Performance & Testing

Today's to-do list
We will look at how our website performance can be improved, tools to help us see exactly what our visitors are doing on our site and platforms to help us detect technical and SEO problems.

Learning objectives:
By the end of this session, you will
Understand more about the performance tools available.
Identify which platforms are appropriate for you.
Learn about the potential issues and how to fix them.

When the dust has settled
Once we have built our sites, added our products, and SEO'd our pages then we want to look at how our sites perform. We need to look at performance from two angles. Our user side, and our technical side.

From our user's point of view, we want to make sure our sites work well for them. We want to know how our users interact, what they like, what works and what doesn't. How they navigate our site and find information. You should always be developing sites, updating them and keeping on top of the latest trends and styles.

On the technical side, we want to look at how our sites perform. How fast they are, are they in good working order, have we got any broken links, toxic backlinks, or accessibility issues?

We have already looked at plugins to help cache and optimise our sites, today we are going to look at some sites that can help us test our site's performance in both areas.

HotJar
Starting with user experience we have HotJar. HotJar and platforms like it allow us to see what our views make of our site. How they use it, interact with it and how they move around. What makes them happy, what makes them mad and what content they visit the most? It lets us see real user behaviour with screen recordings of our visitors moving around, scrolling up and down and actions they take. We can watch their journey around our site and see which pages they visit and in what order. It helps you plan your content better and can help you decide which areas you want to they and increase the traffic to.

By watching the recordings you can see how the pages are interacted with, for example, if you see in the recordings that people are scrolling up and down to the same piece of information, then we can consider moving these elements around to make them easier to view. We want people to interact with our pages (it's good for that bounce rate) but we also don't want people to get frustrated because they can't find what they need and go off to look for it somewhere else.

We have talked about testing for mobile in previous sessions. HotJar lets us see recordings of tablet mobile and desktop devices so we can see how our viewers interact on each device. It means you can see issues first-hand, and you can make improvements based on proper data not just what your Aunt Shirley says 'that nice website she likes does'.

We can use heat maps to see what parts of our site are the most popular. The buttons and links that our viewers use the most. This is useful from an SEO point of view. The most popular pages on your

site will carry more weight with Google. Pages connected to those pages can take advantage of that popularity.

So, for example, you have a service you want to promote and people aren't visiting that page much. It isn't ranking very highly and isn't getting the SERP results you would like. Connecting it to a popular page or sandwiching it between two popular pages in the user's journey will help increase its visibility. Kind of like being popular because you are hanging out with the football team, it's about being in the right place at the right time.

As the business owner your idea of what people think about your business or how they search for it is often very different to the actual process. Using sites like HotJar we can see what the customer clicks, views and reads. We can improve the journey, utilise popular pages to add products and calls to action and increase our traffic and sales.

Just to be clear, HotJar doesn't replace Google Analytics. GA is great and it gives us lots of valuable stats and info. HotJar is about adding deeper insights to the actual page use. GA will tell us which pages have been visited and even in which order but we can't see what goes on during that visit. What buttons, which pages are most popular. It answers questions that the stats on their own just can't. Use the behavioural insights from HotJar with the technical stats from GA to get a deeper understanding.

GA can give us important numbers like bounce rate, page traffic, and drop-off rates, but it can't tell you why your users are behaving that certain way. Where specifically in your journey they're having issues that cause them to leave? Why aren't they converting?

Heat maps show the most popular links and buttons on your site. It means you can see the customer journey through the site but also how about things your viewers think are buttons but aren't? If people seem to be clicking on the same image over and over, improve the experience by making it a link. They obviously want to use it as one so let them.

There are other tools available too like customer surveys. Ask your customers what they think of your site as they are using it. Did they find what they were looking for? How was the checkout process? How easy was the transaction? All the results get stored in your dashboard and you can view them all to find out what your users really think.

Feedback boxes let you ask quick questions, it's about capturing in-the-moment thoughts while your viewers are active on your site. Funnels help you optimise conversions so you can see where issues are and where your customers drop off in the journey.

PageSpeed Insights
Next we are going to talk technical. PageSpeed Insights is a highly addictive free tool that allows us to find out what Google makes of our websites on both desktop and mobile devices. It tests for speed, best practice, accessibility and SEO. Google takes a lot of elements into account when it looks at your website and how high it should rank. **A fast-loading site will enhance the overall user experience, people like sites that load quickly and Google rewards fast-loading sites over slow ones.**

There are a lot of metrics that go into website performance. Yes, we want a page that loads quickly but it's also about how well the pages work together, how we link our content, how we build our site, and how our server is set up. We get scored out of 100 for each of the four sections. The results use a traffic light system of Red-Problems, Amber-ok could be improved and Green-good.

We looked at the performance section last week in your SEO session.
Now we are going to look at some of the other screens

Various factors go into all these metrics results, so we don't want to focus too heavily on one metric but look to improve the overall performance. The beauty of PageSpeed Insights is the opportunities and diagnostics sections that give us suggestions to improve our performance or list elements that we can fix. We want to get the best results for both desktop and mobile on each of the main site pages.

Next we move on to Accessibility, this result is all about identifying opportunities to improve the visibility of our sight from a UX perspective. We are testing for opportunities to enhance the experience for users of assistive technology, like a screen readers.

Looking at our results here [explain whatever results your scan is showing]

Moving on to Best Practices, these are the elements that help our site be better all round. HTTPs, image resolution and general elements throughout the site that make it easier to view and use.

Finally we look at SEO, these checks ensure that your page is following basic search engine optimisation advice.

Activity one
Lets run your demo site through PageSpeed Insights. There will be things that pop up like HTTPs and probably things about caching and domain. We are going to ignore those on these scans as you are all working on test sites. For any of you that already have a website for your business, if you want to run the scan on that URL instead that's fine.

Go to https://pagespeed.web.dev and put in the URL you want to look at and hit Analyze.
Lets open the floor and see what everyone is getting and I can explain your results and loo at options to improve them.

SemRush
We have our overview now from Google as to what it thinks of our site but how about doing a deep dive into our pages, links, backlinks and images? That's where platforms like SEMRush and SERank come in. With these tools, we can look at not just our website, how it performs and its contents but we can also look at our competitors and find out what they are doing too. We can look at our site from a technical point of view with a site audit, we can look at our SEO and Keywords and we look at backlinks and building good quality links with other sites to help improve our rankings.

Activity two
There are some free tools available on SEMRush so let's create a free account and do a website audit. Go to
https://www.semrush.com/signup/?src=blog&onboarding=off
Create a free account and sign in.
Work through the initial onboarding steps. If it asks you to sign up for a free trial just skip it and it will take you to the dashboard. In the navigation on the left-hand side go down to Site Audit and enter the URL you want to test. Just like PageSpeed Insights, you can use your own website if you already have one or you can use your bootcamp site. It might take a few minutes to do a scan depending on how big your site is, so feel free to grab a brew while it's doing it.

Let's open the floor again, tell me what you get and we can look at how you can fix it or improve it.

Coming up soon to extend these skills
We are nearly at the end! You can use these tools and platforms we have explored today in your final two sessions to help improve and complete your websites before completion.

Don't forget
Make sure you complete and submit your workbooks. Once you do you will get a copy of your completed workbook and links to download a copy of today's notes and slides.

Today's session page in your learner dashboard has a useful links document that will cover all the tools, resources, and articles we have discussed in the session and some useful guides and articles to take you further.

Make sure you revisit your FABs and set yourself some goals specific to today's session.

Extra help
If you need any help with anything from today's session feel free to message in the WhatsApp group. If you have any other issues or problems related to the course or the tools speak to Andrew and Irfana, they are here to help you.

Up next
See you tomorrow for first of two project completion session