An Online Tutor Matching Platform: Connecting Education, Shaping Futures

(Application Software in An Established Area)

Chong Hou Choi, 21104588, chchoi@uwaterloo.ca Chun Kit Chui, 21107337, ckchui@uwaterloo.ca Jiarui Fan, 20803239, j65fan@uwaterloo.ca Leo Li, 21079613, 1242li@uwaterloo.ca Zirui Peng, 21104777, z56peng@uwaterloo.ca

Abstract

E-learning is a method of digital education that enables remote access through the Internet, providing a flexible and personalized learning experience. Online Tutoring, a vital aspect of E-learning, focuses on providing tailored one-on-one or small-group remote instruction from expert tutors, designed to boost students' ability in particular subjects or skills. This approach is a win-win solution, helping students by addressing their learning challenges while also offering job opportunities for tutors. A major obstacle in promoting and issuing Online Tutoring lies in the lack of a transparent and efficient matching platform, crucial for seamlessly connecting students and tutors. Our primary goal is to develop a dynamic and responsive platform called Online Tutor Matching Platform that simplifies the entire tutoring connection process.

The Online Tutor Matching Platform will be designed as a user-friendly website application, using a robust database to manage user information, and implementing advanced model frameworks and algorithms to enable personalized recommendations, user interactions, and best matching. The resulting Online Tutor Matching Platform will provide a centralized solution that helps convenient, swift, and high-quality connections between students and tutors. The intuitive user interface and effective matching mechanism will significantly reduce the time and effort required for both students and tutors to find suitable matches. In this project, we aim to gain an understanding of the entire website development process, learn the Next.js framework for front-end development, the Flask framework for back-end development, and implement agile development practices to gain experience through practical application.