Comprehension Questions

- What is caching in the context of React applications, and why is it important for performance?
- Write a code snippet using React Query with a type-safe cache key for fetching product data.
- How do caching and memoization together contribute to scalable and reliable React applications?
- Provide a scenario where memoization could actually hurt performance instead of helping.
- What is query invalidation, and why is it important after a mutation?
- Summarize the basic workflow for integrating TanStack Query into a new React project?
- How do you use the `useQuery` hook to fetch data from an API? Write a simple code example?
- What are the benefits of using TanStack Query DevTools during development?
- Why is it important to always invalidate relevant queries after a successful mutation?
- Why is cache invalidation important after a mutation (such as adding or updating data)?
- How can you test edge cases like network errors or concurrent updates when using React Query or SWR?
- Why is it important to handle loading and error states in your UI