

AN INTERACTIVE WEBSITE TO SUPPORT THE CO-DESIGN PROCESS



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MOTIVATION

Making code evaluation more accessible to scientists.

- GPU based computing provides the potential to both reduce the time to scientific discovery and energy consumption for suitable science objectives.
- One of the major challenges scientists face is the slow adoption of GPU computing technologies because expert knowledge is required for the evaluation process.

GOAL

Web Design: Learning React

- My goal during the internship was to build an interactive learning website aimed at simplifying the evaluation process of GPU computing.
- The website is aimed towards enhancing scientific communication by bridging the knowledge gap between scientists and software engineers and making code evaluation more accessible to researchers and scientists.
- I utilized the React framework and web design principles to build the website.

RESULTS

Query Page

The screenshot shows a 'Query Page' for 'STUDENT EXERCISE 0' with a 5-minute timer. A progress bar at the top indicates 0% completion. The main content area contains four questions with radio button options for 'Yes' and 'No'. A red circle highlights a help icon (question mark) next to the first question. A callout box on the right explains: 'Tool Tip: Users can hover over the help icon to get an explanation of the technical terms they not be familiar with.' Below the questions are 'Back', 'Clear', and 'Next' buttons. A 'Result Page' section below shows a 'Summary Page' with a progress bar at 100% and a list of steps to take to start GPU porting.

Result Page

How does the website work?

- The website is designed to assist the user in evaluating whether their science objective is well-suited for GPU-enabled computing.
- The assessment comprises four pages containing a series of questions.
- Upon completion, the summary page will provide tailored feedback based on the user's responses.
- If the science objective aligns favorably with GPU-enabled computing, the feedback will include a set of steps the user can take to initiate the GPU porting process.

Feedback tailored to user's responses

Steps to take to start GPU porting process

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