



iRonin.IT

Technical Aspects of User Experience

User Experience (or UX) is most commonly associated with design - but did you know it's also heavily dependent on the technical side of your app or website? Here's a checklist of steps you can take to make sure your code supports the experience you want to deliver to your users.



Loading speed

Goal: making sure the most important content gets delivered as soon as possible

- Remove unnecessary resource
 - Unused CSS or JS assets
 - Too-large graphics, script files and styles
 - Minimize the number of HTTP(S) requests
 - Optional: serve assets from a server geographically close to your users
 - Use modern graphic file formats, compressed as necessary
 - Make sure linked/embedded assets are available under the indicated URLs
- Minimize the time necessary to process JS files and free up the main processing thread
 - Optional: use lazy loading for optional scripts
 - Set up cache policy headers for static assets
 - As required: use request caching and reverse proxy solutions
 - Carefully handle data that can become outdated



Privacy and security

Goal: earning your users' trust by protecting their interests, as well as your own - while improving your website's positioning.

- Serve all sites via HTTPS
- Use the WebRTC protocol only when necessary
- Use trusted libraries and scripts
- Get your users' consent for processing their data
 - Within the parameters set out in your (coherent and comprehensive!) privacy policy
- Remove redundant tracking scripts and pixel tracking
- Keep your libraries and all project dependencies up to date
- Backup data that's important for your business and your users



Accessibility

Goal: allowing all users to enjoy the full experience delivered by your app in almost any circumstance

- Adjust your interface for users with visual impairments, motoric impairments or cognitive disorders
 - Use appropriately sized fonts
 - Make sure there's enough contrast between text and background
 - Code your content so that colour blind people will have no trouble with it
 - Keep interactive elements (such as buttons) comfortably spaced out

- Support users who have no disabilities, but who are limited through circumstance (e.g. low-res devices) or temporary issues (e.g. a hand injury or medication impacting cognitive function)
 - Declare content language in the metadata
 - Use a well-structured system of semantic tags
 - Add ALT tags and descriptions for visual and auditory media

- Keep your content mobile-friendly
 - Declare content language in the metadata
 - Use a well-structured system of semantic tags



Websites friendly for crawlers, robots and AI-assistants

Goal: earning your users' trust by protecting their interests, as well as your own - while improving your website's positioning

- Use structured data to deliver all relevant information (contact information, links to social media profiles, etc.)
 - Consider using Schema.org markers
- Check HTML, CSS and JS files for errors
- Make relevant data available to crawlers and robots
 - Check the settings of the robots.txt file
 - Verify the availability of data during web crawling
- Make sure your headers indicate canonical URLs for search result or content categories



When product and UI designers think about ensuring a positive experience they tend to forget how critical are technical aspects. If you cannot or don't care to provide an effective, stable, and secure service for users, both impaired and able-bodied, then you cannot provide a good User Experience

Piotr Wojciechowski,
Product Designer @ iRonin.IT



Many important elements of UX are directly related to the technical side of building apps and websites. To make sure your users will enjoy top experiences, you need a project team with designers and developers working closer together to deliver the highest quality of both design and code.

Ready to learn more? Check out our blog article on this subject, or visit our website at iRonin.IT