

# *Library or Framework?*

1. You've been asked to create a new version of an app used by product administrators to manage settings and display data about user activity and information. The current version was written using jQuery but grew organically, and it's become hard to maintain and add new features to it. It's a medium-sized app, with multiple views displaying a lot of data and forms.

This medium-sized app would do best with a framework simply because the current version is experiencing entropy, therefore becoming difficult to work with. Using a framework will help prevent this by offering a pre-defined structure for the application. Since this app has multiple views displaying a lot of data, one benefit of a framework is its performance with projects on a larger scale with a lot of traffic. For these reasons, I would suggest using React as it was first developed to keep code organized and more efficient, it is widely used, it is appropriate for both web and mobile apps, and it comes with a developers toolset.

2. You've been asked to build a new piece of your company's web app. The existing app consists of several sub-apps served independently under different routes by an Express server, which allows for different technologies and frameworks to cohabit. You'll be building what is

essentially a huge table that will display hundreds of thousands of data records.

In this case since the existing app already has frameworks and sub-apps I would use a library with the new part of the app. A library offers tools that do not change the structure of the app and the developer is in control. A JavaScript library would be great for handling the data and allowing the user to visualize the data.

3. Your designers have tasked you with creating a prototype for a standalone app to be used internally by your product team. The app will showcase the product team's design system (colors, components, fonts, styling, etc.).

In this case, a framework is not needed because of the scale of the project. It is a prototype and will be used internally by the product team. The developer is in control of everything so if anything, I would use a library as needed, perhaps JQuery, to simplify some of the JavaScript concepts.

4. For the Achievement 3 project, React will be beneficial because it makes the process of building the frontend of an app easier and faster. It has a standardized format and a better structure than if I were to just use Vanilla JavaScript. My code will be cleaner and by using React, there will be less opportunities for making mistakes. React handles data efficiently, so since there will be a lot of interactions at the front end

(users signing up, searching movies, saving movies, etc.) the interactions will be efficient and quick.