

Analytics on Skilltype

Responsible Intelligence

Overview

Skilltype's desire to provide value to its users and customers brings with it the need to understand how users interact with the platform. Capturing and analyzing this interaction entails the use of tracking technologies, both off the shelf and custom-built. Skilltype understands the need for transparency and communication with this effort and seeks to strike a balance that allows for tracking that serves the overall effectiveness of the platform through continuous user experience improvements without encroaching on or violating user privacy. This brief whitepaper aims to surface our approach and considerations for what we believe to be a responsible path for user behavior analytics on the Skilltype platform.

Scope of User Behavior Analytics

Understanding Access Patterns and Technologies

The Skilltype application accessed via <https://app.skilltype.com> through a web browser or mobile device serves as the primary mechanism for user interaction. Making that interaction an effective and pleasant one requires that we understand our users' experience by capturing information that includes but not limited to the following:

- Browser type and version
- Screen resolution and capabilities
- Date and time of visit
- Approximate geographic location which helps serve assets (images, content, etc) from the closest data center possible for quick-loading
- Supported language(s)

The tools we use for this purpose include but are not limited to:

- [Google Analytics](#)
- [Intercom](#)

Our considerations include:

- Google Analytics Terms of Service prohibits the collection of personally identifiable data such as name, email address, or billing information.
- Instrumentation of application code and of application log data must exclude PII.
- If necessary, Skilltype must be able to manually or programmatically urge or request that data be purged from third-party systems.
- We identify a user only once they've signed up and logged in. This then enables us to provide a personalized user experience and support.

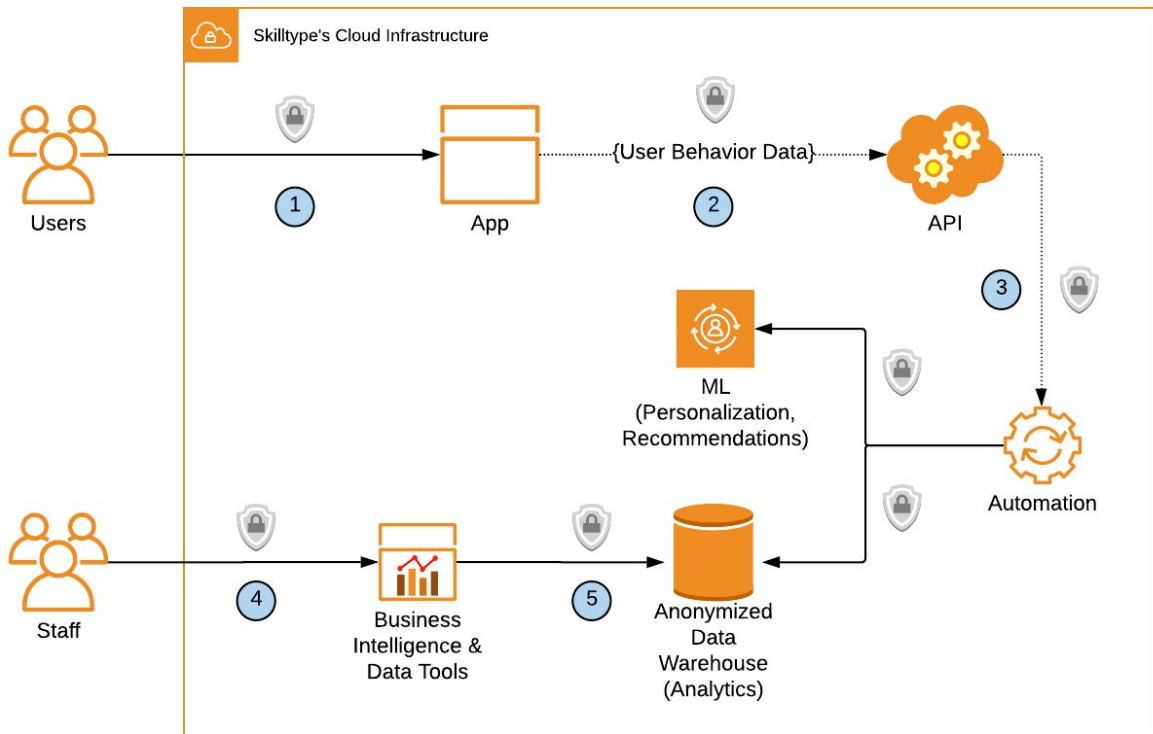
Understanding Feature Usage for Development

Skilltype captures interactions with features of the application such as item bookmarking, clickthroughs, page views, downloads, and more. This data helps us understand which features deliver the most value for our customers and helps us focus our engineering efforts. We also rely on the integration of state-of-the-art Machine Learning technologies deployed within our own infrastructure to help us recommend the best resources to a user while they are on the platform.

User Behavior Capture Architecture

The secure transmission, processing, and storage of user behavior data is a core principle in the design and implementation of Skilltype's technology. Our cloud infrastructure is built on AWS and allows us to take advantage of all the resources this provider puts into its [security, data privacy, and compliance programs](#). Skilltype relies on the [best practices](#) that AWS makes available when deploying resources in the cloud.

Our architecture is built from the ground up to address data privacy concerns by engineering anonymization into the process and securely accessing and storing the processed data. The following high-level diagram provides an overview of the steps we're taking to protect our customer data.



1. All communication between a user's device and Skilltype is encrypted.
2. Skilltype selectively captures behavior data and securely relays it to API backends within the Skilltype cloud infrastructure.
3. The API backends send data to automation pipelines that anonymize and distribute that data to the systems that need it behind the scenes.
4. Business Intelligence tooling is linked to an anonymized data warehouse.
5. Business Intelligence and reporting systems are hosted directly on Skilltype's cloud platform and are securely accessible only to Skilltype staff.

The major benefits to privacy and security with this approach are as follows:

- The behavior data captured on the platform never leaves the platform.
- Skilltype ensures secure transmission of data from end to end.
- Self-hosting certain tools and using managed services through our cloud provider allows Skilltype to develop innovative solutions while limiting how much data is shared with third parties.

Our Guiding Principles on User Privacy

Skilltype engineering treats security as a core principle. To that end, these are the data privacy considerations that guide the design and implementation of not only our user behavior tracking but also the rest of our platform:

- Interaction event data must be anonymized before storage and must use encryption at rest and during transport.
- User behavior analysis is performed using anonymized data that cannot be traced back to a named user.
- A user can request to be forgotten. Skilltype complies with the request by permanently deleting all Personally Identifiable Information (PII) generated by the user. Skilltype retains the anonymized interaction data.
- There must be no means of cross-referencing a forgotten user's data back to an anonymized set of records.
- When requested, PII is stored according to a customer's geographic requirements in order to support data sovereignty requirements.
- Anonymized data can be stored and managed centrally for analysis.
- PII is never sold to or knowingly shared with third parties.
- If or when a breach of the above guidelines is detected, Skilltype prioritizes engineering efforts to address it.

Conclusion

At Skilltype, we understand the trust that our customers place in us to safeguard their private information while they derive value from the platform. We repay this trust by engineering our software with security and privacy as core design principles. We also understand that our approach needs to keep pace with our customers' evolving privacy needs in an era where every service provider seeks to monetize their behavior data. To that end, Skilltype does not share PII data with third parties or use technologies that make it difficult to obfuscate or anonymize our user data.

We are committed to being transparent with what data we collect and what we do with it. We want to hear from you if and when you have any questions or concerns about data privacy and security.

