

ABSTRAK

PENGEMBANGAN *FRONT-END* SISTEM ASESMEN TALENTA MAHASISWA UNIVERSITAS LAMPUNG BERBASIS NEXT.JS DENGAN METODE *RAPID APPLICATION DEVELOPMENT*

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Unit Penunjang Akademik Pengembangan Karier dan Kewirausahaan Universitas Lampung mengadaptasi konsep *9-Box Talent Matrix* untuk mendukung pemetaan dan pengembangan potensi mahasiswa. Penelitian ini bertujuan mengembangkan *front-end* sistem Asesmen Talenta Mahasiswa berbasis *web* menggunakan *framework* Next.js yang mampu memvisualisasikan konsep *9-Box Talent Matrix* dengan mengintegrasikan instrumen Minat Karier, Karakteristik Diri, dan Kesejahteraan Psikologis. Pengembangan sistem dilakukan menggunakan metode *Rapid Application Development* melalui 3 (tiga) iterasi dan menghasilkan 11 fungsionalitas berupa autentikasi pengguna, asesmen mahasiswa, visualisasi statistik, manajemen data, log aktivitas, serta pengelolaan profil pengguna. Pengujian sistem dilakukan menggunakan *Black-Box Testing* melalui 156 skenario dengan tingkat keberhasilan 100%, evaluasi performa menggunakan Google Lighthouse, serta pengujian *usability* melalui *System Usability Scale* dan *Eight Golden Rules*. Hasil pengujian menunjukkan performa sistem yang sangat baik dengan skor Google Lighthouse sebesar 99 dan nilai *Largest Contentful Paint* sebesar 1,0 detik. Evaluasi *usability* menghasilkan skor SUS sebesar 75,87 dengan kategori “Baik” (*Good*) dan skor *Eight Golden Rules* sebesar 164,4 dengan kategori “Sangat Baik”. Dengan demikian, sistem yang dikembangkan terbukti fungsional, andal, dan layak digunakan sebagai solusi digital dalam mendukung strategi pengembangan potensi mahasiswa di Universitas Lampung.

Kata kunci: Asesmen Talenta, *Front-End*, *Website*, Next.js, *Rapid Application Development*

ABSTRACT

FRONT-END DEVELOPMENT OF A STUDENT TALENT ASSESSMENT SYSTEM AT THE UNIVERSITY OF LAMPUNG USING NEXT.JS WITH THE RAPID APPLICATION DEVELOPMENT METHOD

By

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Center for Career and Entrepreneurship Development at the University of Lampung adopts the 9-Box Talent Matrix concept to support the mapping and development of student potential. This study aims to develop the front-end of a web-based Student Talent Assessment system using the Next.js framework that is able to visualize the 9-Box Talent Matrix concept by integrating Career Interest, Self-Characteristics, and Psychological Well-Being instruments. The system development was conducted using the Rapid Application Development method through 3 (three) iterations and produced 11 functionalities including user authentication, student assessment, statistical visualization, data management, activity logs, and user profile management. System testing was carried out using Black-Box Testing through 156 test scenarios with a 100% success rate, performance evaluation using Google Lighthouse, and usability testing using the System Usability Scale and Eight Golden Rules. The testing results showed excellent system performance with a Google Lighthouse score of 99 and a Largest Contentful Paint value of 1.0 seconds. The usability evaluation produced a SUS score of 75.87 categorized as “Good” and an Eight Golden Rules score of 164.4 categorized as “Very Good”. Therefore, the developed system is proven to be functional, reliable, and feasible to be implemented as a digital solution to support student potential development strategies at the University of Lampung.

Keywords: Talent Assessment, Front-End, Website, Next.js, Rapid Application Development