Introduction

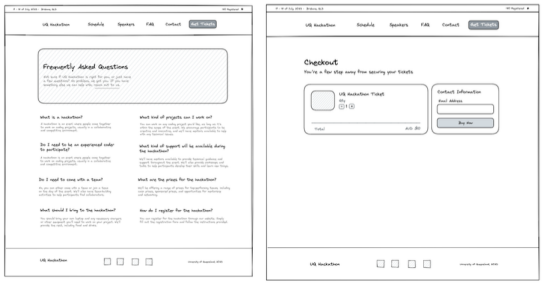
This website informs users about a fictitious UQ Computer Science Club 'Hackathon' event. The target audience of the website is current UQ students studying IT, Computer Science, or Software Engineering.

The concept for the website was developed after I attended UQ's CodeJam event in April 2023. The current website for the CodeJam event works well, but lacks a modern design.

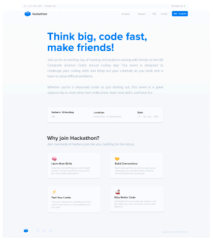
With that in mind, I created a website that caters to the student target audience by making the design modern and appealing to tech enthusiasts, while providing relevant information in a clear and concise way.

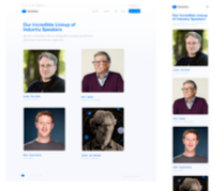
Low fidelity & High Fidelity

The Low Fidelity Prototypes can be accessed on Excalidraw here.



The High Fidelity Prototype for UQ Hackathon website can be accessed in Figma here.





Usability Heuristics

The website adheres to Nielsen's 10 Usability Heuristics. Specifically, the design adheres to the heuristic of an **aesthetic and minimalistic design**. The UI is free of irrelevant or rarely needed information to ensure that the user can gather information easily in order to purchase a ticket. Each page has a clear purpose to ensure the user is never overwhelmed with too much information.

Error Prevention and Visibility of System Status are also adhered to specifically in the checkout page. For example, the user is not able to purchase more then 5 tickets per person. If they attempt to do so, the quantity button is disabled and a warning message is rendered. Similarly, in built HTML form validation was used on the checkout and contact pages to ensure form inputs are input correctly.

Development Process

The website is built with HTML, CSS, and JavaScript. The site is responsive on all devices. Flexbox was primarily used and reduced the amount of media query code. The CSS used gives the site a modern look and feel. For example, the background is gradient from a light blue through to white. Hover effects and transitions use a 0.3 second ease-in-out to give the UI a smooth and modern feeling. CSS Custom Properties are used to ensure consistency across the UI during development.

Javascript was used without relying on any external libraries or frameworks like jQuery. Javascript is responsible for handling error prevention and validation in checkout, mobile menu modal, validating user input in the message form, and dynamically highlighting nav links.

Reflection & Learning

One of my key learnings is the value of low and high fidelity prototyping before beginning development. Starting with a low-fidelity prototype helped me develop the ideal UX without getting bogged down in designing. The high fidelity prototype allowed me to develop more rapidly, as I did not have to worry about 'designing in the browser' and could code to specifications in Figma. In future, I would spend even more time on the low and high fidelity prototype before development as I still found myself needing to make UI design decisions during development.

Another key learning was the managing state. I needed to pass the total cart value from the checkout page to the order confirmation page. This would have been simpler with modern libraries like React, however, with Vanilla JS I used URL Parameters to pass the data.

Future Development

In future, I would like to add functionality to the site to make it more interactive. Transaction functionality on the checkout is the most important addition to allow users to buy tickets without needing to pay on the day. A gateway such as Stripe to handle this, or pass the user to an offsite ticketing platform.

The site was kept purposefully minimal, and modern. It does not use image carousels or sliders. That said, further interactivity would be useful. For example, including a forum or comments section in the FAQ so that unanswered questions are published would be both useful and interactive.

Including a backend to enable data persistence would also unlock functionality such as user accounts. This would also be useful to track other data points such as the number of