



// Social Product Studio

// Casual Corp Platform

The Casual technology platform streamlines rapidly prototyping, building, and scaling social products. Every person involved in product creation uses the same language, as defined below, to describe product features and technical components.

The core of the platform is built around scalable data collections called taps, data points called drops, and the access metaphors below.

// Framework

3-tiered Architecture

Each Casual products is built using a 3-tiered architecture that scales independently through RESTful calls and prescribed data access patterns: Interface + Application + API.

- The Interface layer includes boilerplate code, libraries, and pre-built data objects for iOS and HTML5/JavaScript
- The Application layer handles business rules, such as charge a credit card or send a one-off notification, along with access control.
- The API layer powers all products on the Casual platform without any modification. MongoDB is used for persistence and primary indexing.

Scalable Data Collections

All data in the Casual platform is captured in shardable collections called “taps” in MongoDB and exposed through the API layer. Each datapoint in a tap is a “drop” and is tagged with a timestamp and optionally a location or a user. Predefined access patterns ensure scalability (uniform access across all taps and minimal number of taps accessed per user), with optimizations to aid in lookups, pre computations, and non-standard access patterns.

User Accounts

All data is optionally associated with a user or user access controls. Users can be

authenticated via username/email, twitter, facebook, or a 3rd party mechanism using OAuth. Features built around it include private communities, secure messaging, and incorporating external data when needed.



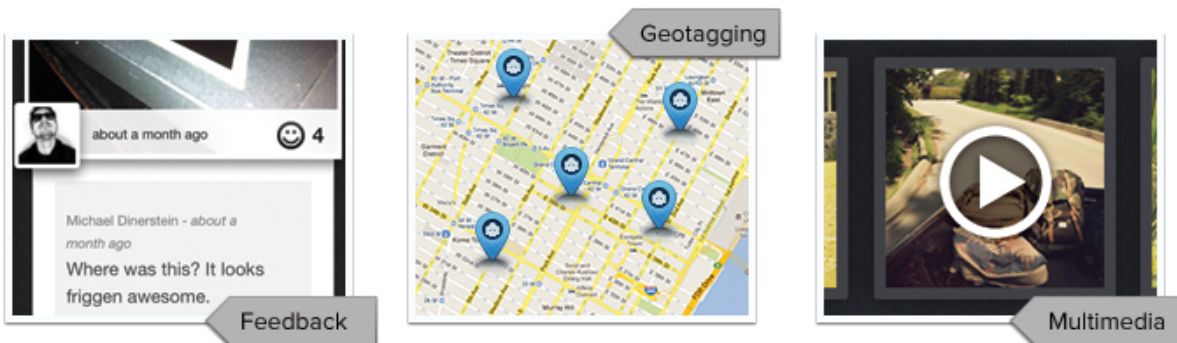
Metadata

Each addressable data element (tap, drop, user) can have metadata attached to it. Metadata consists of counters, tags, attributes, flags, and feedback. the metadata collection has more relaxed consistency requirements.

// Content Types and Features

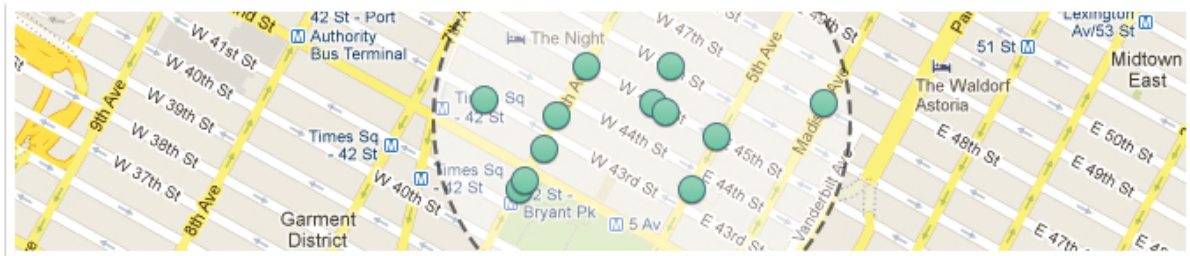
Multimedia

Native content in the Casual platform is text, location, image, feedback, videos, or external sites. They can be interchanged as generic data elements without application layer or API changes.



Filters

The platform allows filtering of data by distance from a point, geographical boundaries, time ranges, or users.



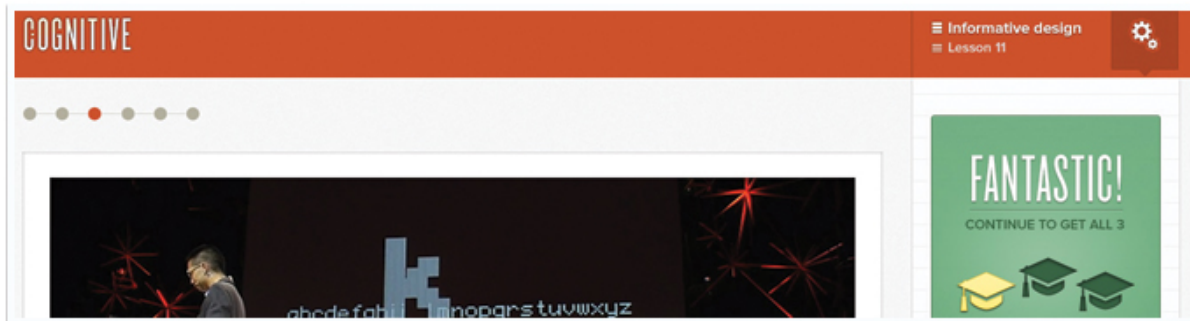
Recommendation Engine

Based on tags, attributes, counters, and other metadata, the Casual Platform can generate recommendations for content of any type and similar users. Additionally, the recommendations can be programmed based on previous responses to implement an adaptive surveying system.



Feedback Loops & Incentives

Each interaction can trigger an incentive or a pre-defined feedback loop, to capture game elements, positive feedback, narrative progression, and other engagement loops.



E-Commerce

Triggers can tie financial transactions to creating new drops. This couples sending messages, real-world gifts, and ecommerce with social engagement.

