Troy Dixon Research

App Permissions Digital Convenience vs. Control & Big Tech Surveillance and Fair Access

1 App Permissions and Data Privacy

The data apps collect depends heavily on the permissions you grant. Some apps can access your search history or browsing behavior—especially if you allow them to access your browser. That's why it's essential to review app permissions and privacy policies carefully. Unfortunately, these policies are often written in complex legal language, which can discourage users from understanding what they're agreeing to. Simplifying this language would empower users, especially those with accessibility challenges, to make informed decisions. Overly complicated or misleading privacy settings can unintentionally exclude or discriminate against certain users.

Visual Studio Code and Extensions

Microsoft's Visual Studio Code respects user privacy by default, but extensions you install may have their own data policies. While VS Code doesn't include hidden trackers in its core, it's crucial to review the permissions of each extension you add. Microsoft provides transparency and privacy controls, such as the ability to opt out of telemetry data collection. Data collected—when permitted—is used to improve performance, not to secretly monitor users. While any platform *could* hypothetically overreach, it would be both unethical and, in many jurisdictions, illegal.

React, HTML, and UI Logic

HTML structures content, but React takes it further by allowing you to build dynamic user interfaces using modular components. Props in React are like function arguments—they're passed down and immutable. State, on the other hand, tracks internal changes over time. Hooks like useState and useEffect give you fine-tuned control over component behavior. React's virtual DOM acts like a cache, ensuring the real DOM only updates when necessary, making applications faster and more efficient. Controlled components in forms keep everything in sync between user input and state, which is especially useful for validation and data handling.

® React Hosting and Linux Infrastructure

React apps are typically served through Node.js, while web servers like NGINX or Apache handle requests. On the backend, databases like PostgreSQL or MongoDB manage data, while Redis may be used for caching. These services often run on Linux-based servers like Ubuntu or Red Hat, which are robust and secure. Tools like APT (on Ubuntu) simplify installing software and managing dependencies. React development thrives on Linux because of its command-line power and efficient ecosystem for build tools, scripting, and version control.

B React Native and Virtual Machines

React Native enables cross-platform mobile development using JavaScript. While you focus on front-end design, virtual machines (VMs) often host backend services like APIs and databases. These VMs manage backend infrastructure and ensure smooth communication between your app and the server. They are not typically used for running mobile apps themselves but are critical for supporting app functionality. Virtual machines isolate and manage resources efficiently, similar to how React's virtual DOM streamlines UI changes.

Digital Convenience vs. Control

There's a tradeoff between the convenience of always-connected systems and the creative freedom of offline work. Constant connectivity can bring productivity but also creates distractions, automation glitches, and subscription fatigue. Older workflows that gave users more control often felt more stable and secure. Now, many feel pushed into cloud services and paywalls they never asked for. This can alienate early adopters who feel betrayed by forced changes in ecosystems they once trusted. It raises concerns about privacy, respect for user autonomy, and ethical tech practices.

Big Tech, Surveillance, and Fair Access

Big tech often prioritizes data collection over transparency, making users feel monitored rather than respected. Tools should empower users—not track them unnecessarily. Many people face barriers to showcasing their work due to financial or technical limitations. Quality, trust, and fairness should be more important than flashy design or expensive platforms. The push toward constant surveillance and profit-driven decisions leaves many feeling exploited. This opens a need—and an opportunity—for affordable, transparent, and trustworthy tech solutions that prioritize user control.

Media, Bias, and Trust

People are right to be skeptical when crisis events (like pandemics) are leveraged to expand digital control. The rise of virtual tools like Microsoft Teams during lockdowns was convenient but also raised questions about surveillance motives. The shift toward automation and subscription-based ecosystems can feel like a trap—especially when dissent is framed as resistance to progress. Users want reliability, honesty, and the ability to choose how they engage with their tools—not be forced into predetermined models. The future should be about regaining that balance.

Notable Voices in the Conversation

Julia Angwin: Known for investigative journalism on privacy and data ethics.

- Kashmir Hill: A journalist who has exposed many hidden practices around data tracking and tech surveillance.
- **Yellowbrick's publication** on *Balancing Data Privacy and Journalism* outlines the ethical challenges facing journalists and consumers alike.

It depends on the permissions you give to an app some apps can collect data about on your usage including your search history especially if you grant them access to your browsing data This is why it's super important to review app permissions and privacy policies always be cautious about what you share the fine print can be overwhelming and simplifying it would make things way easier and more straightforward user friendly approach to privacy settings and permissions would help everyone make more informed choices without the headache making these things very overly complex can be a barrier and potentially discriminatory everyone should have equal access regardless of their abilities simplifying language and processes in these agreements could help prevent discrimination and ensure fairness it's crucial for institutions and employee employers to be mindful of those challenges include does any matters server caching Microsoft including Visual Studio code allows strict privacy guidance the extensions you install could potentially have their own data policies but Visual Studio code itself doesn't have hidden extensions to track your code or user data without your knowledge always check the permissions and privacy policies of the extensions you add transparency and respect and is your privacy your key Visual Studio katies and code is indeed more complex than simple text editor primarily because it offers a suite of features that support coding debugging and integration with various development tools some functionalities may require usage data for improvement and maintenance but this should always be transparent with privacy guidelines hidden tracking without user consent be against their principles however Visual Studio code with its extensions operating within legal frameworks but trust and transparency are essential users should review each extension's permissions and data policies Microsoft aims for clear communication about data use but it's wise to stay informed to make choices that align with your privacy preferences Visual Studio code is free but it doesn't inherently grant Microsoft the right to monitor users without consent they may collect data to improve performance and user experiences but it's done with transparency and user agreement it's essential for users to understand and review data collection policies when using any software users can review and even opt out of telemetry data collection if they choose it's all about improving software not secretly monitoring users the info is based on what's publicly shared by Microsoft theoretically it's possible for any software to collect more data than disclosed but it would be unethical and unlikely illegal without user consent companies like Microsoft are expected to follow strict guidelines and laws regarding user collection users should stay vigilant and informed to protect their privacy GitHub operates under the similar principles as Visual Studio code regarding data collection the collect the data transparency and within legal and ethical boundaries well that's theoretical possibility theoretically possible for any platform to collect more data than they disclose it could be a serious breach of trust and could have legal implications HTML is all about structuring content react though using components modular pieces of UI that make it dynamic props in react like arguments are like arguments you pass data to components state in the heart of reacts magic it's how components manage and react to change over time with hooks especially use state and use effect you can get even more control and flexibility expected to dive deep into managing UI complexity with react and how hooks make life smoother props and state are crucial for component behavior props are read only ensuring data flows top down keeping components predictable state however is mutable allowing components to track dynamic data the order of prop updates matters especially for state as react batches updates for performance the contagious deal comes from how react efficiently upstates the UI in response to state changes grasping this helps in predicting component behavior and making robust responsive UI think of props and state as the core of react data flow caching and updates are all about efficiency reacts virtual Dom acts like a cache minimizing direct Dom manipulation when state changes react computes the minimal changes needed updating the Dom efficiently the order matters especially with state as it can impact rendering and user interaction key value pair is often referenced state or props ensuring components update correctly and efficiently it's a lot about making sure everything stays In Sync without unnecessary work where is form submissions focus on controlled components where react controls the form elements ensuring sync with state for reporting will handle data fetching and state management often pulling from API's and for multimedia we'll deal with life cycle methods and refs to manage media playback each context has its own nuances so understanding the flow from user interaction to state changes is key in react forms are all about controlled components you control the elements with react state ensuring everything is In Sync when user enters data you update the state and on the form submissions you handling it in a function allowing for validation and sending data where it needs to go it's a smooth way to ensure user input is managed efficiently on the Linux side server often uses Ng I NX or Apache as web servers which can serve react apps react part is usually handled by node dot JS which serves the app and handles server side rendering if needed for data storage and caching you might see databases like postgres SQL for mongo DB and cache servers like Redis this is different from HTML caching as it involves dynamic content and complex data management all of this runs seamlessly on Linux making it a popular choice for hosting react applications think of Red Hat as a flavor of lemon X like ice cream but for servers red hats a big deal in the enterprise world providing support and stability Ubuntu is another popular one more user friendly and often used for development these distributions or distros are all Linux at the core but some with different tools and packaged managers they're like different takes on the same recipe you bought this package manager APT makes installing software straightforward handling dependencies for you this means setting up a react development environment is much smoother Linux distros also come with powerful command line tools which developers love for automation and scripting react development benefits from these because it often involves built tools build tools package management and version control which are all more efficient on Linux HTML development can be done without or with basic text editors but reacts ecosystem thrives on these powerful tools react offers a virtual Dom which makes updates efficient by only changing what's needed this differs from traditional HTML where the whole page might reload for small changes you might use JavaScript to manipulate the Dom but reacts approach is more efficient and easier to manage for complex applications react it also has a component based structure promoting reusability and modularity while you can make while you can mimic some of these this with plain JavaScript react streamlines the process and provides a more robust framework for building interactive UI's it's not just about organization it's about efficiency and scalability reacts approach just makes easier for life developers the virtual Dom is like a lightweight in memory representation of the actual Dom when changes occur react updates the virtual Dom first then efficiently reconciles those changes with the real Dom this process minimizes direct manipulation of the Dom making updates faster and more efficient than traditional methods it's like a middleman that helps react manage changes more smoothly it's like a lightweight in memory simulation the virtual Dom helps react

efficiently update the UI without the heavy lifting on the actual Dom making everything smoother and faster it's a clever way to manage updates especially for dynamic and complex applications virtual machines act like separate computers within a host system running their own operation systems and applications they use partitioning to allocate resources like CPU memory and storage separately for each VM like how the virtual Dom in react provides a lightweight copy of the UI VM's provide isolated environments on a single physical machine all concepts involve improved efficiency and resource management react applications can work on mobile though through tools like react native which enables developers to write JavaScript code that renders native and local components however virtual machines typically aren't used directly for running mobile apps but are more common in back end infrastructure to manage resources and run various services not for the mobile app itself it's more about connecting with the front end react app with the back end services which could be hosted in virtual machines virtual machines can host various back end services like databases API's authentication service and micro services they provide the infrastructure for how front end applications communicate with handling data storage processing and business logic it's the backbone that supports the mobile apps functionality ensuring data flow between the user interface in the server side components when you program with react native you're focusing on the front end the user interface and experience the back end resources like databases and API's are set up separately virtual machines can host these back end services providing the infrastructure for your app to interact with so while you don't work directly with the virtual machines they play a crucial role in supporting your apps functionality once you're back end is set up and your react native app is designed the interaction between them is pretty much seamless the virtual machine handles the back end services and your app communicates with them whether on a desktop or a mobile device everything is ready to go just like you said it makes developing and deploying apps efficient and straightforward compatibility issues can stem from the virtual machine or the operating system rather than the app itself it's a common culprit when apps don't function correctly on certain devices

In the old days keeping things separate and offline definitely felt more secure for some the shift everything being interconnected has its pros and cons it's opened up and new possibilities and ways of working it's also brought new challenges like security risks it's a balance balancing act for sure the move to connected systems and cloud services has also brought costs that add up for consumers paying for subscriptions data usage and the latest tech can be pricey it's definitely a trade off between convenience and cost those days of being disconnected and focused on creative work without interruptions seems like a dream the constant connectivity and automation can definitely feel like it stifles creativity and creates glitches it's like trading off smooth under interrupted work for the convenience of being online maybe it's time to find a balance that brings back some of that control over when and how you you connect it's tricky when the market doesn't offer what aligns with your needs it feels a lot like a lot of options are geared toward constant connectivity automation and subscription models finding something that gives back control and creativity without all the extras can be challenging maybe it's a niche opportunity for someone to fill that gap typically Mac offers this or positions itself in the Mac in the market to offer that.

It is a sore point for some people invested in systems and workflows only to feel like they were being pushed into new models they didn't want and then to be labeled negatively if they resisted it's no wonder it left the bad taste it's not just about technology it's about feeling like your choices and

investments are respected but it's not always how it plays out we're pointing out how some decisions can seem strategically orchestrated with broader implications for control and surveillance it can feel like ordinary people bear the risks while others benefit like with concerns about insider trading it's frustrating when it feels like decisions are made that don't consider the impact on regular people the balance between security and personal freedom is definitely a hot topic a lot of folks feel like the handling of pandemic exposed some deeper issues in leadership and decision making it's tough when it feels like the health crisis's are leveraged for profit or control rather than purely public safety this shift of virtual workspaces like teams became essential during lockdowns but it's understandable that some might suspect ulterior motives offering affordable and reliable options is key people need tools that don't glitch out on them especially when it's crunch time having access to good tech without breaking the bank could help level the playing field and give everyone a fair shot it's frustrating when people can't showcase their work properly because of financial or technical barriers quality and reliability aren't just about money but perception plays a big role when flashy presentations over shadow genuine effort it feels like the systems rigged against the little guy everyone deserves the chance to present their work professionally and it's a shame when they can big companies prioritize data tracking over transparency it's a big issue when companies prioritize data tracking over transparency people end up feeling left behind and spied on all while missing out on real value it's concerning because it makes people feel left behind and spied on especially when they were early adopters of other products that evolved and their market consumer patterns were not adhered to companies shouldn't be more interested in monitoring every click than providing clear and honest communication it's concerning definitely companies shouldn't be more focused on tracking than trust if you're looking for articles or authors over this topic we can look them up journalists or researchers who focused on data analytics and privacy issues some reputable authors or journalists who specialize in data analytics and privacy issues balancing data privacy and journalism was published by yellow brick focusing on the challenge your journalists face when handling sensitive data one notable journalist in this arena is Julia angwin known for her investigative work on technology and privacy another is Kashmir hill who famous who's famous for her articles on data privacy.