a brief overview of your approach, any challenges faced, and how you overcame them.
 - Document any specific design patterns or architectural decisions made.
 - Provide instructions for running the Angular web app and accessing the dashboard.
- **Deadline:** Our developers have made this assignment in 2 days, some of them in 3 days. As a courtesy from us, you have 4 calendar days to provide the assessment test starting from the next day you receive this document.
- **AI Policy:** This part is very important and must be taken with care. We're very serious with it, just as we spoke above about it:
 - At DeepDive, we normally don't have that much of a problem if you use AI assistants or code generation tools if you take all the necessary safeguards and

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compliance to make sure your code works as it has been requested to do so.

Even, sometimes we even give you access to these tools because it improves productivity if properly used.

- However, during this Assessment Test we're not looking to measure the AI's intelligence nor performance, but yours. Because of this, using any kind of AI assistance tools such as ChatGPT, Claude, GitHub Copilot, Tabnine, and other generative AI models **IS ENTIRELY PROHIBITED** and failing to comply with this will result into dismissing your profile and rejecting to accept it on future applications in our company and the group of companies we work with.

Evaluation Criteria:

- **Code Quality:** Clean, maintainable code following best practices and conventions.
- **Functionality:** The application should meet all the requirements, and the features should work as intended.
- **Problem-Solving Skills:** Ability to integrate Angular application and solve practical problems.
- **Frontend Design:** A simple but user-friendly interface that demonstrates good UX principles.
- **Documentation:** Clear and comprehensive documentation that makes it easy to understand the project and set it up.

Good luck with this assessment test!

Wish you the best of luck,

- Your future DDM Team.