

Jest puppeteer

TDXAD-106



ThriveDX Jest puppeteer

Time Commitment 4 days (total of 32

hours / 8 hours per day)

Skill Level Professional Level Course Category Agile & Devops

Jest Puppeteer is a combination of two powerful tools: Jest, which is a popular JavaScript testing framework, and Puppeteer, a Node library for controlling headless Chrome or Chromium. Jest Puppeteer allows you to write end-to-end tests for web applications, simulating user interactions and verifying the results. It's particularly useful for testing web UIs in a realistic environment.

Target audience

The target audience for learning Jest Puppeteer includes:

- Web Developers: Especially those working with JavaScript and web applications.
- Quality Assurance (QA) Engineers: Individuals responsible for testing and ensuring the quality of web applications.
- Automation Testers: Professionals interested in automating testing workflows for web applications.
- Frontend Engineers: Those who want to ensure the functionality and behavior of their frontend components.
- Students and Learners: Anyone keen on improving their skills in testing web applications.
- Teams and Companies: Organizations looking to implement automated testing for their web





Prerequisites

To learn Jest Puppeteer, it's helpful to have a basic understanding of the following:

- JavaScript: Since both Jest and Puppeteer are JavaScript-based tools, having a solid grasp of JavaScript fundamentals is essential.
- Node.js and npm: Jest and Puppeteer are Node.js packages, so familiarity with Node.js and npm (Node Package Manager) is necessary.
- HTML and CSS: Understanding HTML structure and CSS selectors is important for interacting with elements on web pages during testing.
- Asynchronous JavaScript (Promises, async/await): Puppeteer relies heavily on asynchronous JavaScript, so understanding concepts like Promises and async/await is crucial.
- Testing Concepts: Basic knowledge of testing concepts, such as test suites, test cases, assertions, and test runners, is beneficial.
- Command Line Interface (CLI): Comfort with using the command line interface to run scripts and manage dependencies is useful.
- Having these prerequisites will make it easier to grasp the concepts and techniques involved in using Jest Puppeteer effectively.



Program Structure

Module 1:

- Introduction to web scraping and automation
- Setting up a development environment with Node.js and NPM
- Introduction to Puppeteer
- Navigating websites and manipulating the DOM using Puppeteer

Module 2:

- Working with forms, buttons, and events in Puppeteer
- Scraping dynamic websites and bypassing CAPTCHAs with Puppeteer
- Debugging and troubleshooting in Puppeteer
- Best practices for web scraping and automation

Module 3:

- Working with forms, buttons, and events in Puppeteer
- Scraping dynamic websites and bypassing CAPTCHAs with Puppeteer
- Debugging and troubleshooting in Puppeteer
- Best practices for web scraping and automation

Module 4:

- Integrating Puppeteer and Jest for end-to-end testing
- Debugging and troubleshooting tests in Jest
- Best practices for testing with Jest
- Project: Building a real-world application that combines
- Puppeteer and Jest for web scraping and testing











