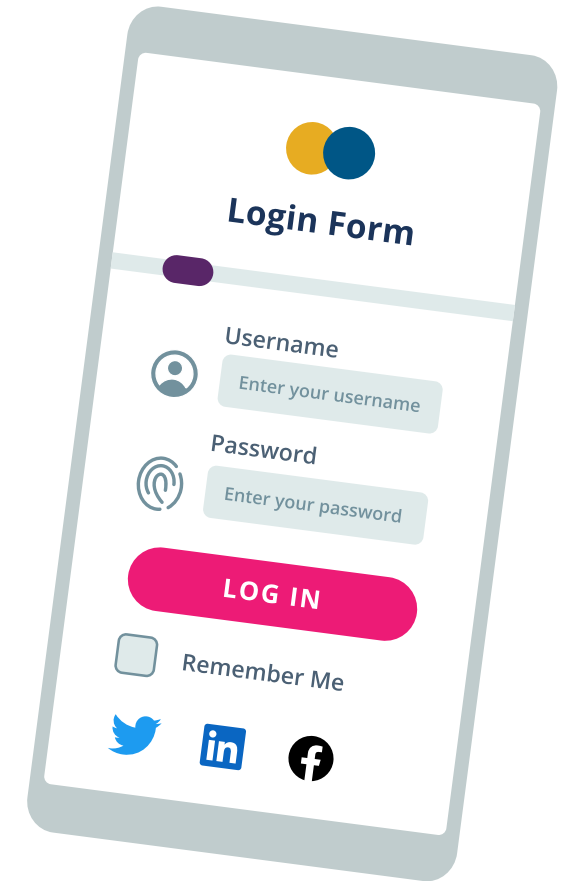




# The State of UI/UX Testing 2022

Presented by Applitoools



# Introduction

The State of UI/UX Testing report is the industry's largest survey centered on those involved in designing, building, and testing of frontends, or user interfaces, of applications. Unlike testing at other levels of the stack, the frontend has unique challenges around cross-platform testing, accessibility needs, and visual perfection that come across in our respondents' answers.

In 2022, there is increasing optimism as tools and practices are being adopted to make UI/UX testing a simpler process that requires less maintenance. But skill sets and broad range of testing environments are still immense challenges nearly 2 years after our last survey.

Read ahead to learn how your peers act on UI/UX testing.

This report is divided into the following sections:



Design



Development



CI/CD



Testing



AI

# Demographics of Report

Shipping quality UIs takes a village, and it certainly benefits from having a diverse set of functions collaboratively working together. Our report surveyed over 800 designers, developers, automation engineers, manual testers, and digital leaders to bring a wide range of viewpoints into a final assessments.

We focused on those that were designing and building the frontend of applications, but did allow input from those that were building APIs directly for consumption by a UI team. After all, modern application interfaces are built up of many modular parts and systems built by many different teams.

Our respondents were from companies of all shapes and sizes - from start-ups with only a single tester to Fortune 100 companies with an army of manual testers.

## SIZE OF ROLE

Individual Contributor



Manage a team of 5 people or less



Manage a team between 6-10 people



Manage a team of more than 10 people



## JOB FUNCTION

QA Engineer / SDET



Manual Tester



QA Manager



Frontend Developer



Backend Developer



Designer



## Design Systems

# Will the rise of design systems aid testers?

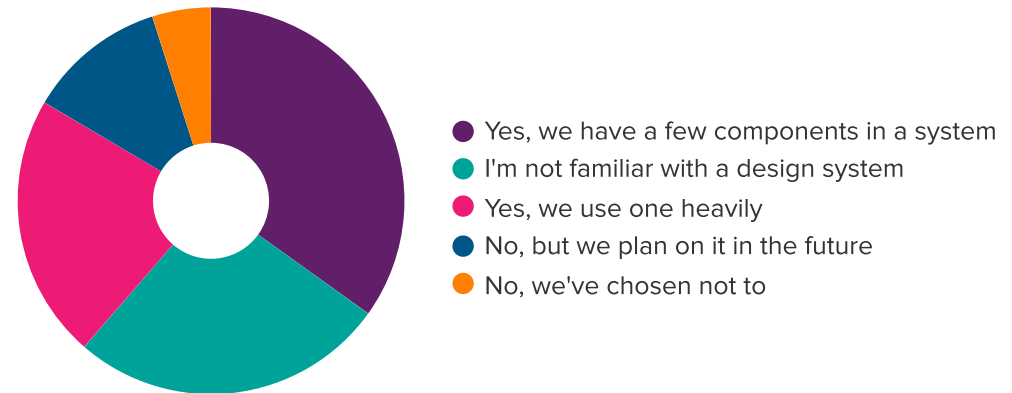
Design systems seek to offer organizations the benefits of speed and consistency, helping frontend teams deliver well-designed applications efficiently. By reusing atomic units across design and development, teams can ship faster while worrying less about all the little details.

While design systems are always good practice, the tools that help you build them are just as important.

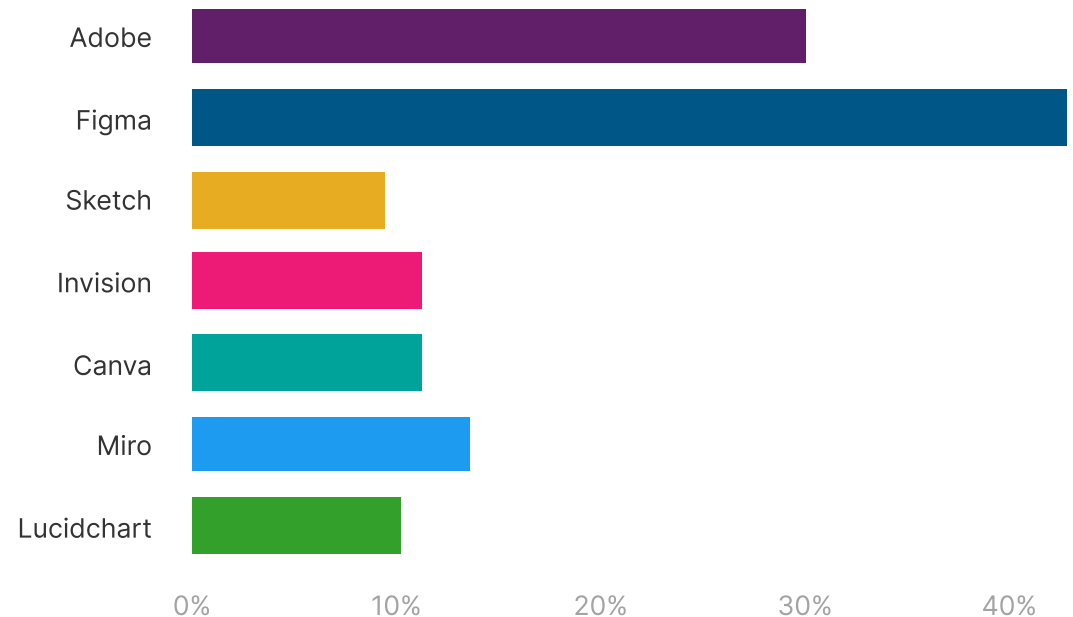
## Tools & Workflows

We asked our survey respondents about the design tools their organizations are using to build high-fidelity mockups. Figma is the clear leader in design tools, while Adobe - the longtime favorite - is a close runner-up. Figma was the first to bring full-functioning graphic design tools to the browser, and has led to a whole new level of collaboration around design.

### DO YOU USE A DESIGN SYSTEM?



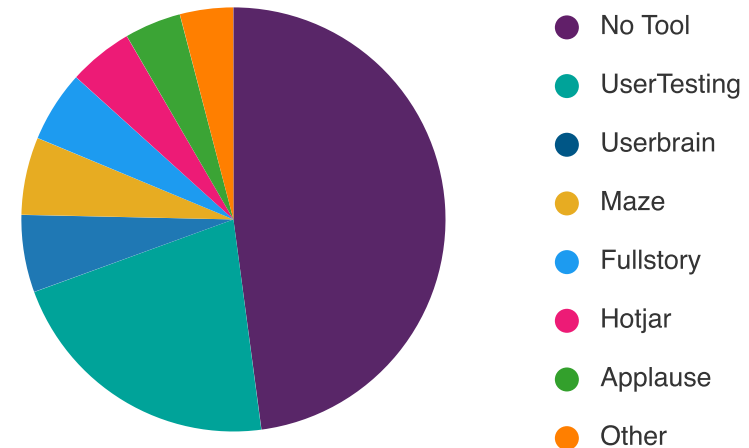
### TOP DESIGN TOOLS



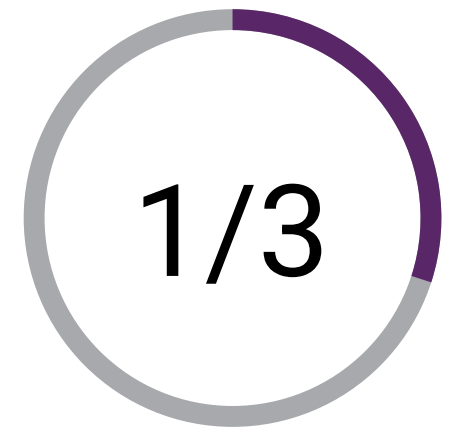
# Usability Testing is becoming a bigger deal for frontend teams

Usability testing, or verifying that actual users can intuitively carry out tasks in an applications UI, is a large part of testing the UI/UX of an application. We asked respondents to rank which types of testing were done on each deployment and usability testing was more commonly run than security and performance testing.

This is a huge revelation, as other types of testing often get more attention and resources on teams. The challenge historically with usability testing has been that it is difficult to automate and measure. That's all changing with a new class of tools popping up around the Usability space like User Testing, Fullstory, and Applitools.



Nearly one-third of those surveyed do Usability Testing on every single deployment



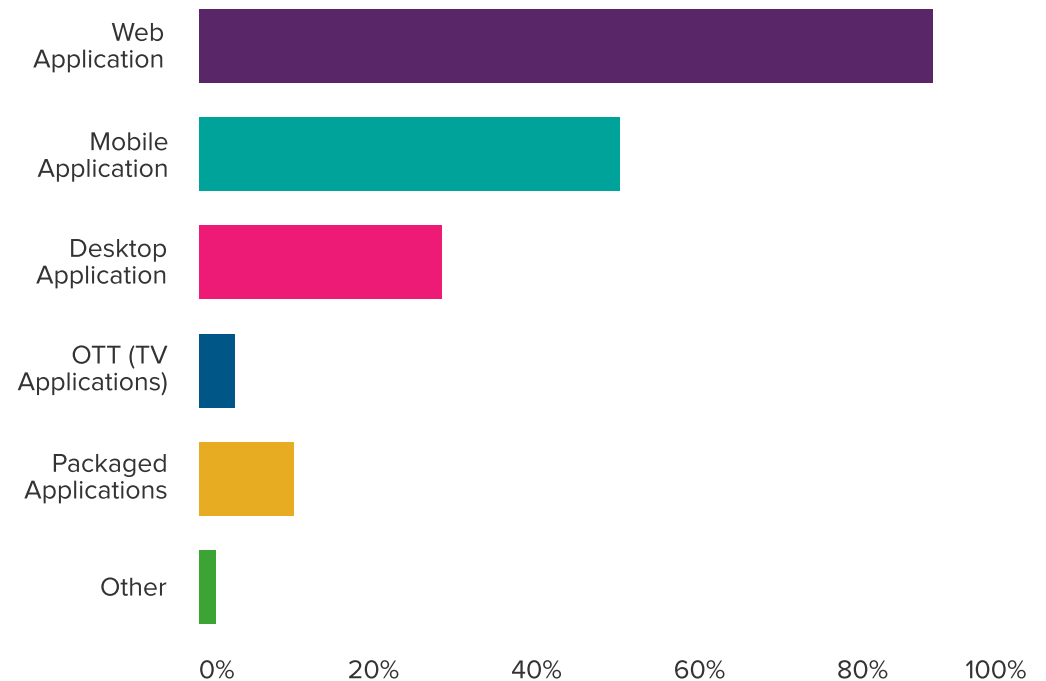
# Websites and Web applications continue to dominate test targets

At least half of all respondents to our survey are involved in testing either a Mobile or Web application, but an even greater percentage (most!) interact with a websites or web applications for their daily testing responsibilities.

The rise of mobile and JavaScript powered web frameworks have made web applications a more powerful interface for banks, retailers, manufacturers, and others to interact directly with their customers.

Those that do test only Web interfaces also tend to test more than just a single app. This may be due to the proliferation of modular web design and how common integrations are for these interfaces.

What percent of respondents test each type of application?



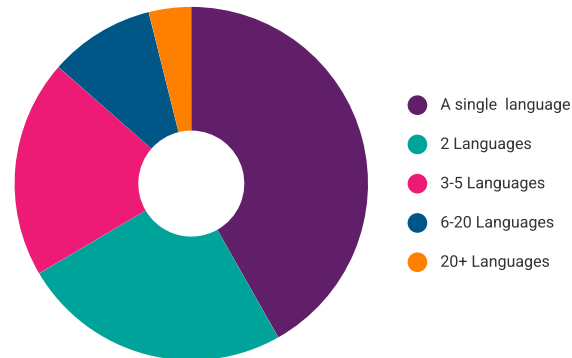
# One app. Many, many interfaces.

The exponential growth in different interfaces that need to be tested for just one application has dramatically slowed down testing.

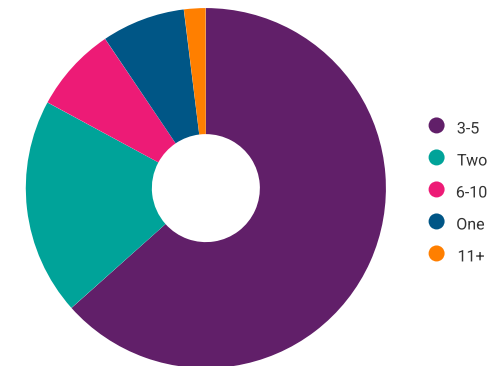
Teams that test more than one browser or device are almost 2x slower in delivering changes into production than teams that only test on one. This was the largest single factor on deployment speeds, yet it stayed consistent for teams that test 2 browsers or 10 - there were no major differences once a team took on more than one browser to test.

Applitools Customers saw 4x faster deployments when faced with cross browser testing solutions, thanks to the Applitools Ultrafast Test Cloud

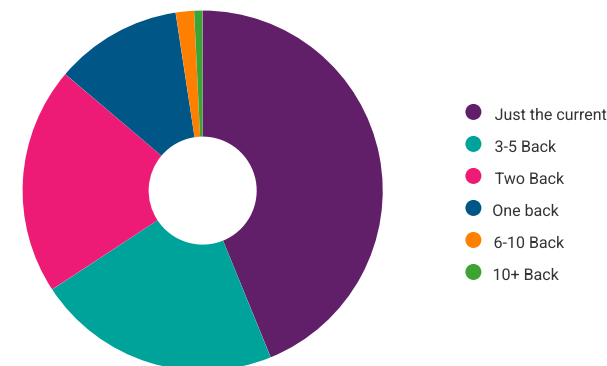
How many different languages do you test for?



How many different browsers do you support?



How many versions of browsers do you support?



How many different mobile devices do you support?



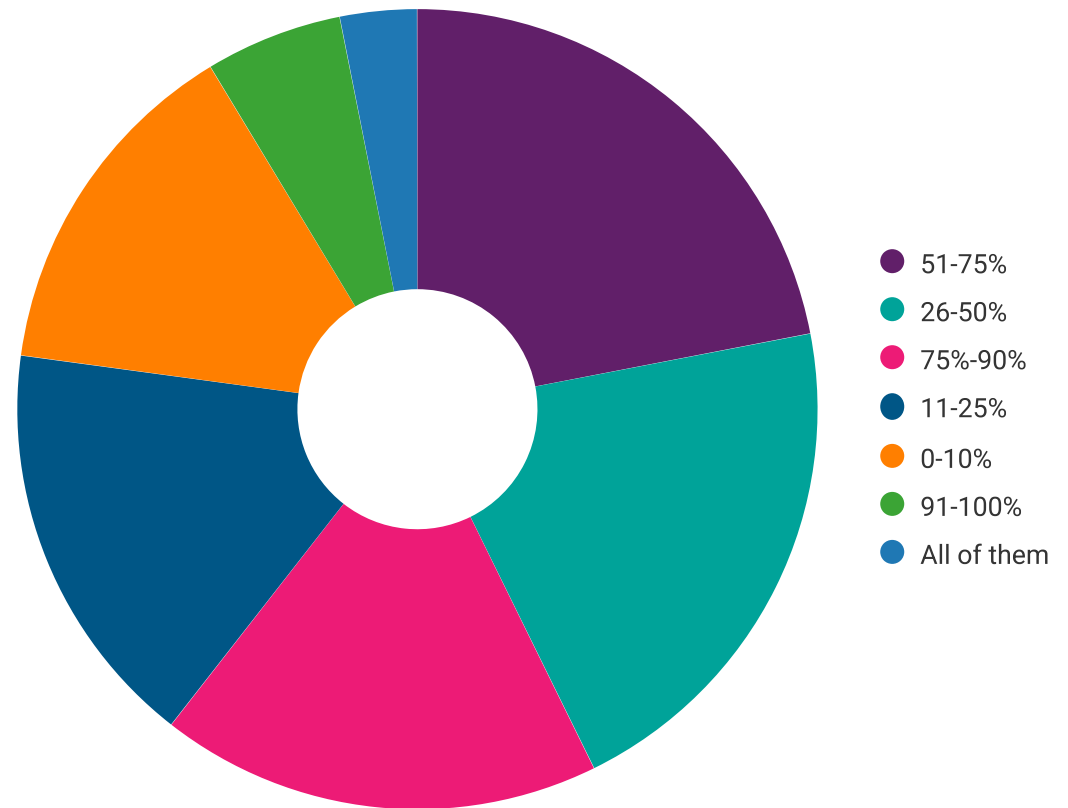
# Most organizations automate less than 50% of their testing

In 2022, it is bit sobering to report more than 50% of our respondents are a “manual testing” org. That is to say, they automate less than 50% of their overall testing. This means that most organizations are still missing out on the plethora of benefits that automation can bring to their software delivery, including higher quality, faster releases, and a more confident engineering team.

The high percentage of manual tests in organizations is often times due to the difficulty of automating certain types of tests such as visual, usability, performance, and accessibility.

Solutions like AppliTools can help teams with this additional automation - assisting them in automatic validation of manual intensive work like spotting visual or accessibility bugs.

What percent of your tests are automated?





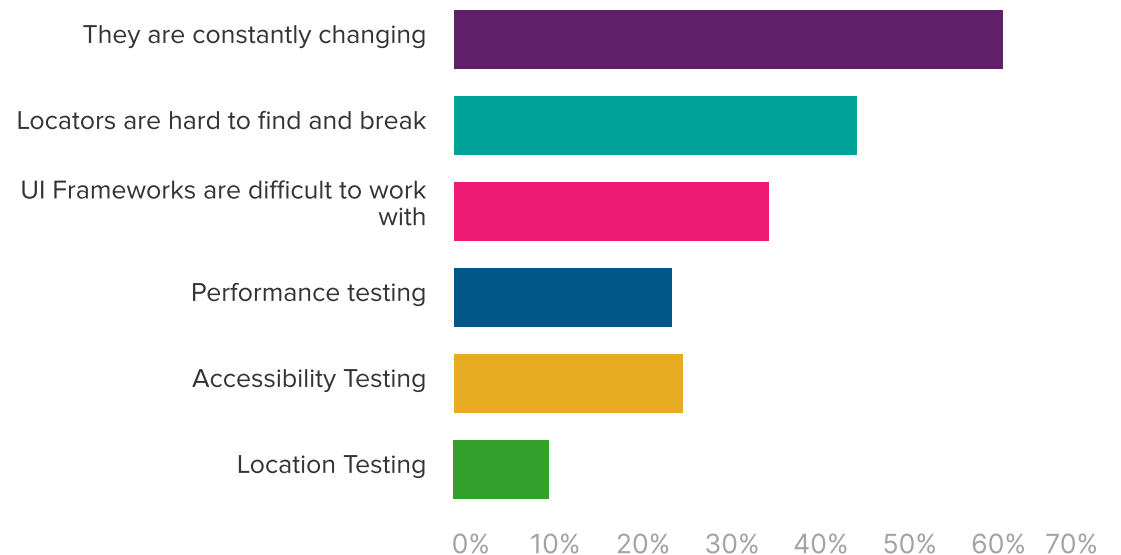
# Frontend testing is a never ending challenge

While modern web development has greatly benefitted from the explosion of frameworks, tools, and processes that has popped up in earnest in the past decade - it also has presented a growing challenge for testers.

In one of the most resounding answers in the report, “The constantly changing UI” is the hardest challenge that testers seem to face when tackling the frontend of an application.

With user interfaces layouts, styling, and content changing nearly hourly, testers have to be able to keep up and maintain huge test cases at scale.

What part of testing frontends do you find most challenging?



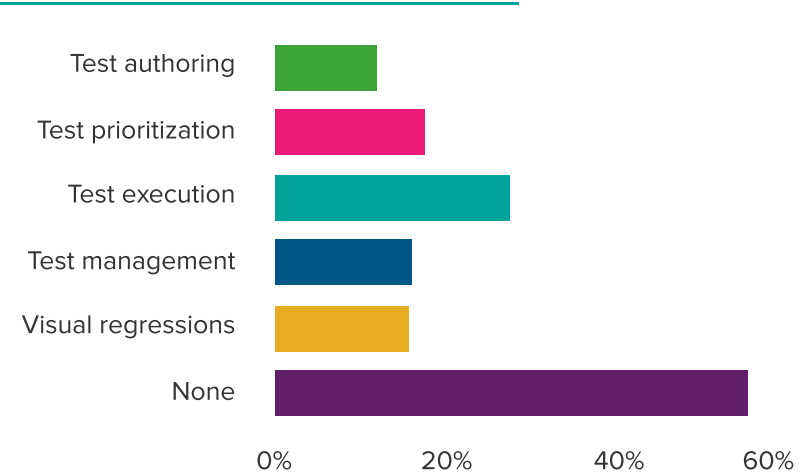
# AI is becoming a bigger part of the Test Automation story

Artificial Intelligence has been a long time coming for the QA space, yet it still hasn't impacted every aspect of our craft. Respondents answered that specific types of testing have garnered more attention from AI at their organizations than others, especially around test execution and visual testing.

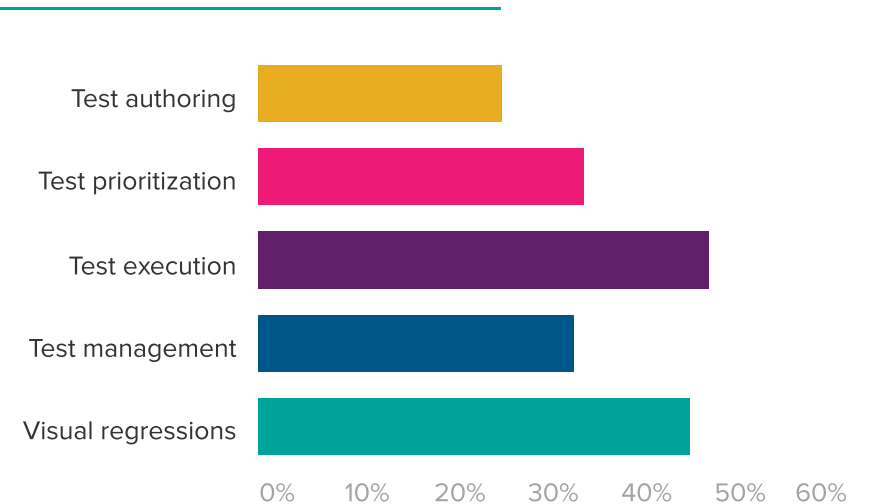
Test authoring continues to actually be the thing testers are least interested in replacing with AI or autonomous robots.

Visual Testing, on the other hand, is one of the top candidates for AI enhancement. 48% of teams expect to add artificial intelligence capabilities in their visual regressions through solutions like AppliTools Eyes.

What part of your testing strategy do you use AI in today?



What part of your testing strategy do you expect to use AI in?



## Conclusion and recommendations

This wraps up this year's State of UI/UX Testing report. Our respondents this year covered design, development, and testing of applications and represented a wide range of languages, functions, and challenges.

The challenges that teams face while testing modern frontends are wide ranging - but tools such as AppliTools, that embrace AI and automate the hard things, can make these tasks just a little simpler.

We hope that by learning where your peers are on their automation journey that you are able to push your strategy to the next level and test confidently into the future.

Visit [AppliTools.com](https://applitools.com)  
to get started testing your  
application's frontend in a  
whole new way.