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CSS 497 Abstract

Transitioning from academic learning to real-world software engineering roles is a challenging process, often punctuated by the daunting hurdle of technical interviews. In the software engineering education landscape, there is a void between the knowledge acquired and the aptitude required for successful technical interview outcomes. Addressing this disparity was the central objective of this capstone project.

The project entailed creating a two-step tool to bolster student confidence and prepare for technical interviews. The initial component was a Canvas course crafted as a comprehensive study guide. This curated course, with challenges, helpful web pages, and video content, was designed to offer students an exhaustive preparation path, giving them the fundamental tenets of technical interviewing. The trajectory of the course imparts knowledge and instills confidence in problem-solving, indispensable assets in an interview scenario.

Upon successful completion of the Canvas course, students are given access to the second phase: a specially designed website that provides a unique opportunity for practicing technical interview sessions featuring a scheduling tool for both mentors and students. This site offers students a network of industry mentors willing to volunteer their time where they can hone their skills in low-stress mock interviews and mentoring sessions. This symbiotic model allowed students to gain invaluable feedback and experience while providing mentors with an opportunity to refine their interviewing skills.

The underlying reason for adopting this dual-structure approach was rooted in the belief that theoretical knowledge, while essential, is only truly learned when combined with practical application. By combining a course-based learning module with real-time practice interviewing, we aimed to offer students a holistic preparation journey.

The culmination of our efforts was a robust system that can revolutionize technical interview preparation, as it has the potential to go beyond helping only CS students. While our solution does not claim to guarantee success, it unquestionably bridges the current gap, positioning students more favorably in their quest for software engineering roles by giving them the confidence and skills needed to succeed.

In conclusion, our capstone project was not just an exercise in software development but an endeavor to facilitate a smoother academic-to-industry transition for software engineering students. By combining education with practicality, we have introduced a solution that promises to reshape the landscape of technical interview preparation, making it more accessible, comprehensive, and effective.