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Hyper-automation of web testing

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Abstract

During testing, functional testing is a typical practice to ensure that a website's functionality works correctly. Several robotic process automation tools are available for this testing, such as Mabl and Google Recorder. However, the challenge is that these tools require human intervention to manually input the elements to be tested on a particular webpage, and depending on the website's size, this process can be time-consuming.

This project involves researching, designing, and developing a tool that eliminates the need for human interaction in creating functional tests. The goal is to improve the speed and efficiency of the functional test creation process by automatically generating these tests.

The Test Synergy tool offers a user-friendly design and algorithm that utilizes Cheerio and Selenium to eliminate the need for human involvement in creating and executing functional test cases. With the aid of Cheerio, this tool efficiently generates test cases, even for moderately large websites like the React documentation, taking only a few minutes to complete the process.

Keywords: Functional testing, Robotic Process Automation (RPA), Cheerio, Selenium