

## ABSTRACT

### **“WEBSITE FRONTEND DESIGN AND ADMIN SYSTEM MANAGEMENT DESIGN AT FERMATA MUSIC COURSE JOGJA USING REACTJS WATERFALL METHOD”**

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*Fermata Music Course Jogja currently still uses Excel to manage student data, schedules and course information. This results in a slow data search process, data input errors, and overall less effective data management. This research aims to develop a ReactJS-based website frontend to overcome these problems. By applying the Waterfall method and using Tailwind CSS, the system developed can increase data management efficiency, reduce input errors, and provide a better user experience. The system developed is tested using the black-box method to ensure its functionality meets requirements. Tests were carried out on various main features, including student data management, course schedule management, and data search and grouping. The test results show that all features can run well according to the specified specifications. All test scenarios obtained a success rate of 100%, which shows that the system has met the main research objectives, namely increasing data management efficiency and reducing input errors. With the success of this implementation, it is hoped that Fermata Music Course can adopt this web-based system to replace the previous Excel-based data management method. Apart from increasing speed and accuracy in data processing, this system also provides a more intuitive display for users, making navigation and overall use easier.*

**Keywords:** Admin, metode Waterfall, ReactJS, Website.