Parallels: An Exploration Engine for The Discovery of Ideas

www.parallels.io

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ABSTRACT + CONCEPT

Parallels is a free + open source browser-based platform that enables the creation, navigation and discovery of networks of ideas. It consists of two integrated components: A tool for fluidly creating and remixing documents, and an associatively connected library comprised of the content people using the system decide to explicitly share.

Four principles guide its design: fluidity, remixability, connections and privacy-by-design

WHY?

Our daily digital experience is fragmenting into increasingly smaller moments and more diverse modes of interaction. Two trends make it difficult to holistically manage, connect and share the fragments of knowledge, or bits, which we create and consume:

The shift towards collaborative versus individual modes of work

The rise of centralized, cloud based services which offer convenience yet are tailored for narrow uses, lock in our data, and are driven by advertising models which skew privacy and ethical guidelines of content use

At the same time, open source experiments such as Linux, git and Wikipedia demonstrate the benfits of sharing knowledge and the interdependance of ideas across open systems.

This project seeks to find the balance of a system design which benefits the modern knowledge worker, where data is assumed private and in control / ownership of its creator[s], while also encouraging the intentional publishing and sharing of ideas for the benefit of others.

To do this, our design seeks to:

- help visualize the associated nature and interconnectedness of ideas
- allow us to work in ways that support this hollistic and associative way of thinking
- provide significant value over existing alternatives
- assumes the content we create is private, yet encourages sharing to allow for the serenditious discovery and connection of information

USE CASES

Extract the common functionality of:

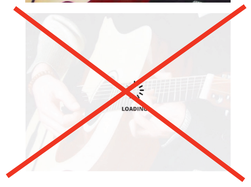
web browsing
text authoring
design layout
note-taking
reasoning
publishing

for these types of knowledge workers:

writer
visual artist
designer
blogger
journalist
filmmaker
teacher
student
researcher
facilitator

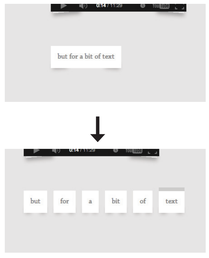
FLUIDITY

System is designed for experimentation and play by allowing fluid, physics-based reactive interaction across all of its functions. Responsive as musical instrument, seeking to enable a state of flow unlike current systems. Any action to be undone easily, which extends not just on the document level, but across any action taken on the system level.



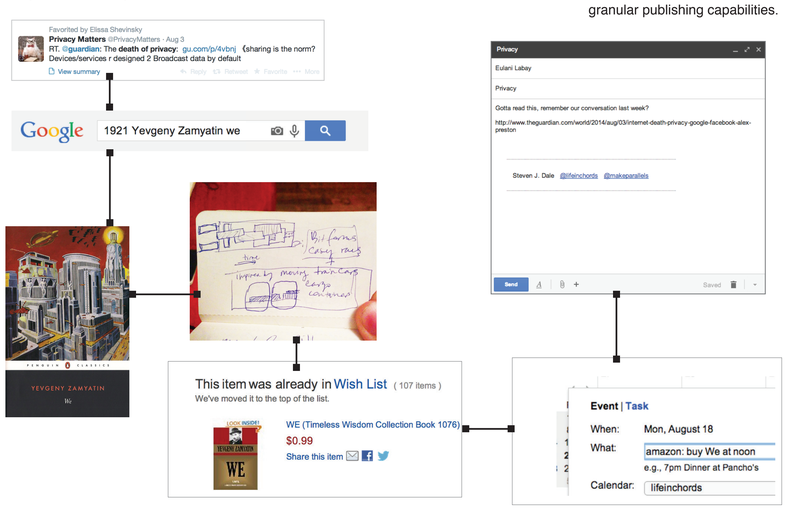
REMIXABILITY

Documents are maps constructed of bits, or pieces of digital content on an endless canvas. Bits can be shattered, reordered and reassembled into different combinations like digital Lego. Instead of organization through files and folders, documents are represented by bounds of particular sections of the canvas.



CONNECTIONS

Semantic associations are the primary means of establishing document structure. These invisible connections, or parallels, between bits provide a system for creating relationships and establishing order. This also enables unique search, navigation, clustering and serendipitous discovery across user's personal content, and that of content available on the network



PRIVACY BY DESIGN

Data privacy is a not a bolt-on feature, but a core part of its design. All data is in hands of creator, unless explicitly shared through a system of granular publishing capabilities.

RESEARCH QUESTIONS

TIME.
- At what granularity and scale are revisions considered discrete?
- How is the time dimension navigated?
- How can snapshots across time be compared/contrasted fluidly?
- What are the mechanisms of forking + evolving snapshots, in terms of genealogy + morphology?

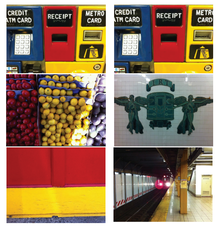
SPACE.
- What are the bounds of a document / map?
- How is the map represented: through a ZUI? scroll-based? hybrid?

CONNECTION.
- What do parallels (connections) between two bits (entities) represent?
- What are the attributes of perceptual versus conceptual connections?
- How can the best aspects of associative (links) and hierarchical (layers) connection structures be combined?
- How are connections interacted with: created, displayed, accessed, and navigated?

NARRATIVE.
- How are perspectives crafted with system's building blocks: bits, clusters, and parallels?
- How can a person follow different streams and branches of stories?
- What types of narratives are best served by collaboration or multiple perspectives?

AUTHORSHIP + STORAGE
- How is the role of the author defined in a dynamic, interactive narrative? In a shared narrative?
- What types of groups are most open to shared authorship?
- Where does a bit live at any given time when shared? Clone? Single entity?
- How can publishing and ownership control be granular but not overly complex?
- What are the implications of a P2P distributed data store design?

COLLABORATION.
- What are the potential roles in collaborative knowledge sharing?
- How would a facilitator function in team collaboration, in the way a stenographer work?



Perceptual
vimeo.com/20418309

Chronological
vimeo.com/20418261

Research experiment exploring the reconfiguration of a common set of images into independant narratives: chronological versus perceptual associations.

Created a large paper-based research map of divergent yet loosely connected precedents, ideas, people, events and concepts from domains of sound, libraries, serendipity, distraction. Serves as initial research prototype into mixing conceptual and explicit representations of bit types and representing connections using space and color.

Design studies of spatially clustering bits into 4 quadrants: flow, flight, interface and synchronization.

http://www.cstreams.com/posts/072312_weightless

12 collaborators

300+ signups

13 domains

First face to face meeting for collaborators to meet, greet, discuss project goals, interest and potential roles in the project

Bit

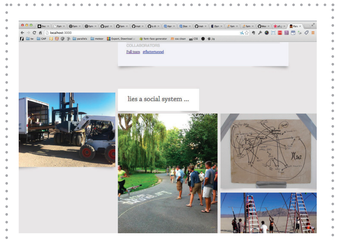
select
drag
shatter
crop
lift
edit
delete
fold
like
create
parallel
group
share
clip

Canvas

undo
commit
fork
play
rewind

KICKSTARTER

Set up and launch Kickstarter campaign to raise funds for first iterations of alpha development



Beta launch

Alpha launch release with core functionality, invitations and outreach to core community, 300+ signups

2010 2011 2012 2013 2014 2015 2016

Research of note taking and annotation habits among a transdisciplinary group of knowledge workers. Seeded inquiry into pattern identification and workflow management.

Collaboratively designed a series of rapid paper-based games for sharing ideas amongst design researchers and connecting seemingly disparate research topics.

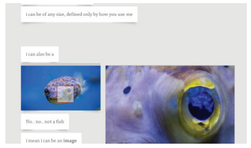
http://www.cstreams.com/projects/spark

Research experiment into clustering and grouping bits of various types: text, image, sketches, and methods for creating spatial relationships and clusters

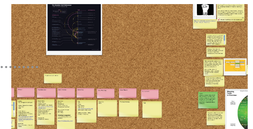
Presented an exploratory research paper at Critical Themes, a media conference at Parsons The New School for Design. Expeirmented with both form and content: visual design of creating bits, or cards of information in a linear, web-based narrative

http://bit.ly/Y6kqnB

Scripted narrative of core concepts as an interactive demo. Functional prototype, experimenting with sculpting text, shattering, clustering, bits in views, creating connections.
http://www.parallels.io



Used an existing mapping platform corkboard.me to synthesize research and begin communicating core project concepts to potential collaborators.



Alpha browser-based prototype development underway on GitHub

Meteor JS - open source reactive, JavaScript based platform for both server + client. Performs auto data syncronization, latency compensation, live updates.

Famo.us - Javascript physics library optimzed for performance:

research workshops to evaluate alpha, explore potential use cases

Development of 2nd phase - P2P browser-based operating system