

for Bollywood Data



M.Des, Interaction Design

Guide

Industrial Design Centre, IIT Bombay

Summary so far

The definition

Interactive Information Explorer (IIE) is an interaction model which represents collated data in such a manner that helps reduce human cognitive load.

Project Direction

- **Structuring**
 - Information Architecture
- **Presentation**
 - Information Visualization

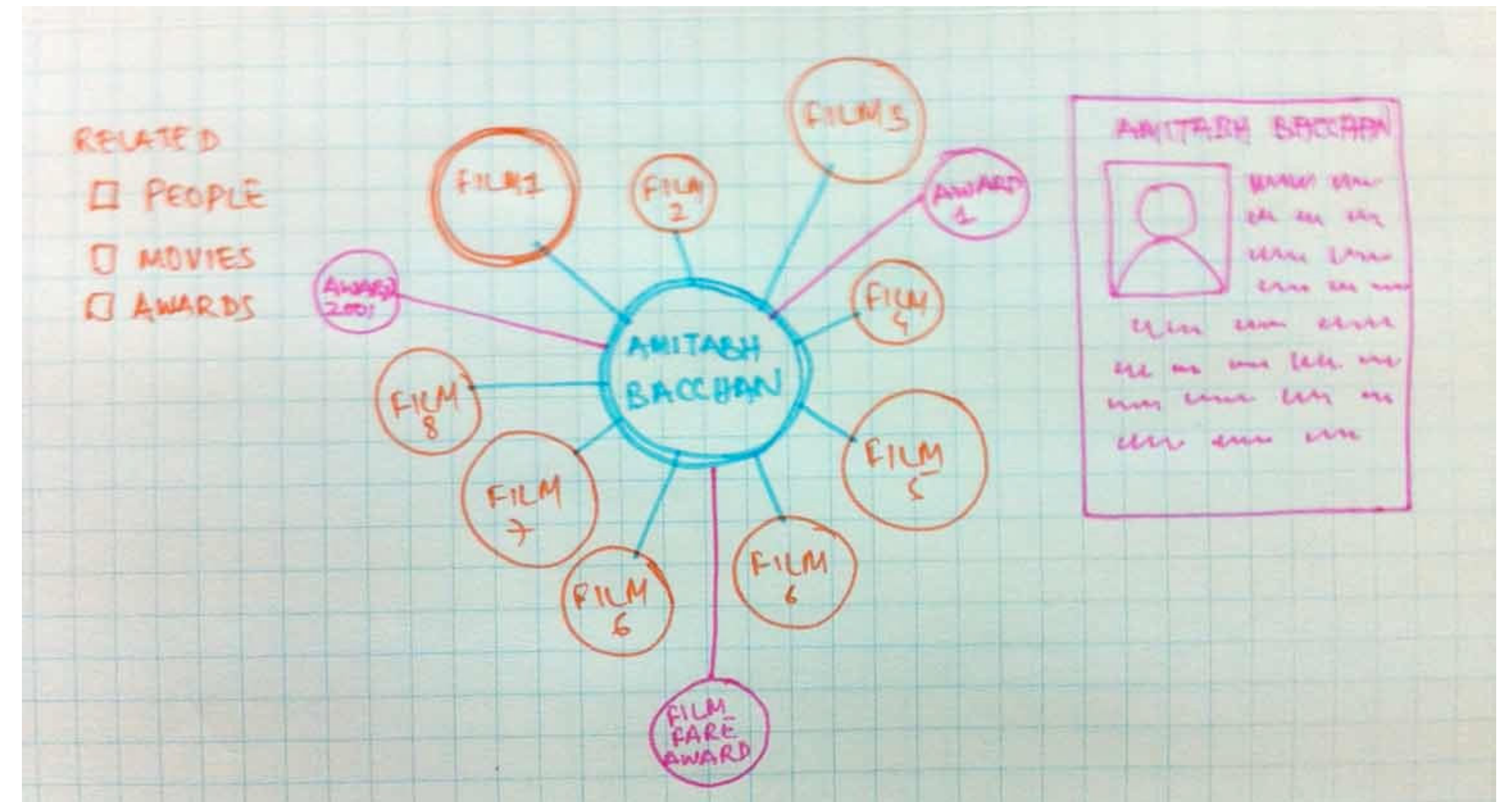
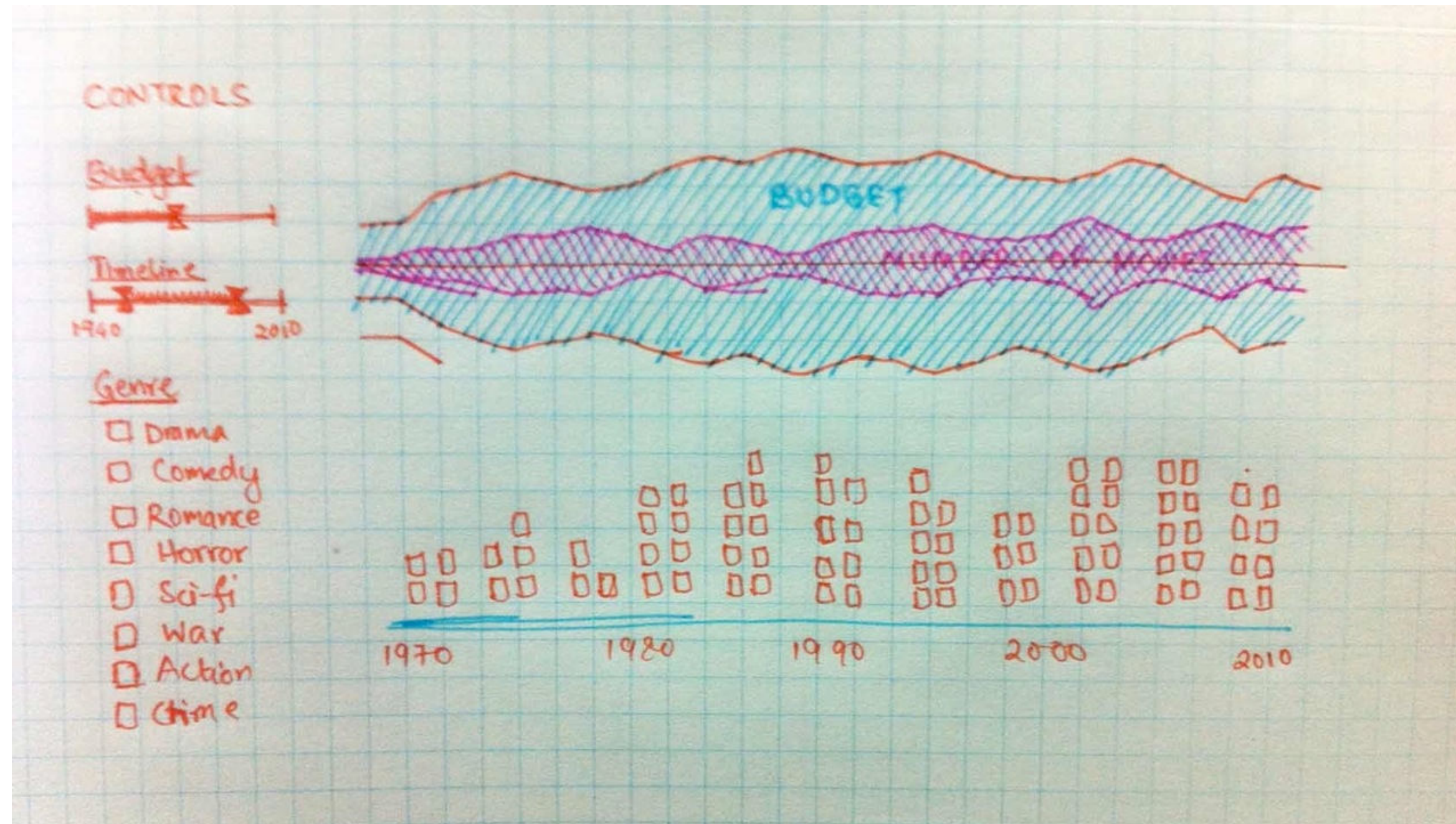
User Group

Movie Lovers

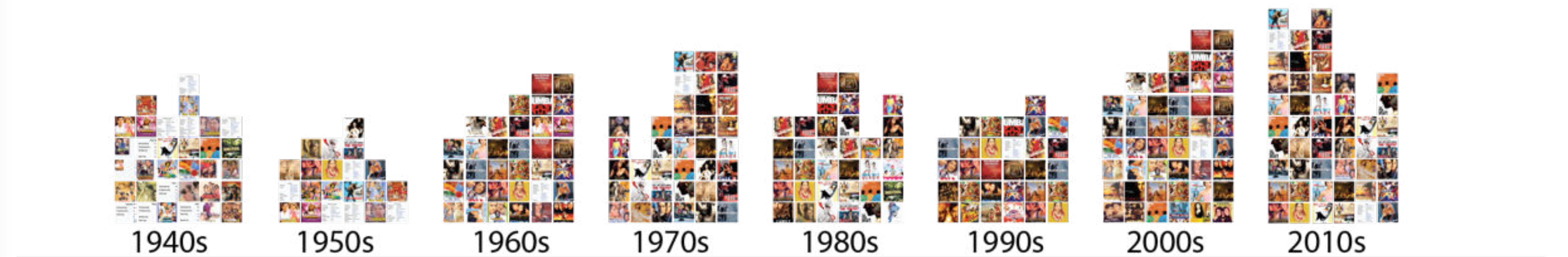
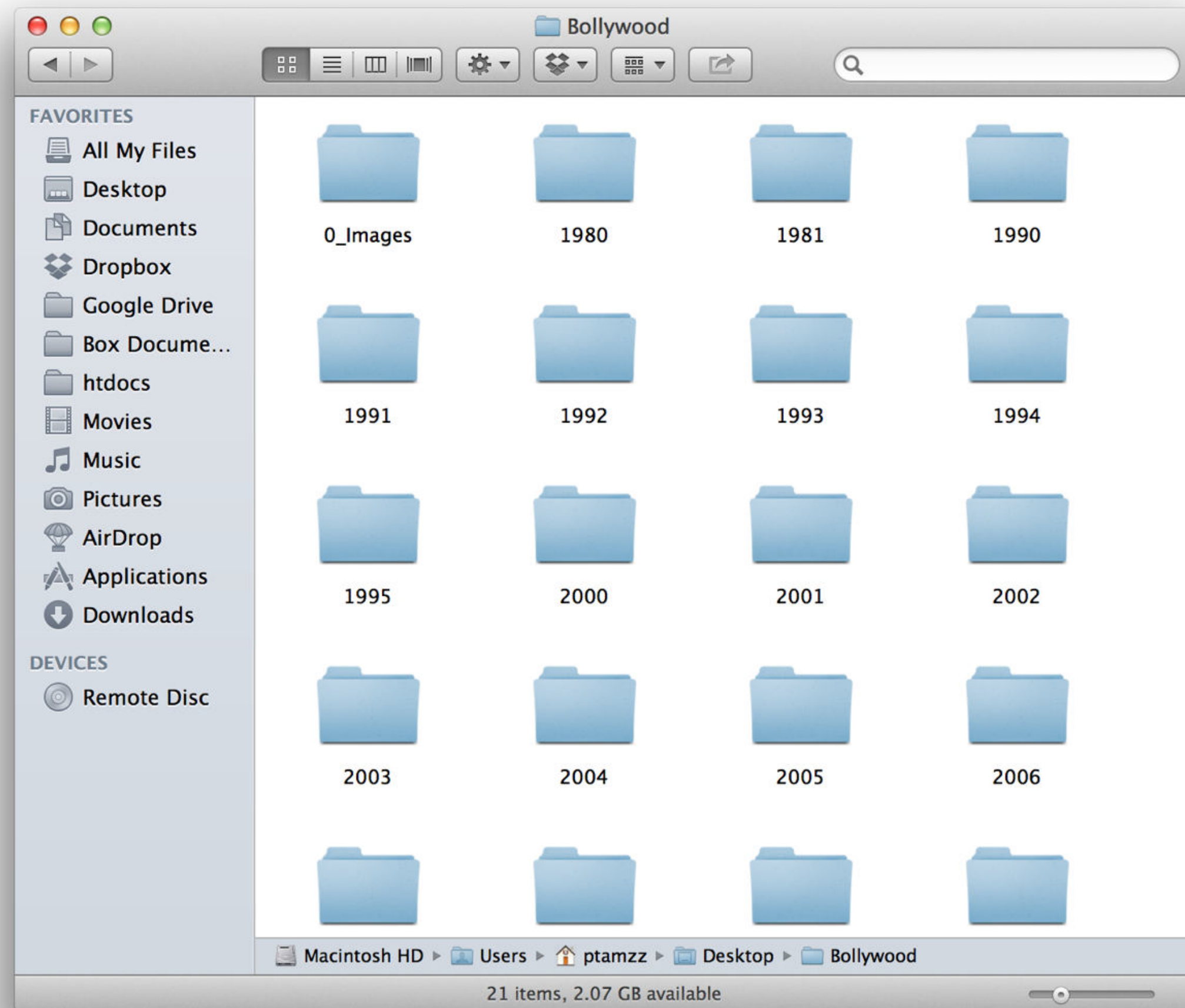
User Persona

- A college student
- Interested in film making
- People usually take movies from him
- Friends usually ask him for movie suggestions
- Has a huge collection of movies

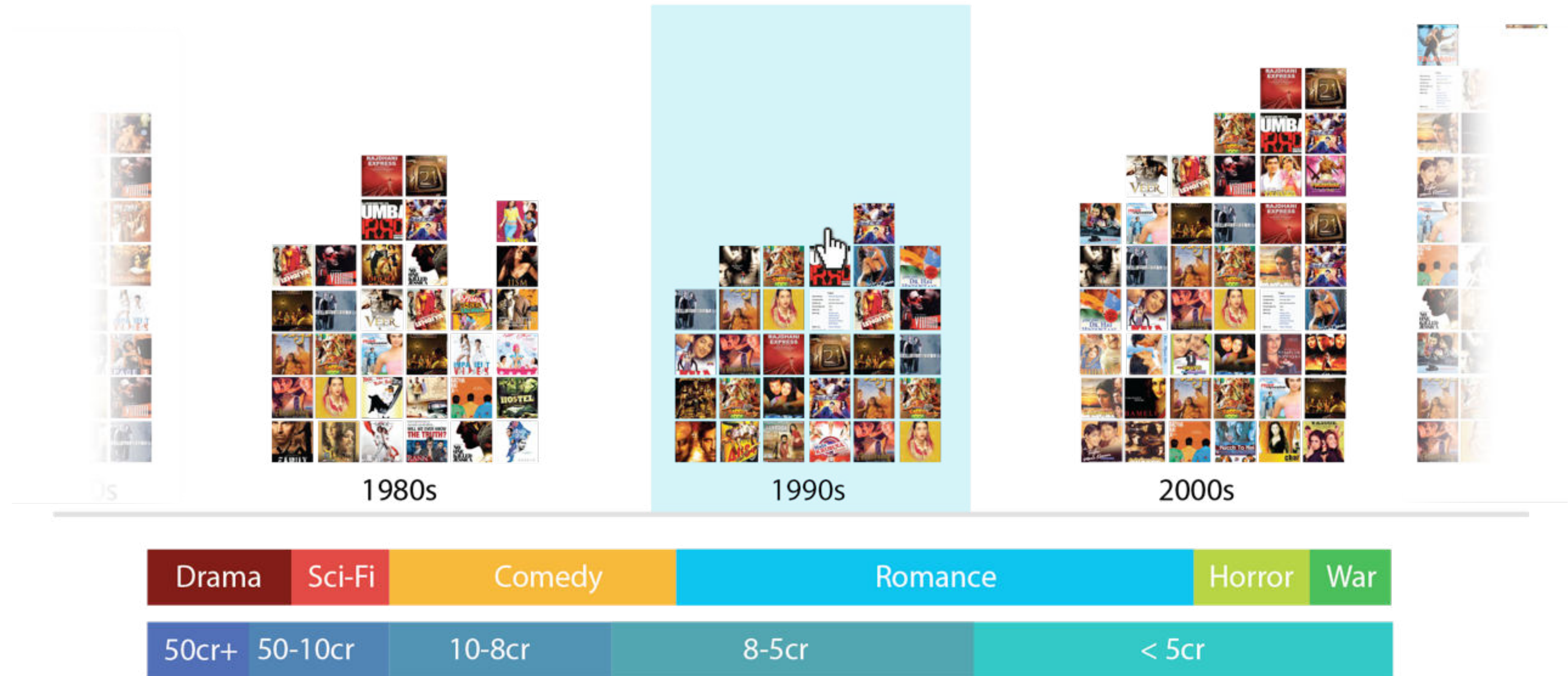
Ideation: Stage 1



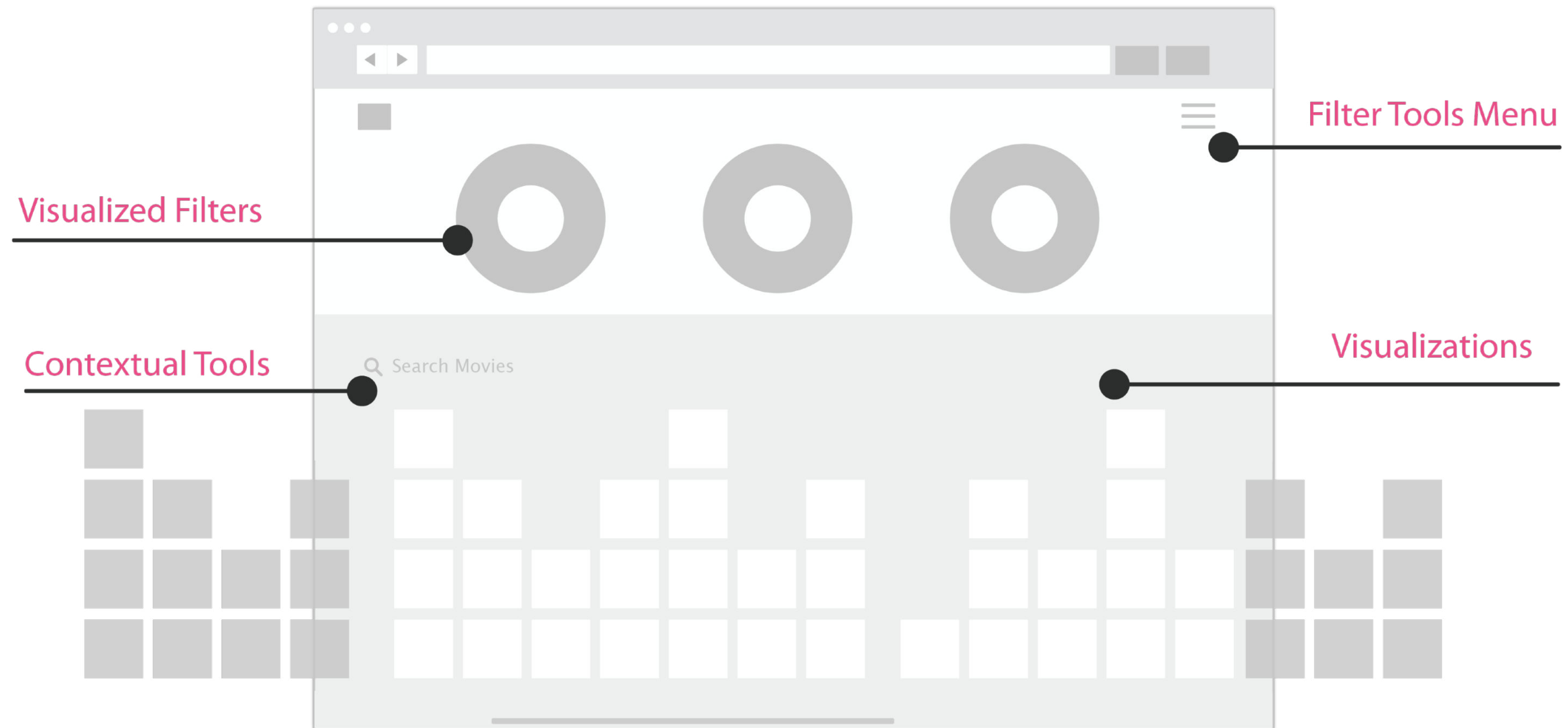
Ideation: Stage 1



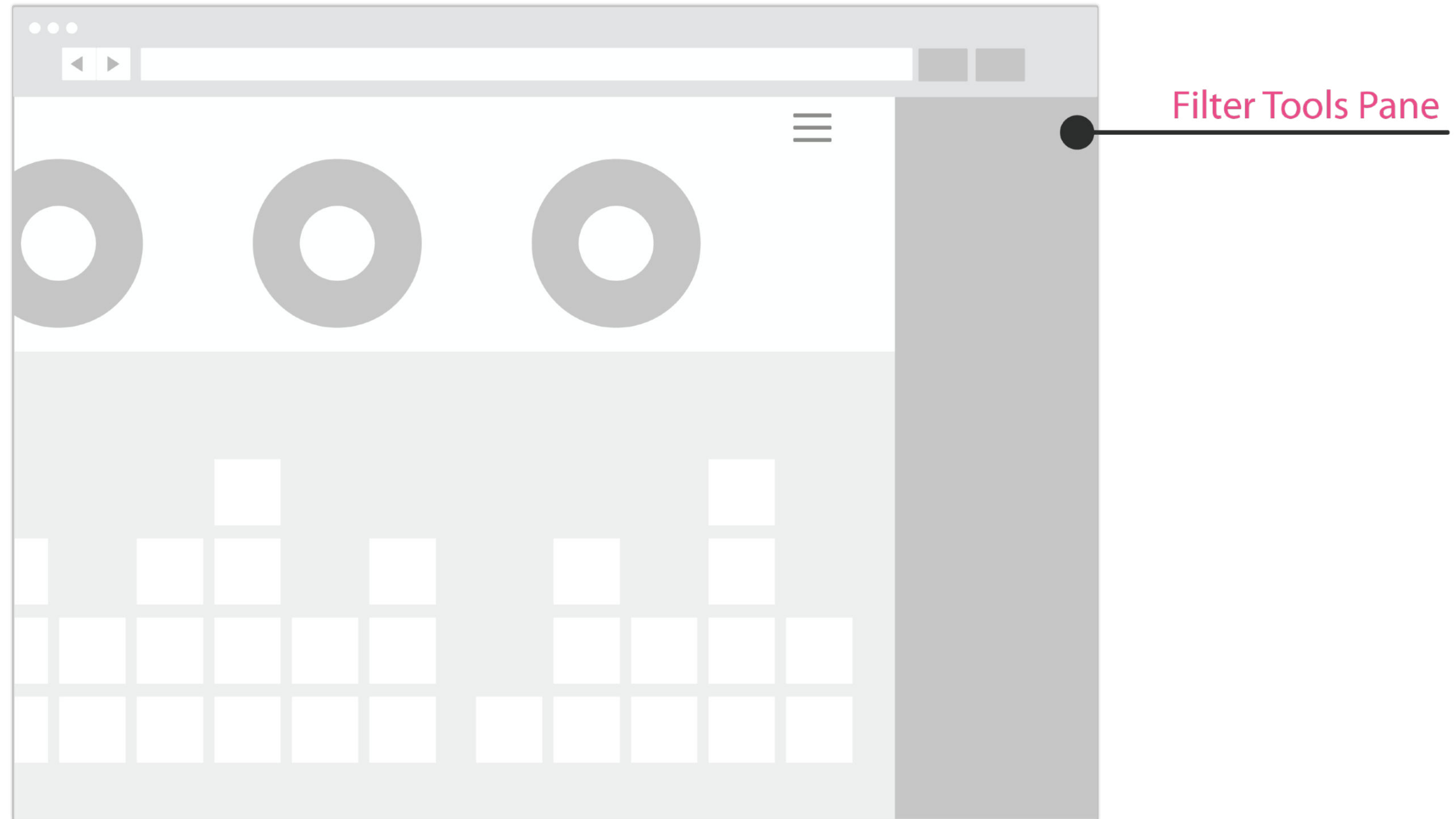
Ideation: Phase 2

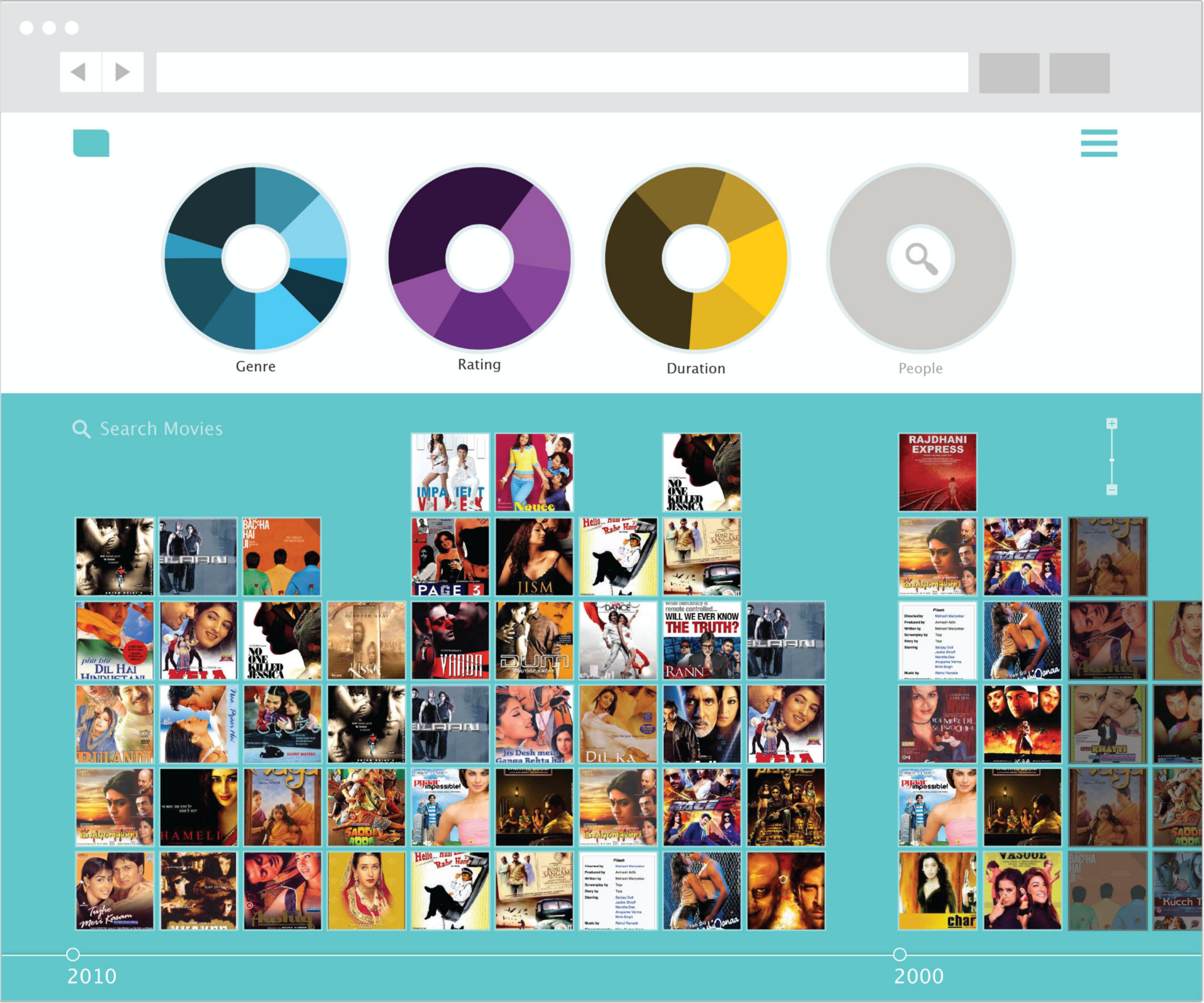


Ideation: Phase 3

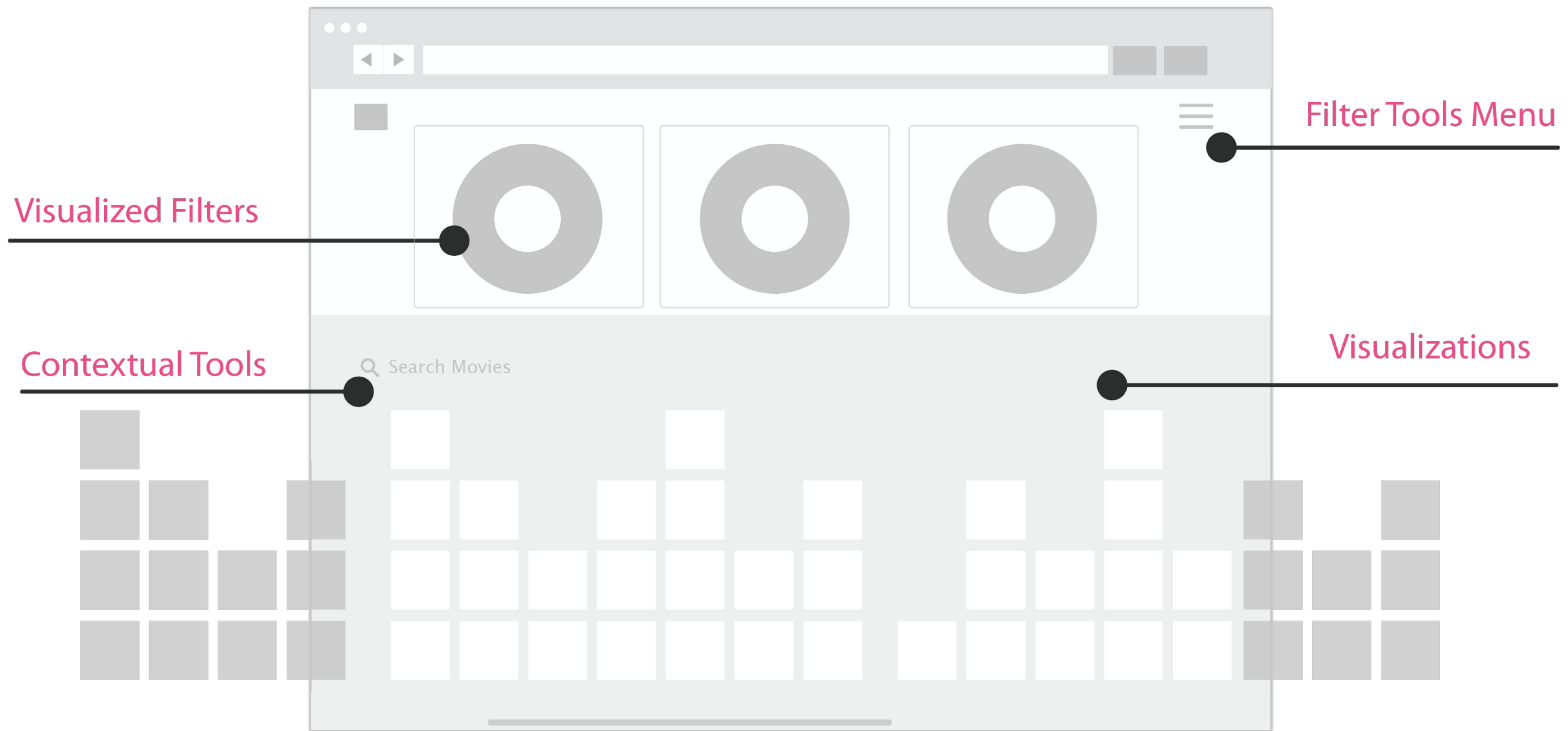


Ideation: Phase 3



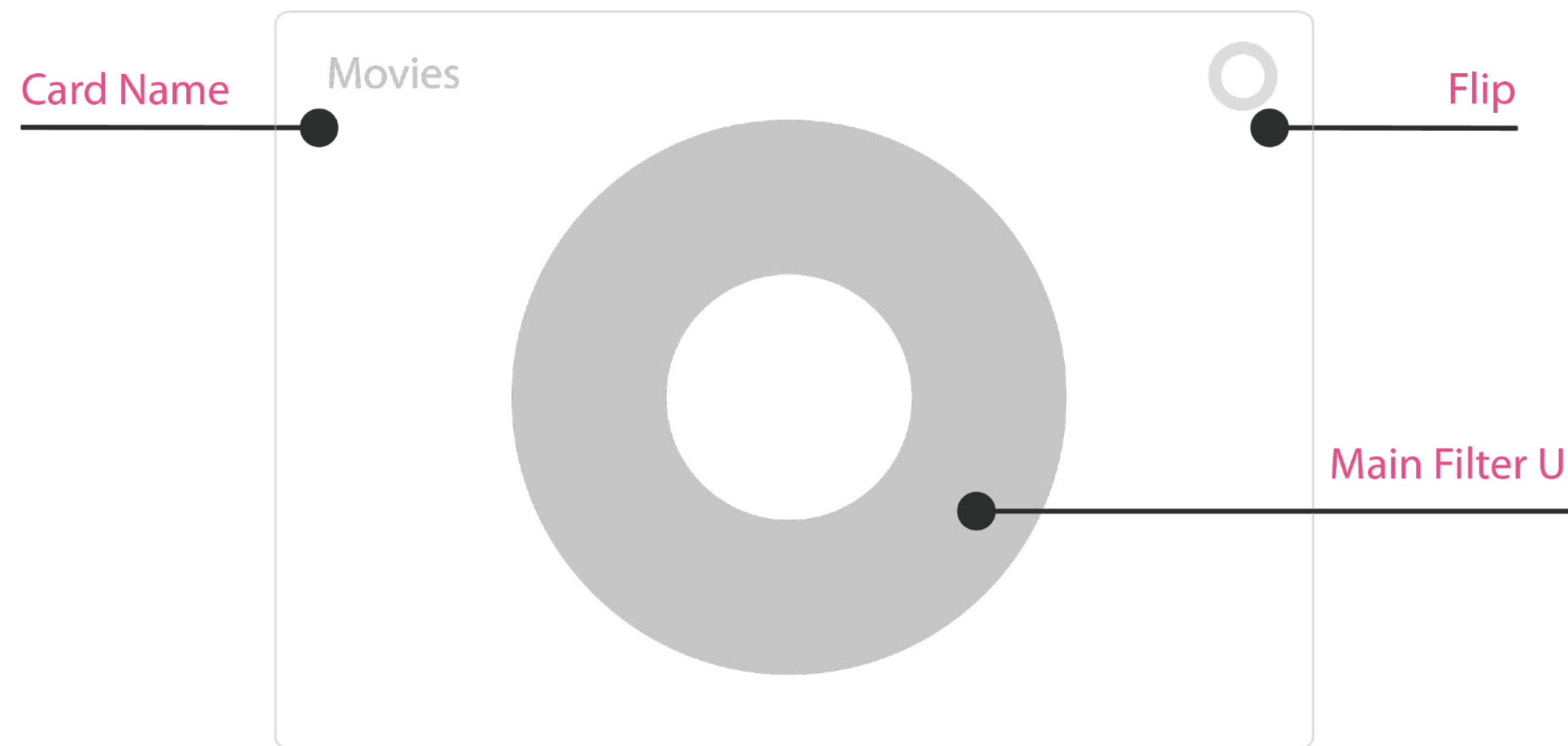


Conceptualization: Phase 4



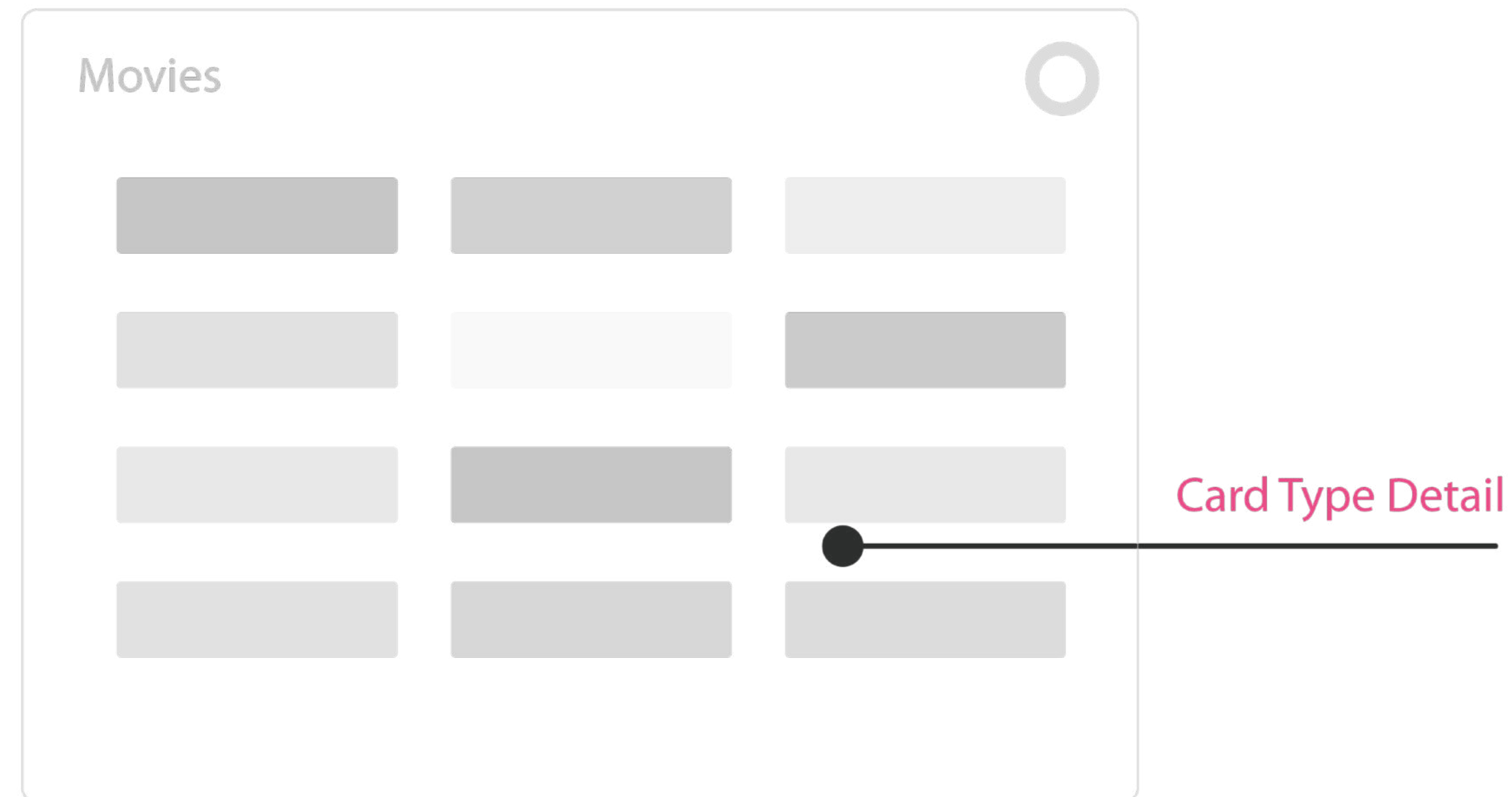
Introducing 'card' as basic UI element

Conceptualization: Phase 4



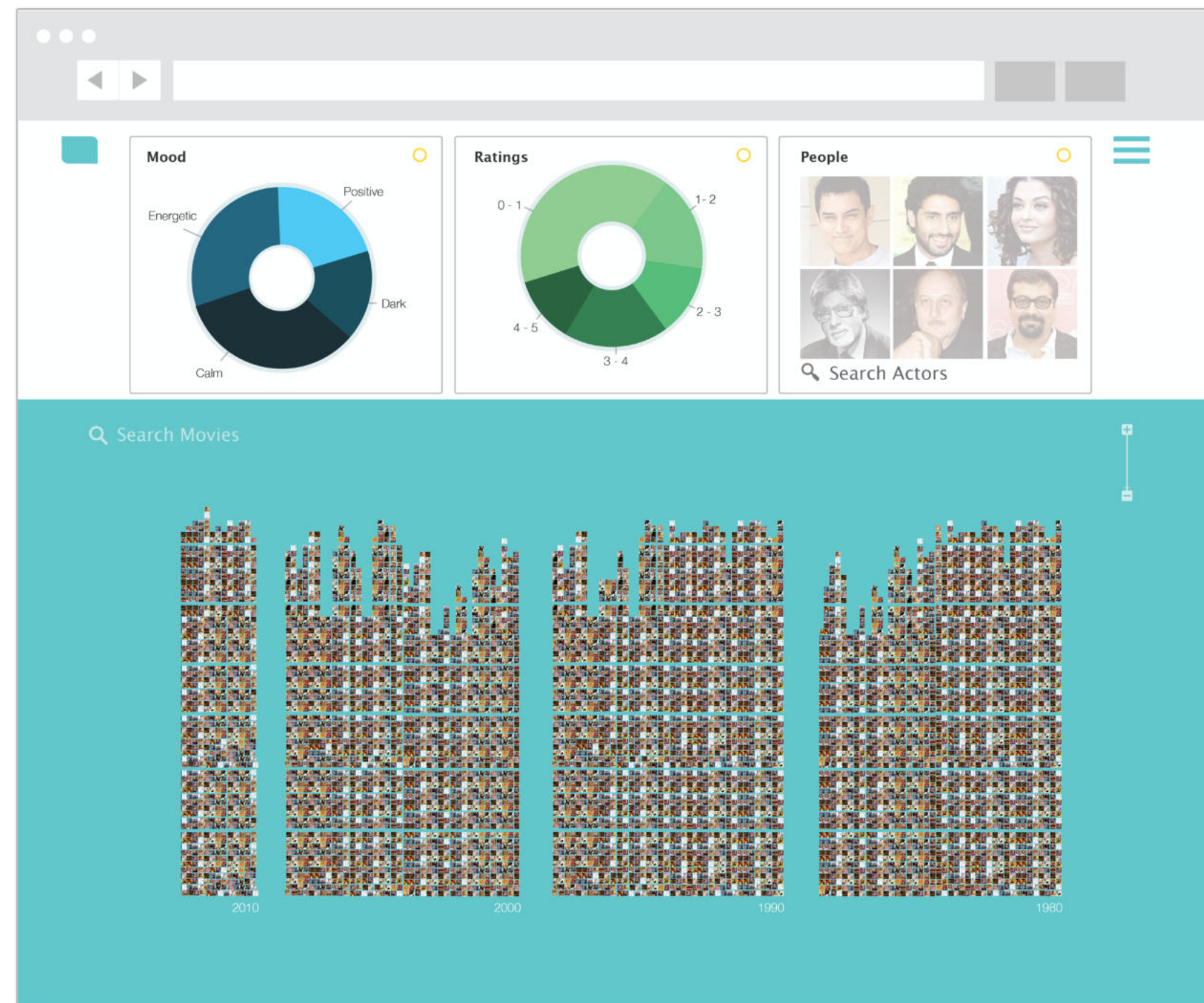
Front: Shows main information or interaction elements

Conceptualization: Phase 4

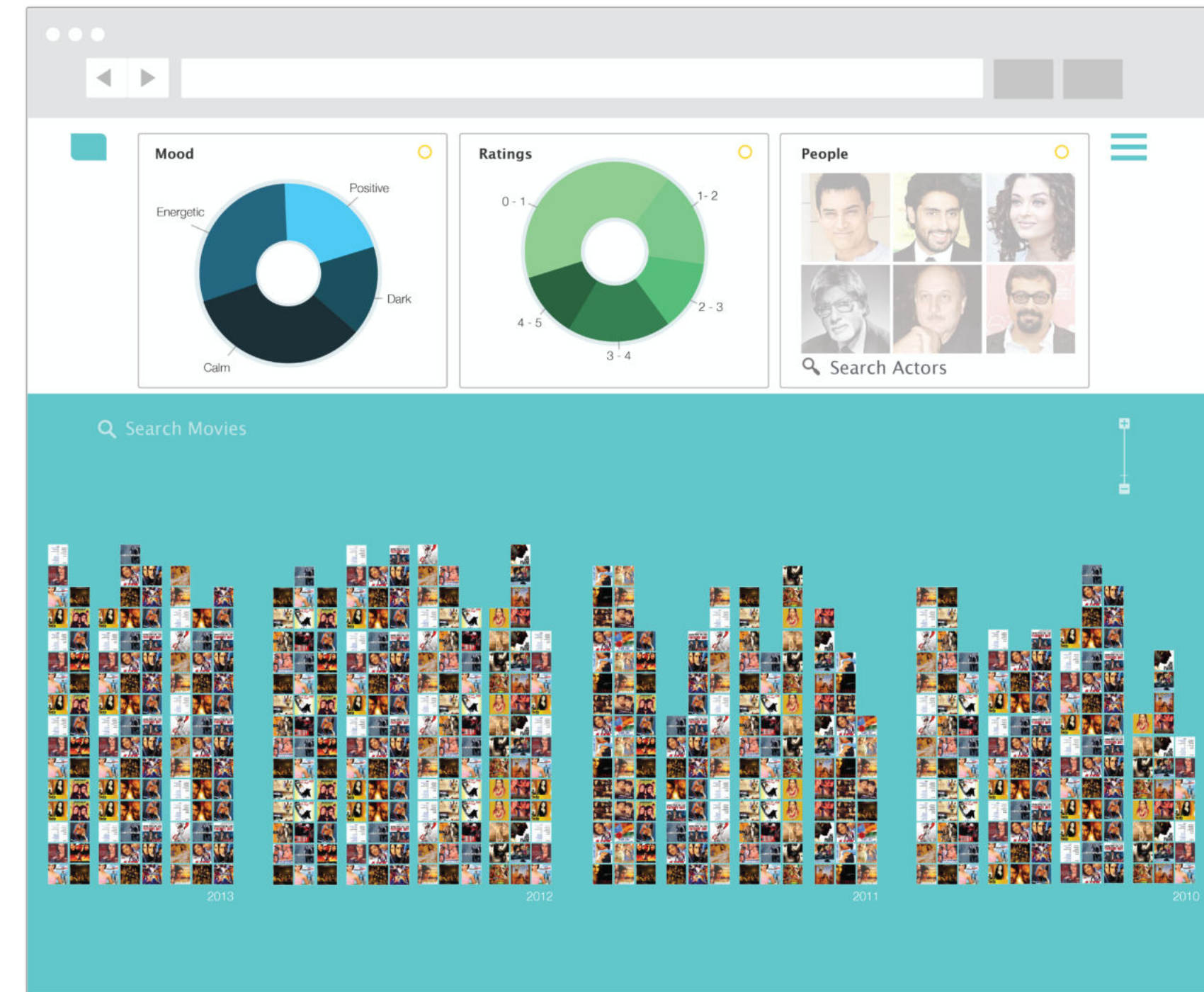


Flip to back: Shows contextual detailed information of the card type

Conceptualization: Phase 4

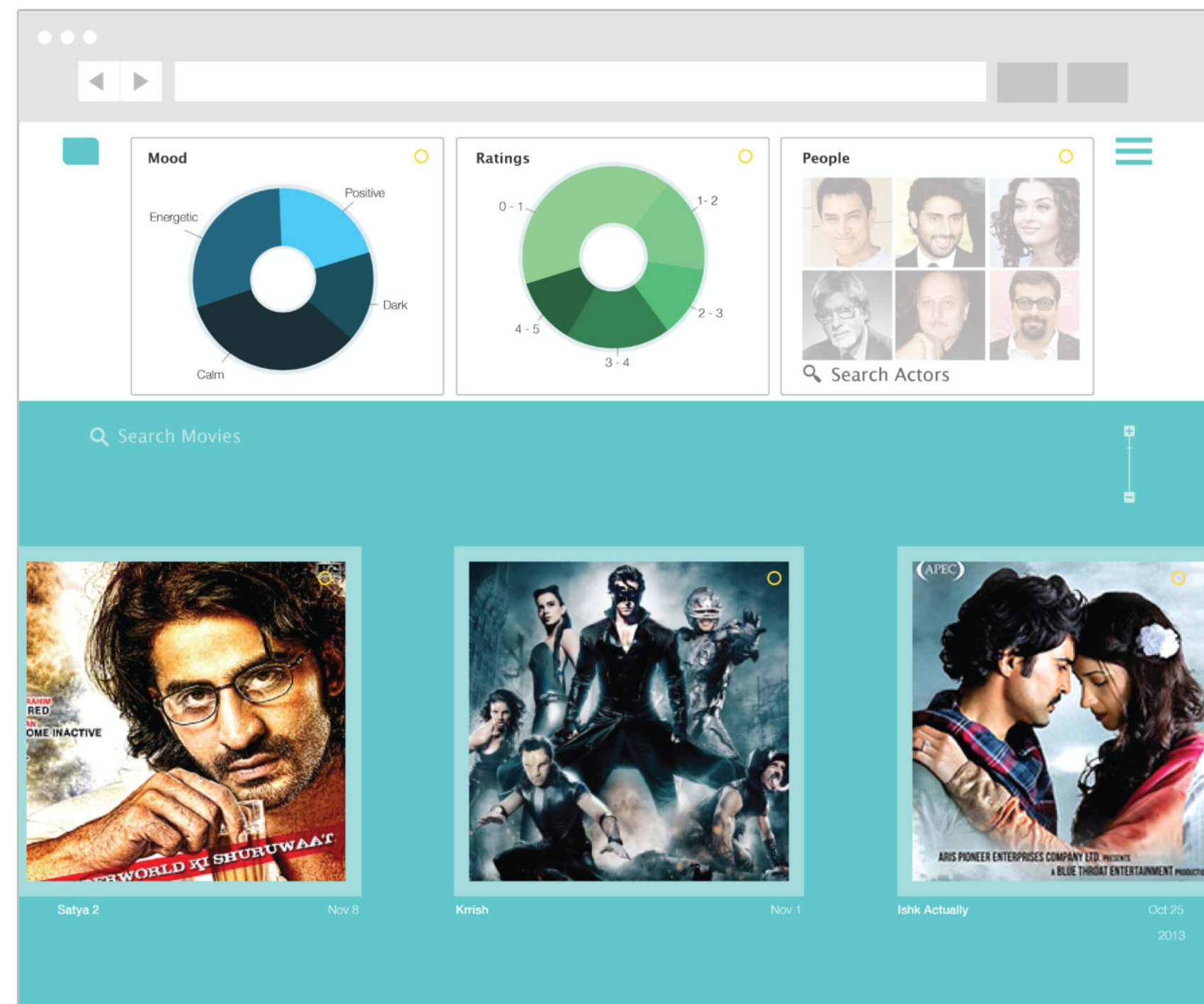


Decade view

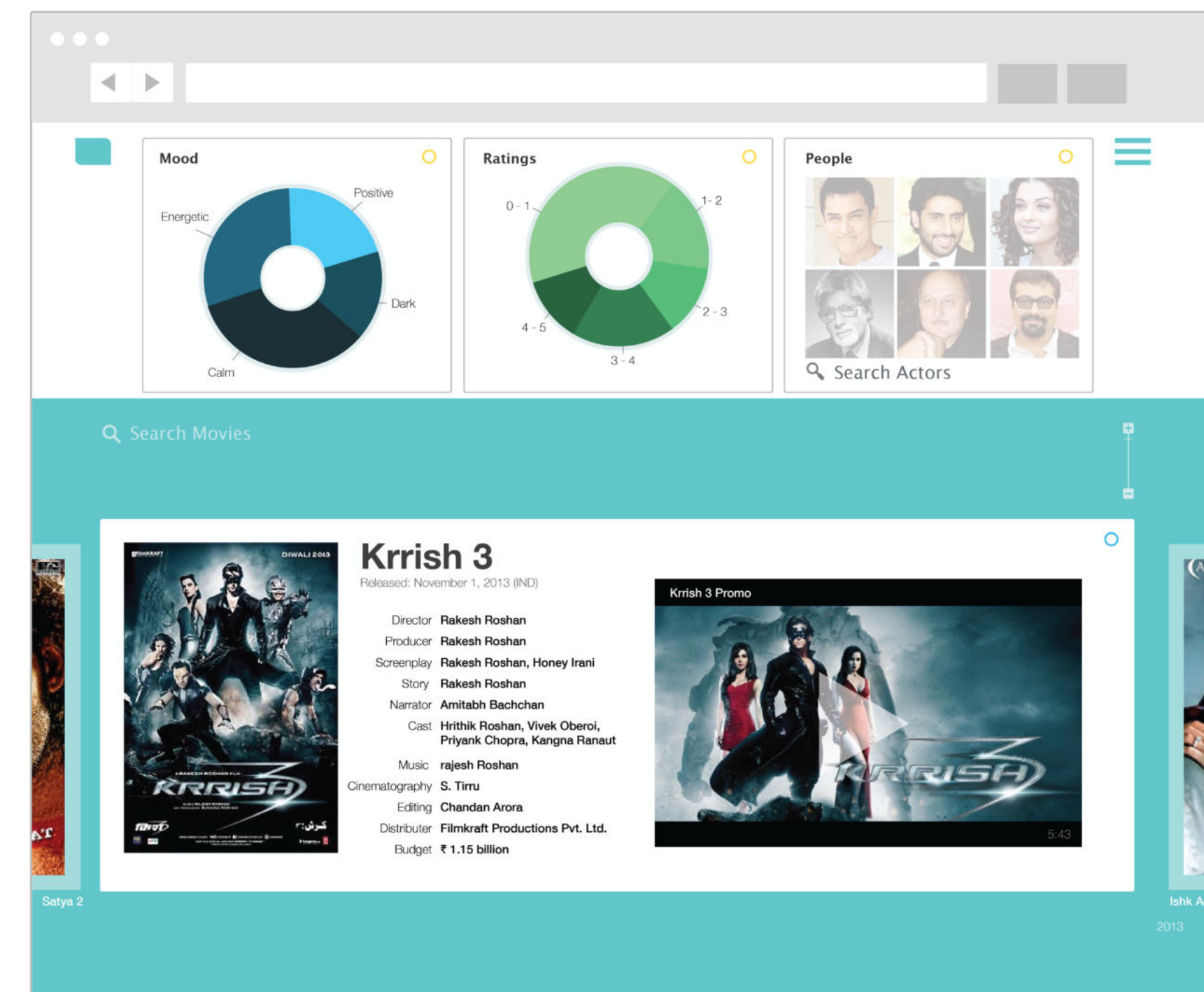


Year View

Conceptualization: Phase 4



Movie Card View



Detailed View after flipping the Movie Card

Research

Secondary Research

- **Understanding Building Blocks**
- **Understanding Microsoft Pivot**
- **Analysis of Existing Visualizations**

Secondary Research

- **Understanding Building Blocks**
“Interactive”, “Information”, “Explorer”?
- **Understanding Microsoft Pivot**
- **Analysis of Existing Visualizations**

Secondary Research

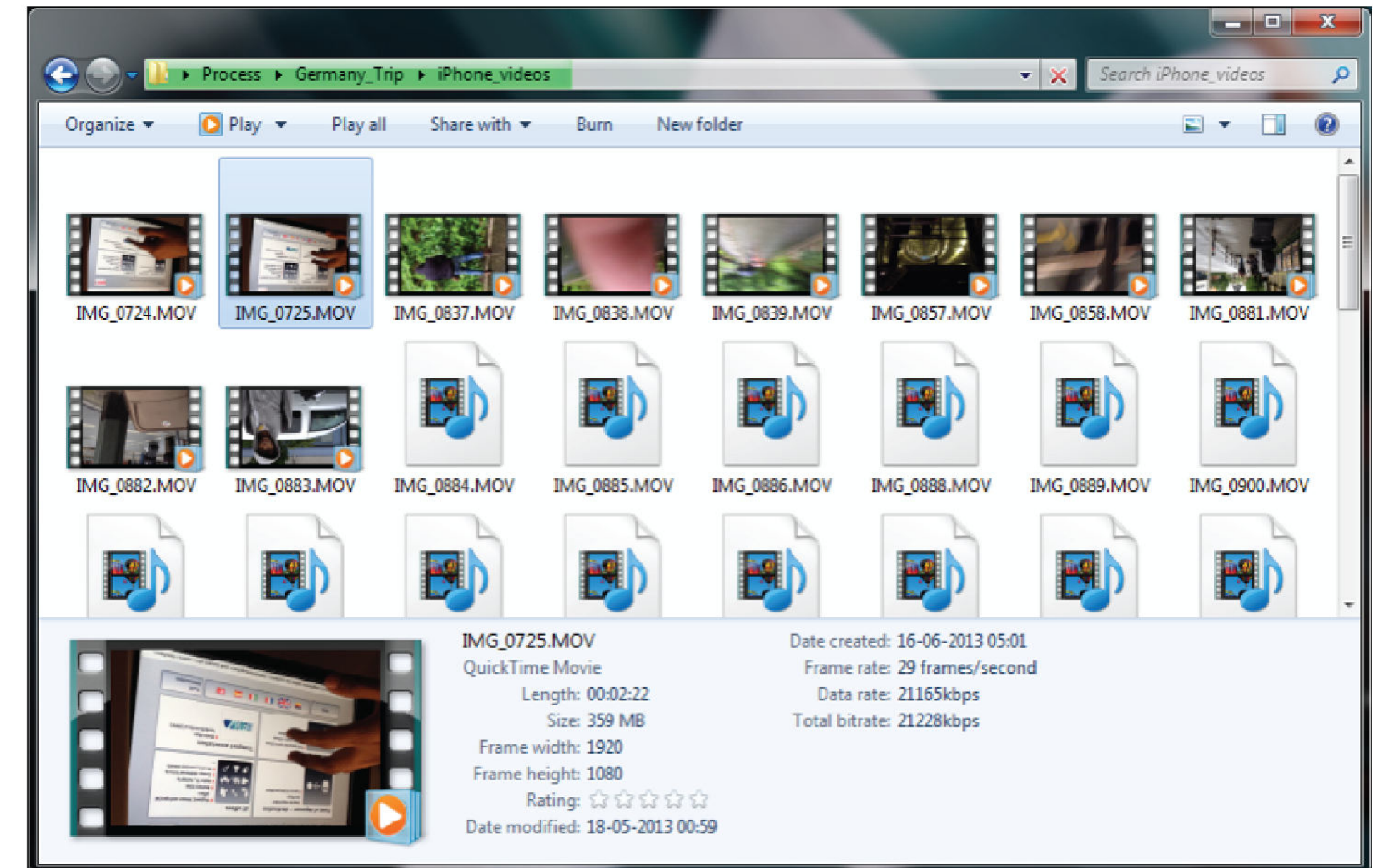
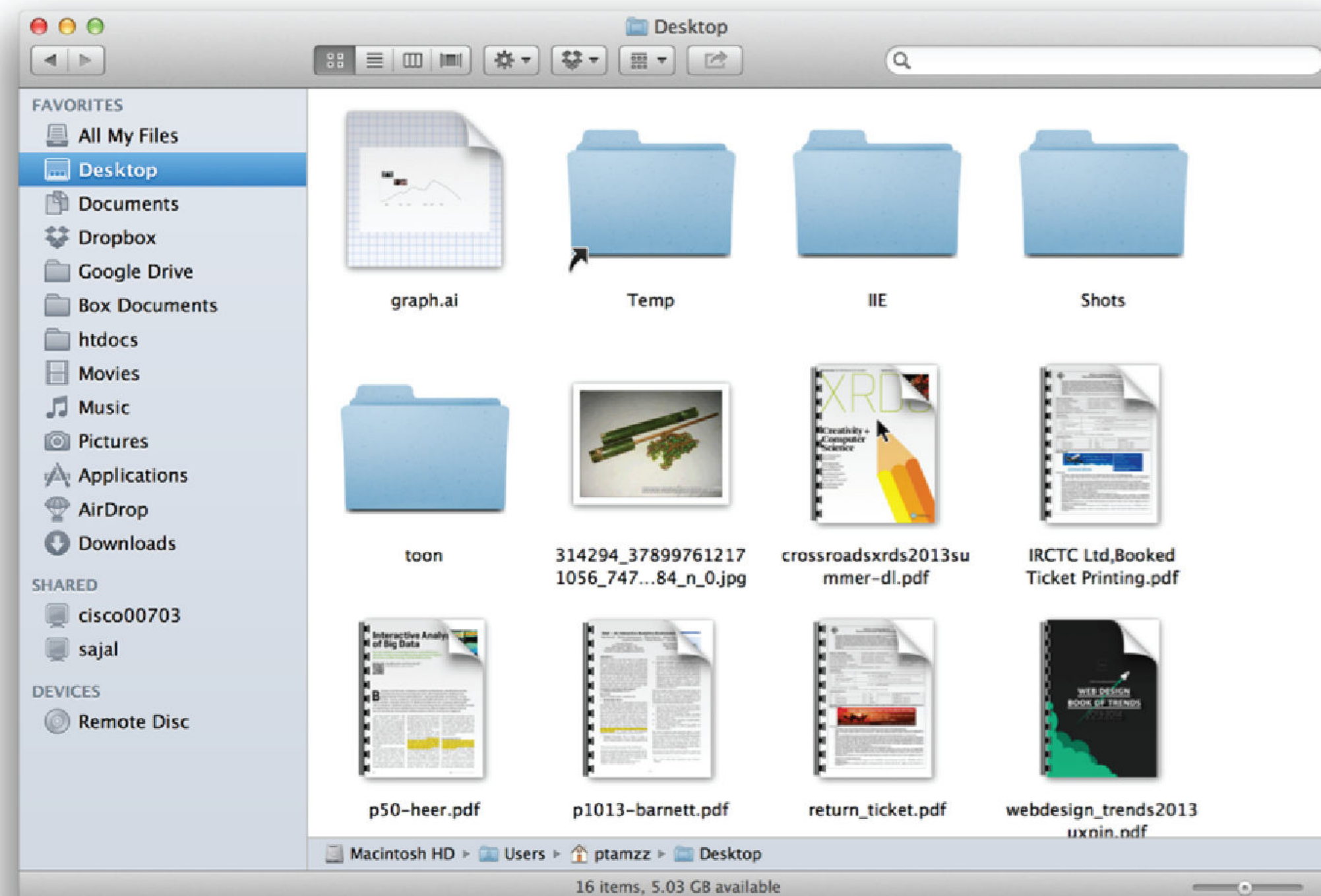
- **Understanding Building Blocks**
“Interactive”, “Information”, “Explorer”?
- **Understanding Microsoft Pivot**
How Microsoft Pivot organises data?
- **Analysis of Existing Visualizations**

Secondary Research

- **Understanding Building Blocks**
“Interactive”, “Information”, “Explorer”?
- **Understanding Microsoft Pivot**
How Microsoft Pivot organises data?
- **Analysis of Existing Visualizations**
Insights from existing visualizations

Primary Research

Understanding Building Blocks



What is a Explorer?

Primary Research

Understanding Building Blocks

Population Data

India	1.237 billion (2012)
China	1.351 billion (2012)

Information

China is 1.09 times more populated as India

Primary Research

Understanding Building Blocks

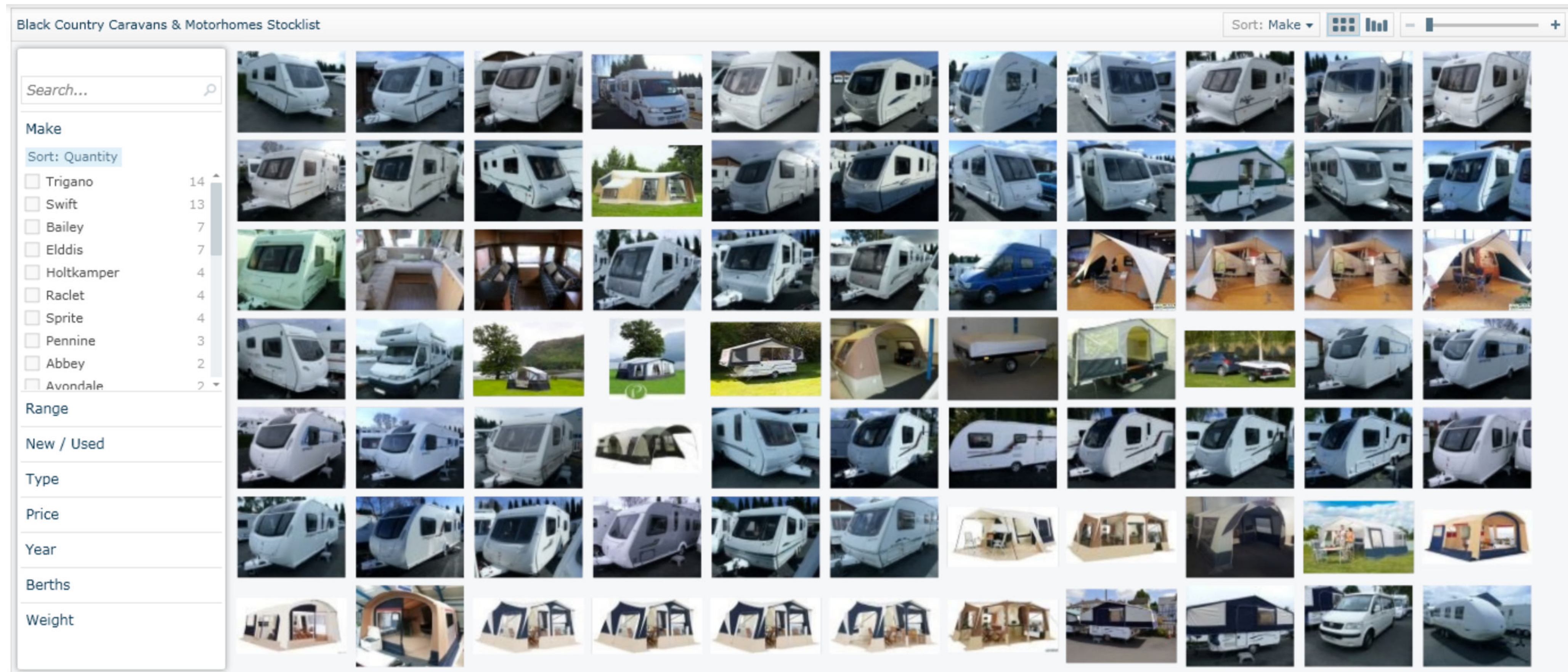
What is a 'Information'?

- consists of one or more data
- the data is well-formed
- the well-formed data are meaningful

Stanford: Semantic Conceptions of Information
(<http://plato.stanford.edu/entries/information-semantic/>)

Primary Research

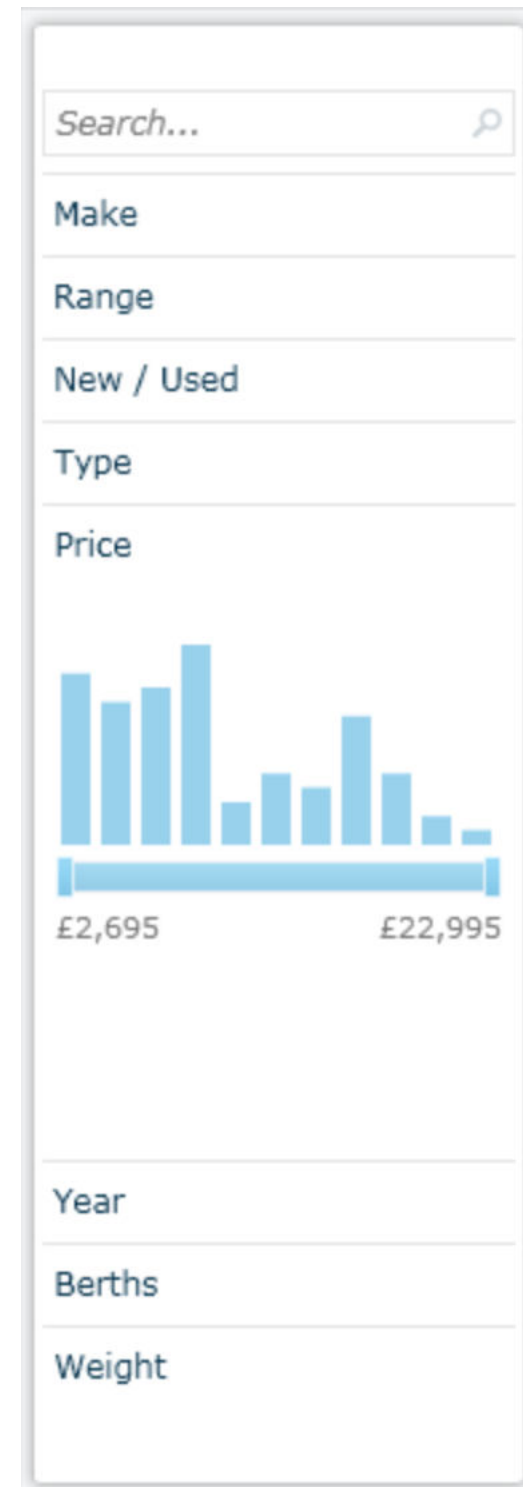
Understanding Microsoft Pivot



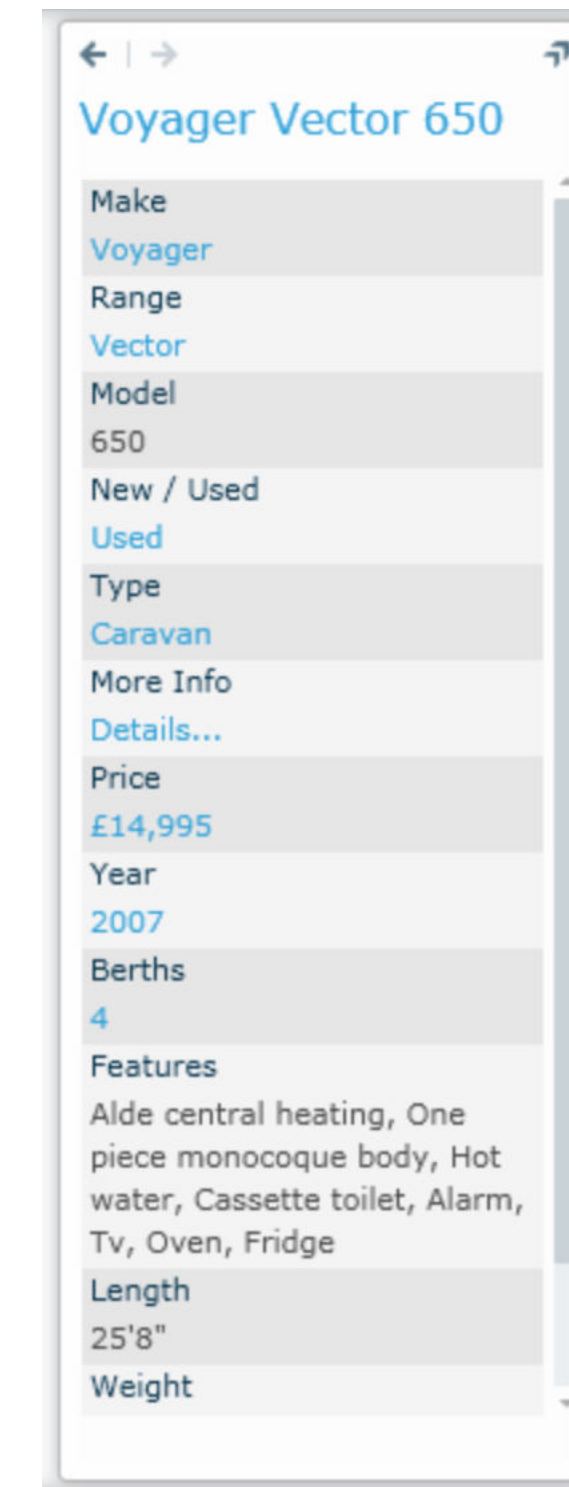
Zoomable Area

Primary Research

Understanding Microsoft Pivot



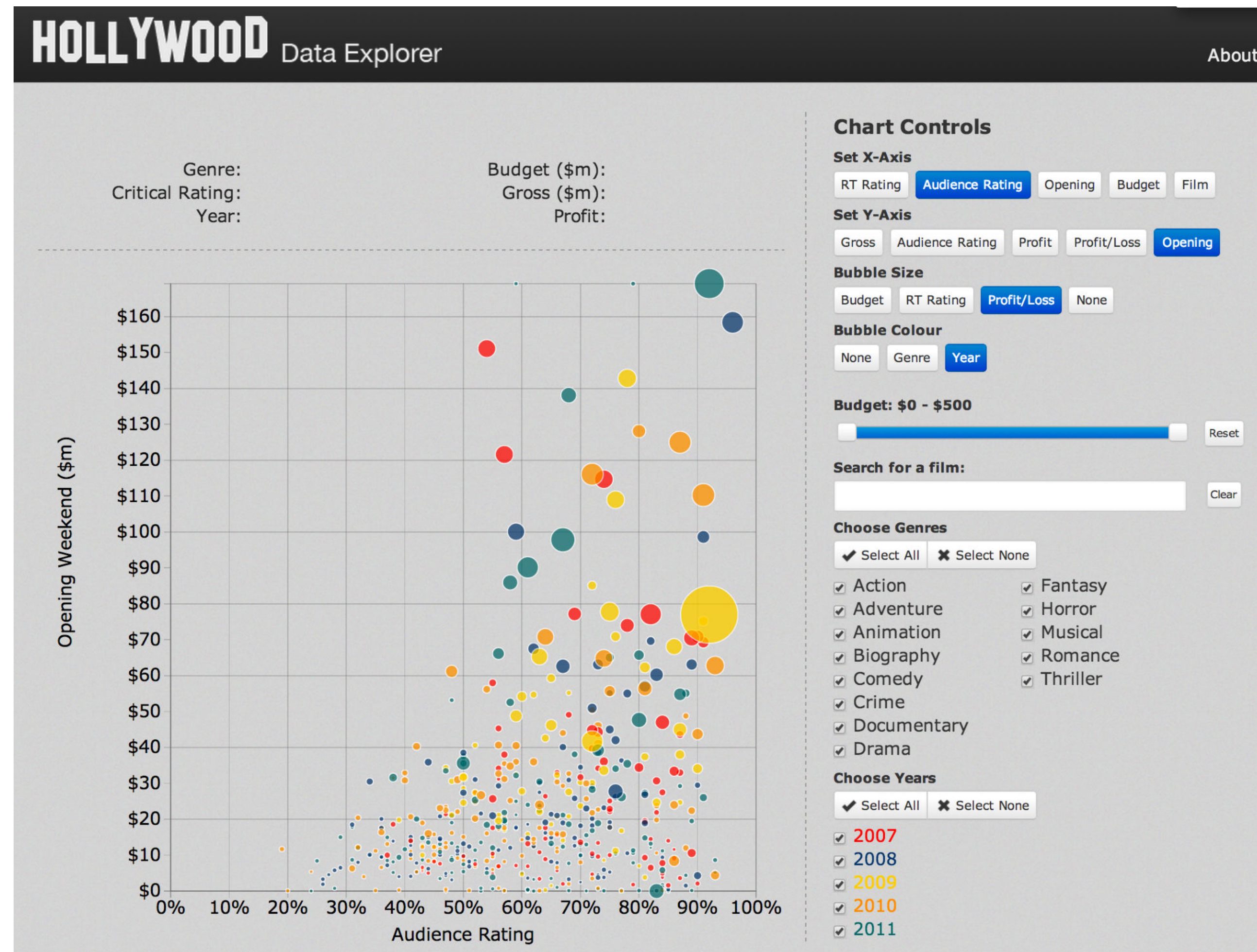
Control Tools



Meta Data

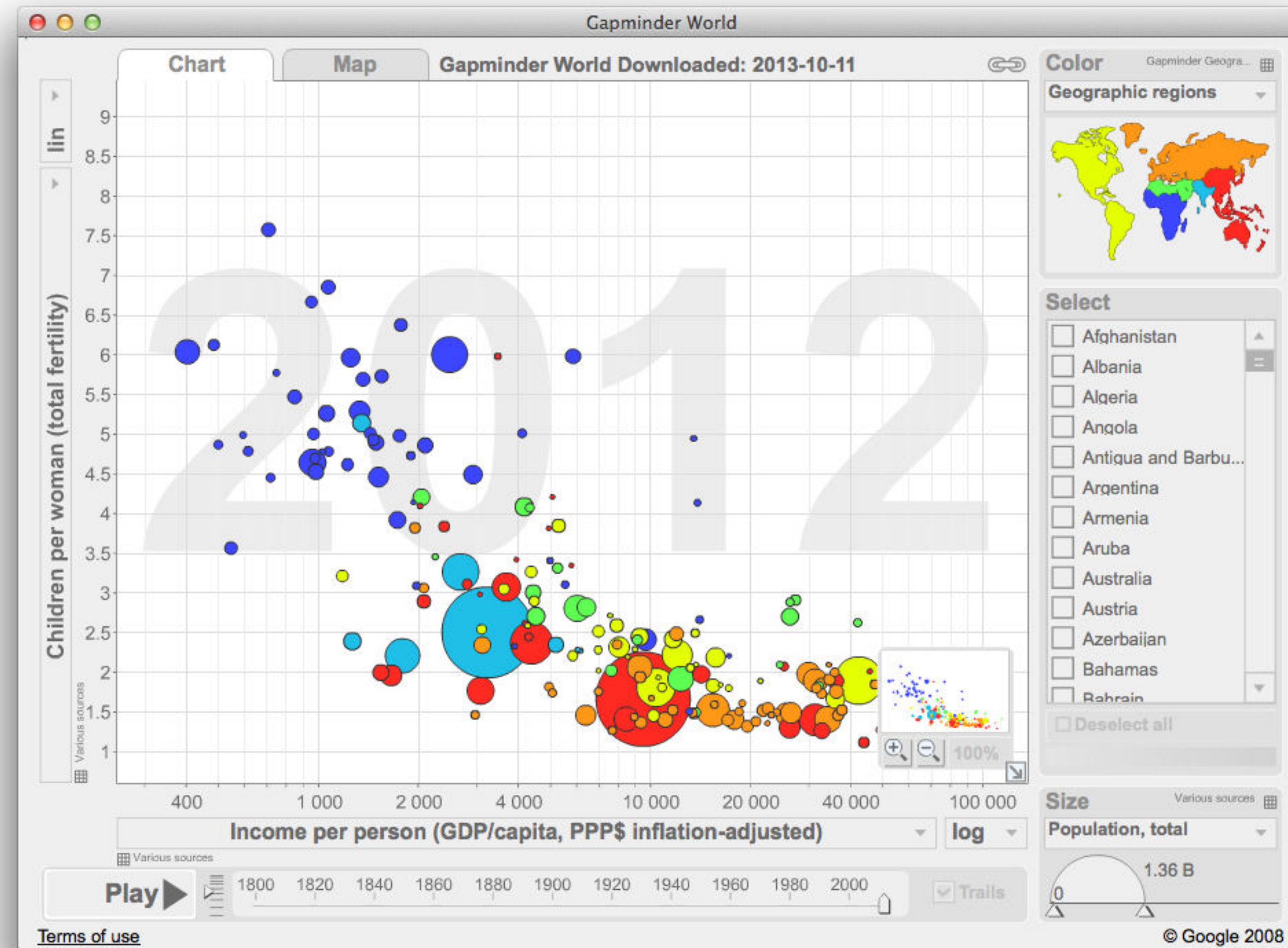
Primary Research: Analysis of Existing Products

Information is Beautiful: Hollywood Data Explorer



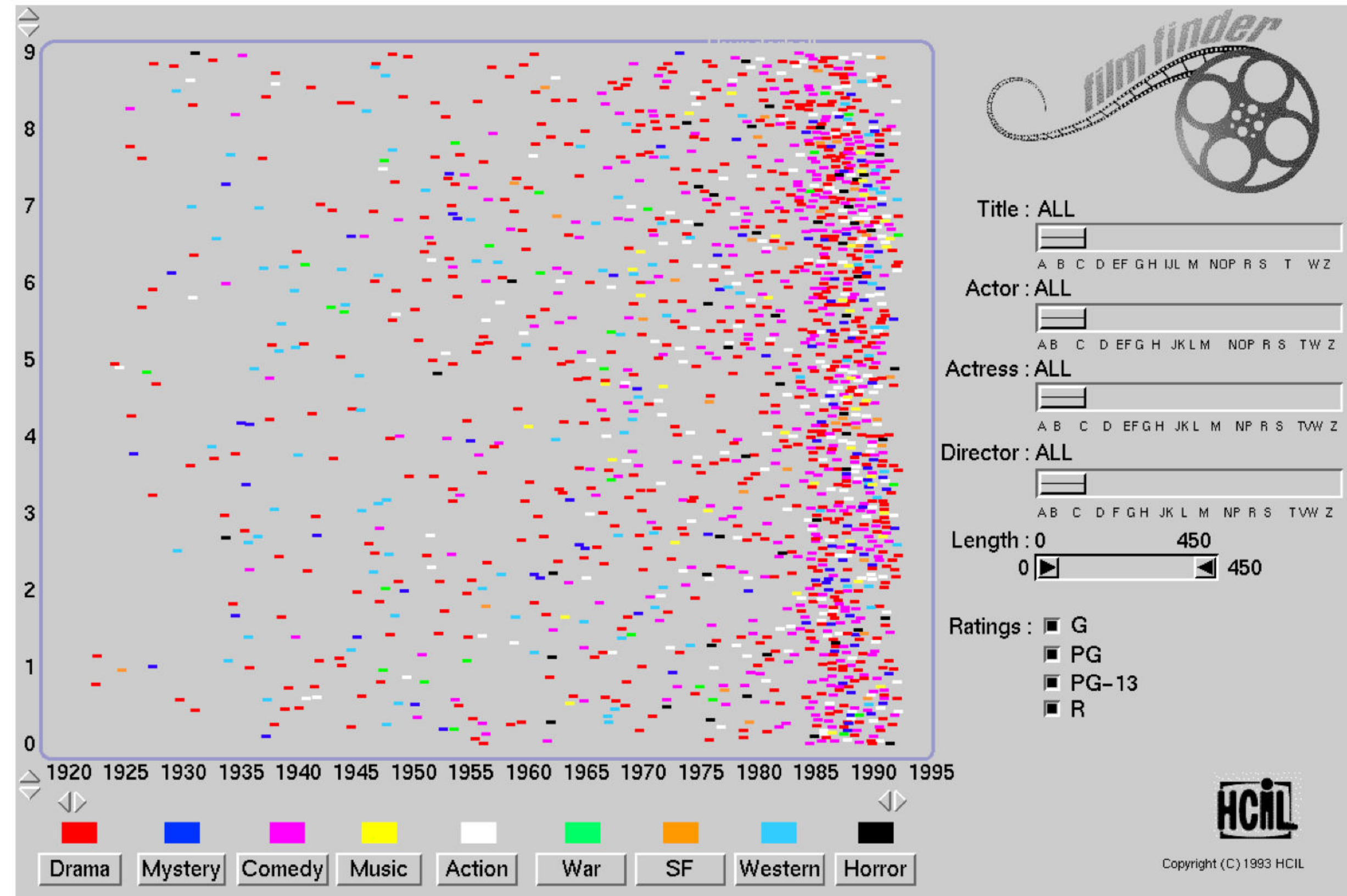
Primary Research: Analysis of Existing Products

Trendalyser: Gapmind Foundation

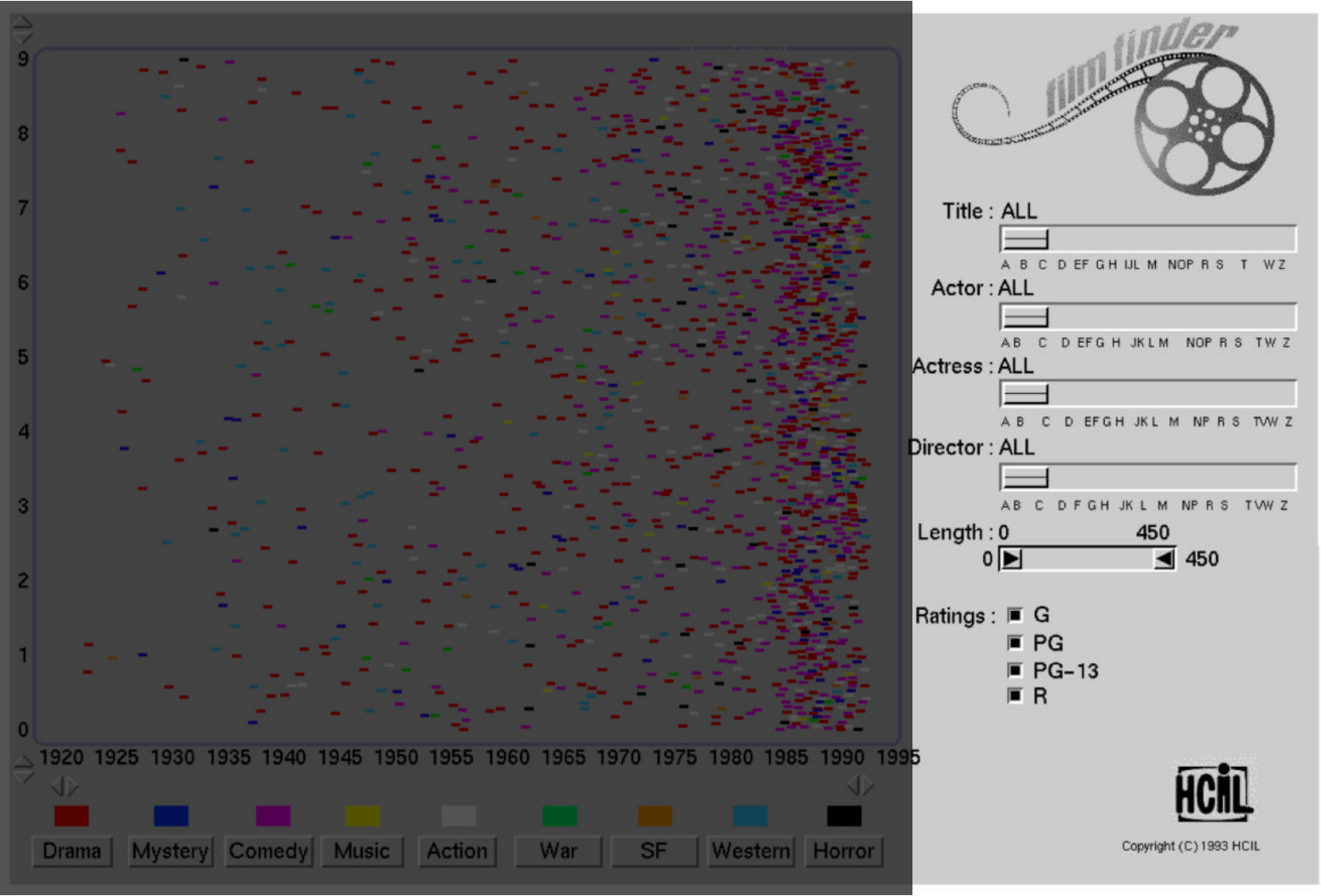
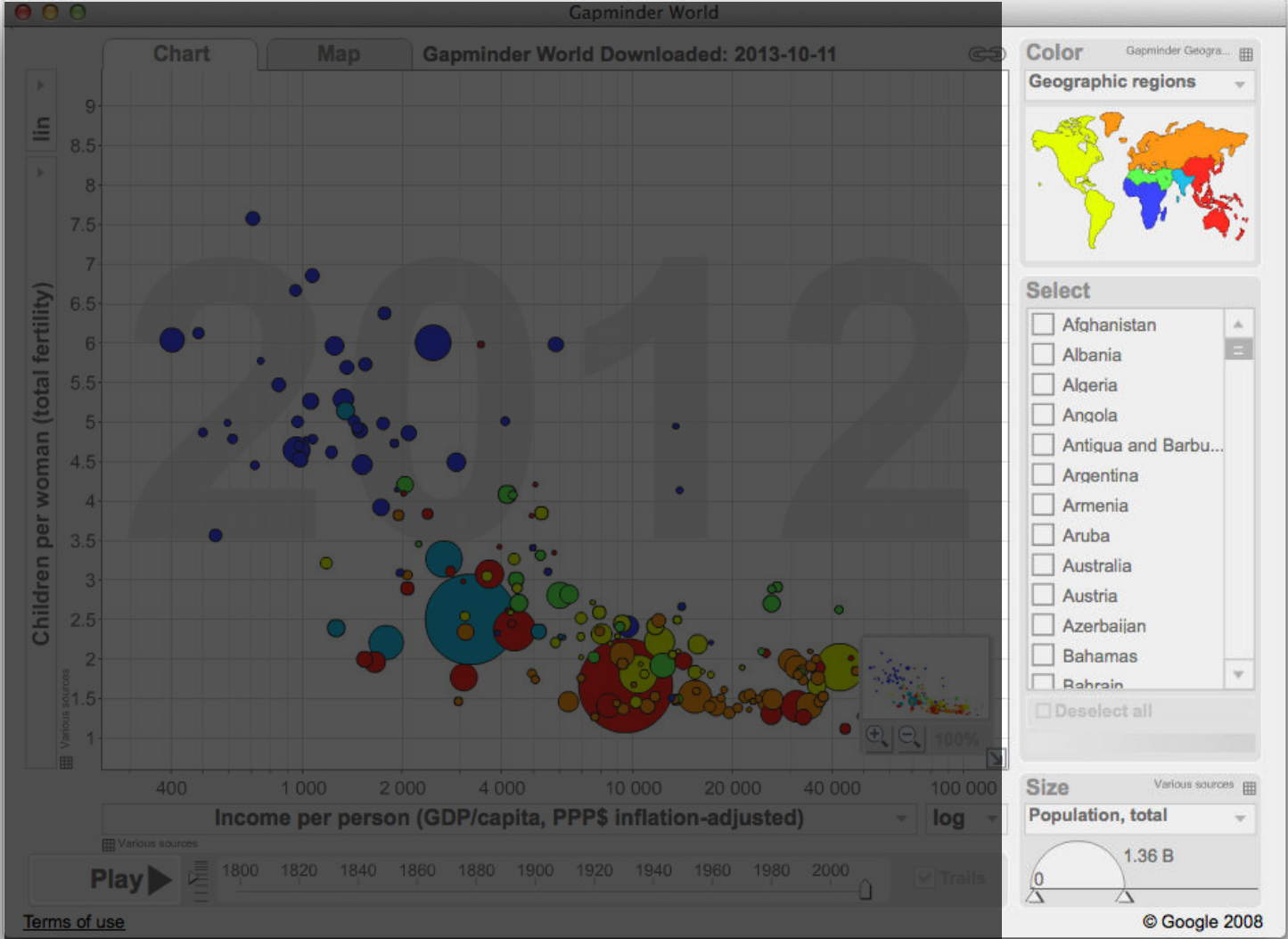
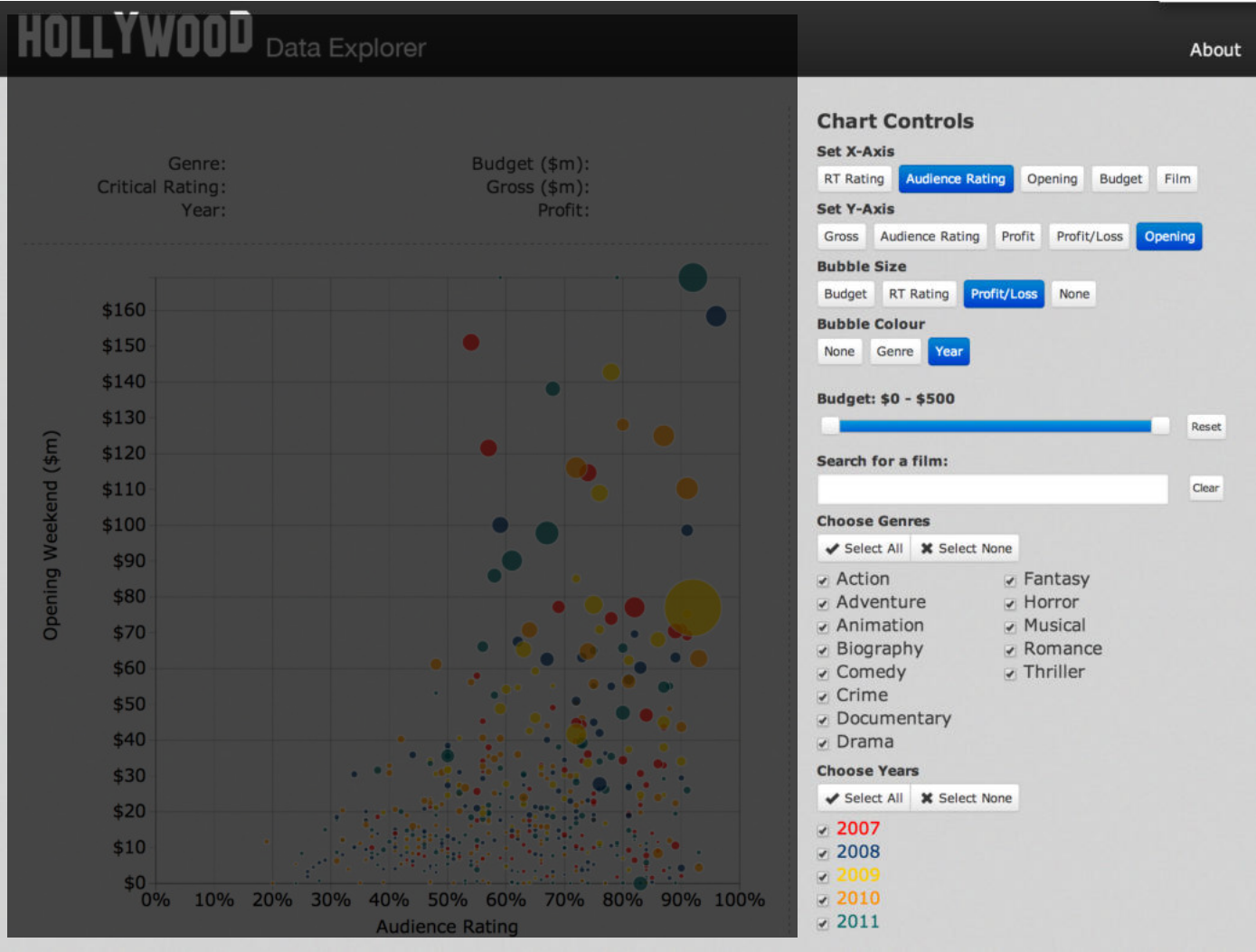


Primary Research: Analysis of Existing Products

FilmFinder



Visual Information Seeking: Christopher Ahlberg and Ben Shneiderman



Filters are important: It reduces down data tremendously

The Data

Data

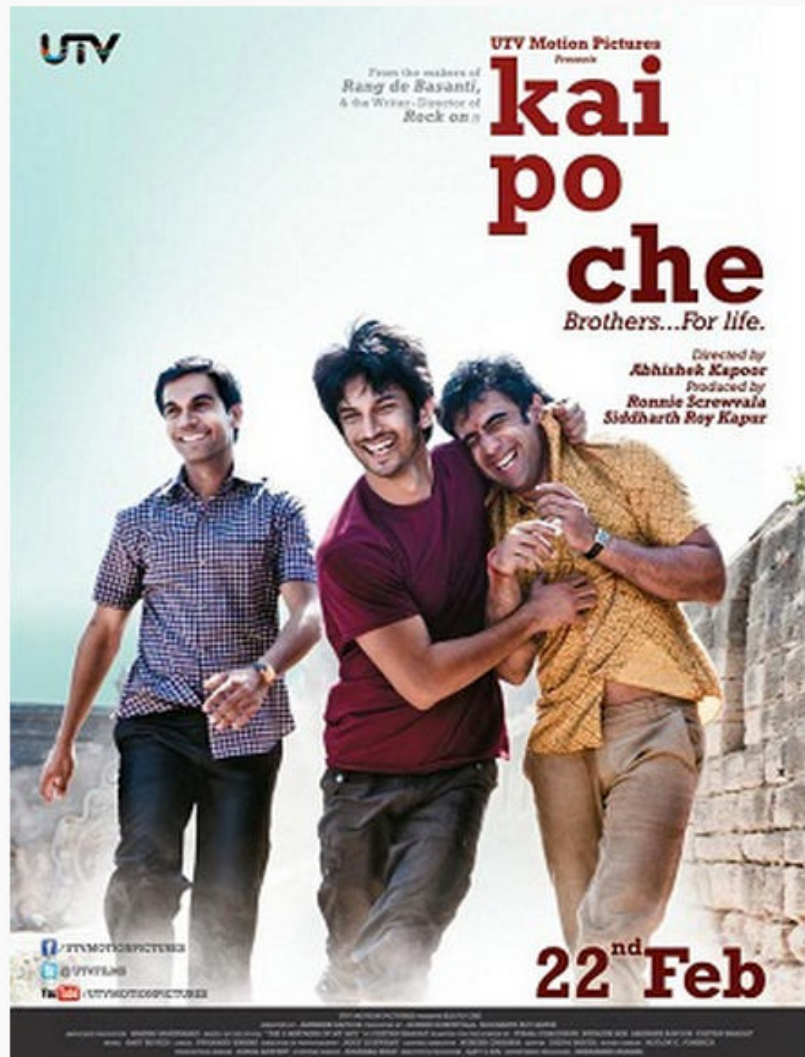
Movie Name (1980 - 2013)

Director	Narrator	Editing
Producer	Music	Distributor
Screenplay	Casts	Release Date
Story	Cinematography	Budget
Writer	Based on	Gross

http://en.wikipedia.org/wiki/List_of_Bollywood_films

<http://www.bollywoodhungama.com/>

Kai Po Che!



UTV

From the makers of Rang de Basanti, A Wednesday, Dilwale Dulhania Le Jayenge, Rock on

kai po che

Brothers...For life.

Directed by Abhishek Kapoor
Produced by Ronnie Screwvala Siddharth Roy Kapur

22nd Feb

Theatrical release poster

Directed by	Abhishek Kapoor
Produced by	Ronnie Screwvala Siddharth Roy Kapur
Screenplay by	Pubali Chaudhari Supratik Sen Abhishek Kapoor Chetan Bhagat
Based on	<i>The 3 Mistakes of My Life</i> by Chetan Bhagat
Starring	Sushant Singh Rajput Amit Sadh Rajkummar Rao Amrita Puri
Music by	Amit Trivedi

Background Score:
Hitesh Sonik

Cinematography Anay Goswami

Movie Name (1980 - 2013)

Director	Narrator	Editing
Producer	Music	Distributor
Screenplay	Casts	Release Date
Story	Cinematography	Budget
Writer	Based on	Gross

Is a person's or persons' name(s)

Movie Name (1980 - 2013)

Director	Narrator	Editing
Producer	Music	Distributor
Screenplay	Casts	Release Date
Story	Cinematography	Budget
Writer	Based on	Gross

Are conditionally available or sometimes missing

Movie Name (1980 - 2013)

Director	Narrator	Editing
Producer	Music	Distributor
Screenplay	Casts	Release Date
Story	Cinematography	Budget
Writer	Based on	Gross

Multiple dates available for different countries

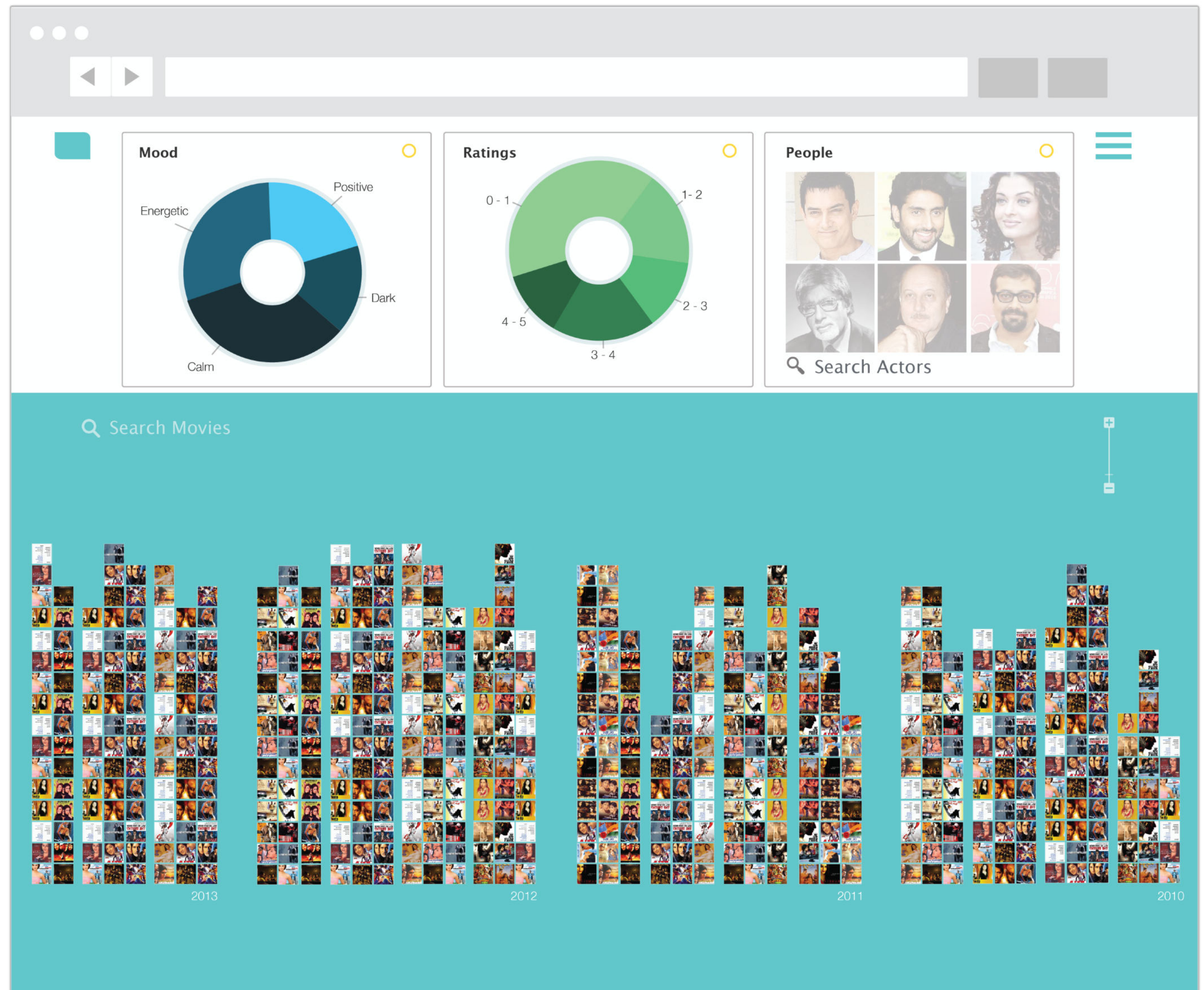
Movie Name (1980 - 2013)

Director	Narrator	Editing
Producer	Music	Distributor
Screenplay	Casts	Release Date
Story	Cinematography	Budget
Writer	Based on	Gross

When available, available in USD

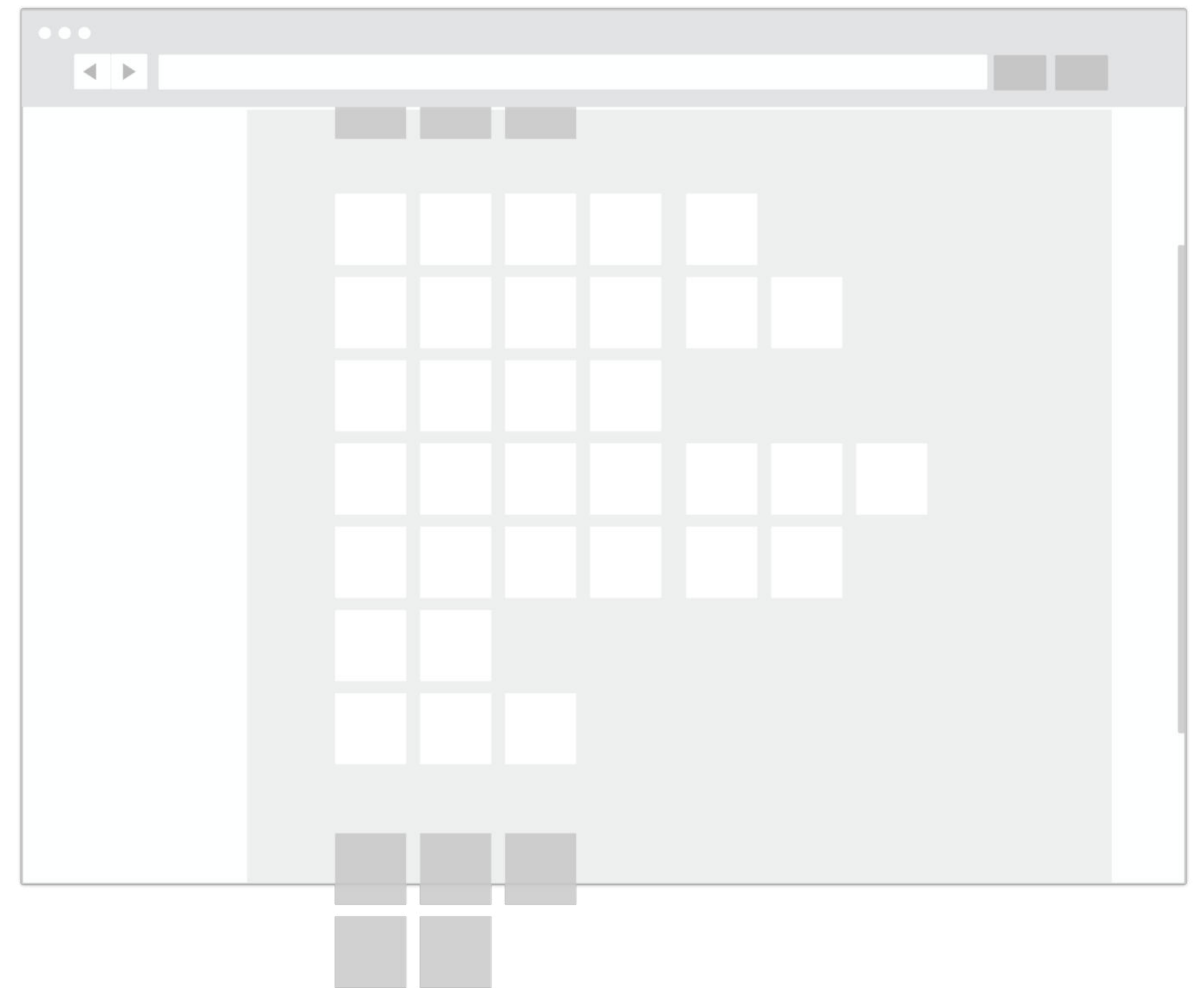
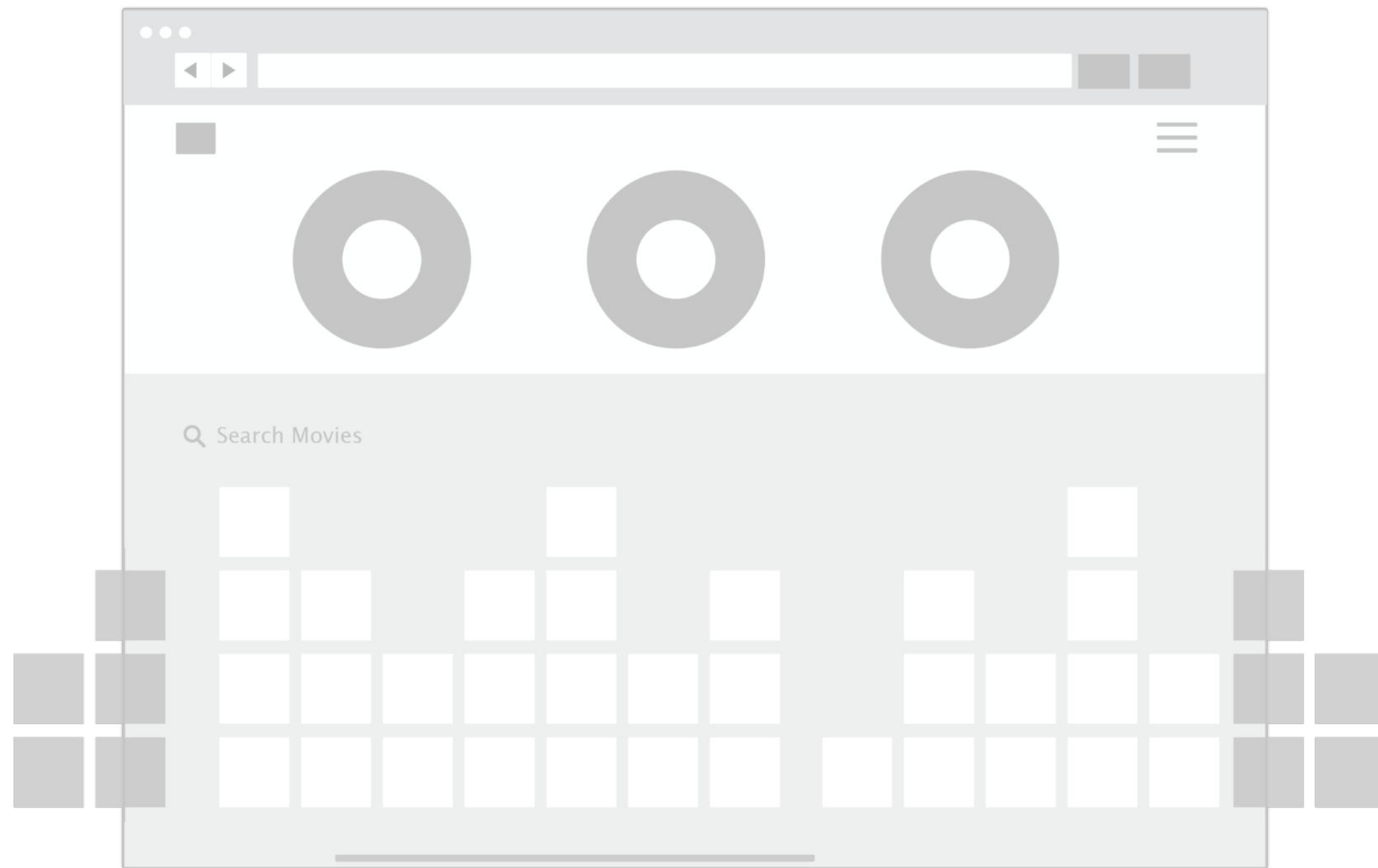
Changes from the feedbacks

1. Timeline: Left-Right or Right-Left



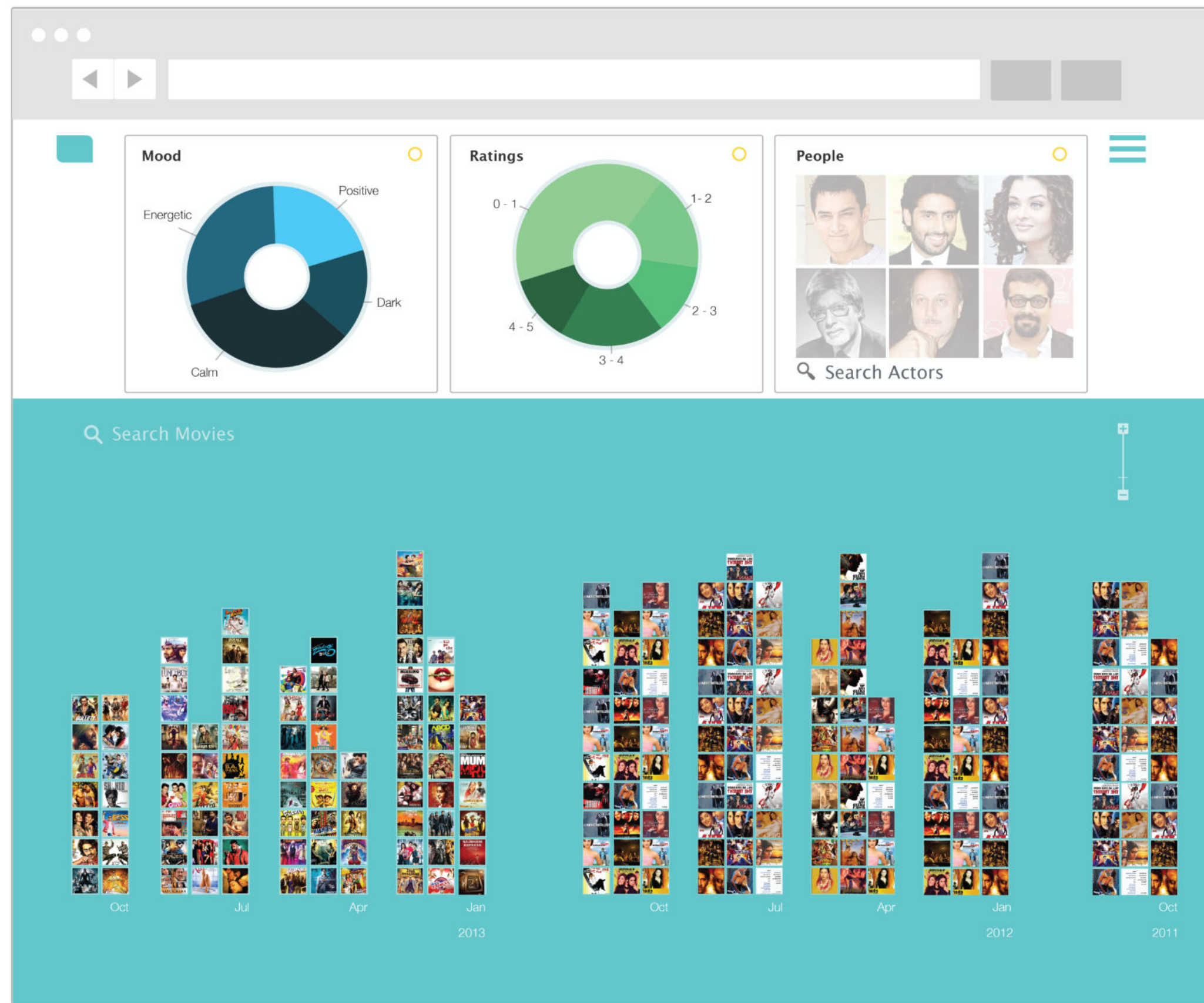
Jacob Neilson: <http://goo.gl/4MGckC>

Timeline: Vertical Scroll

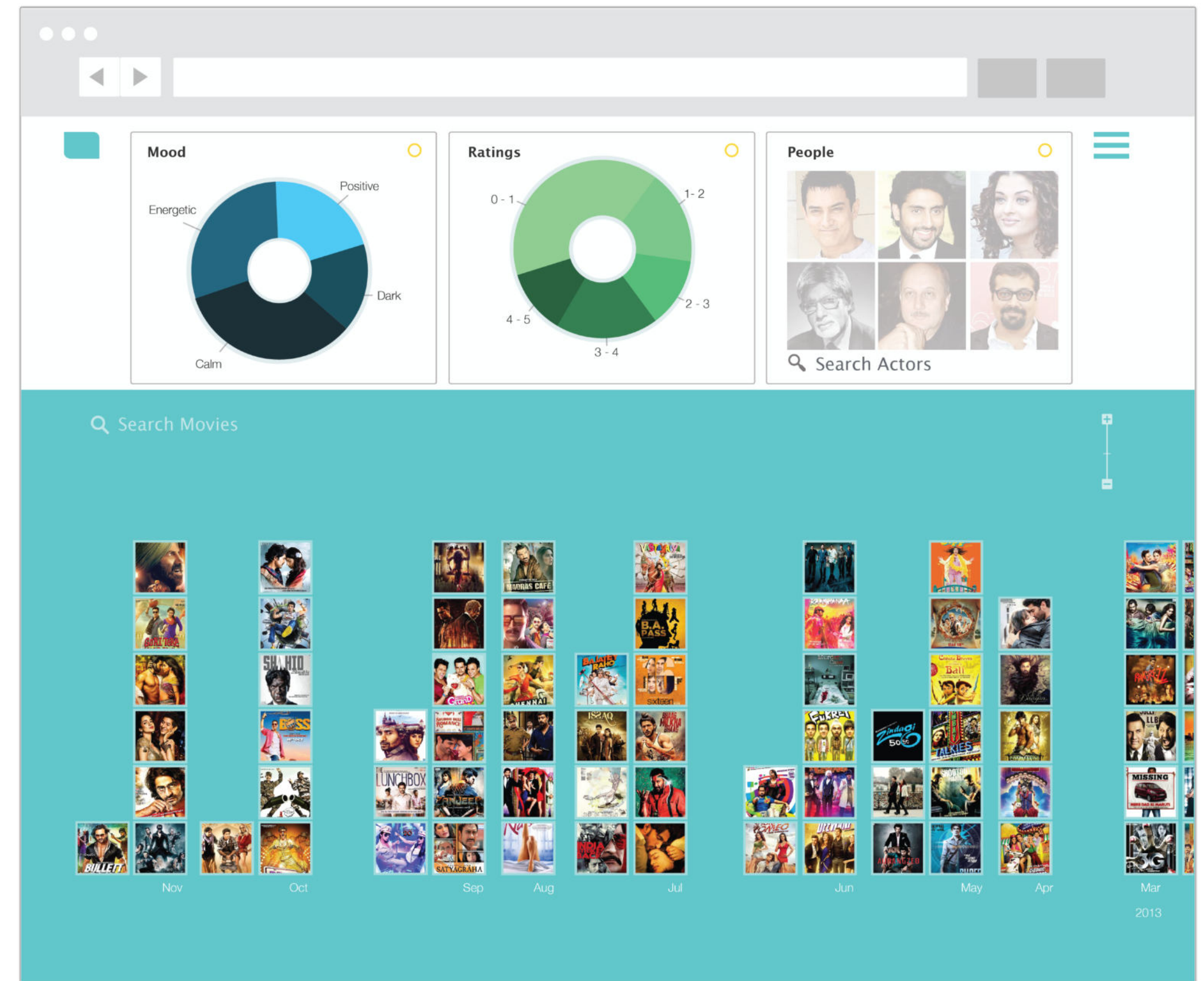


Reverse Chronological order

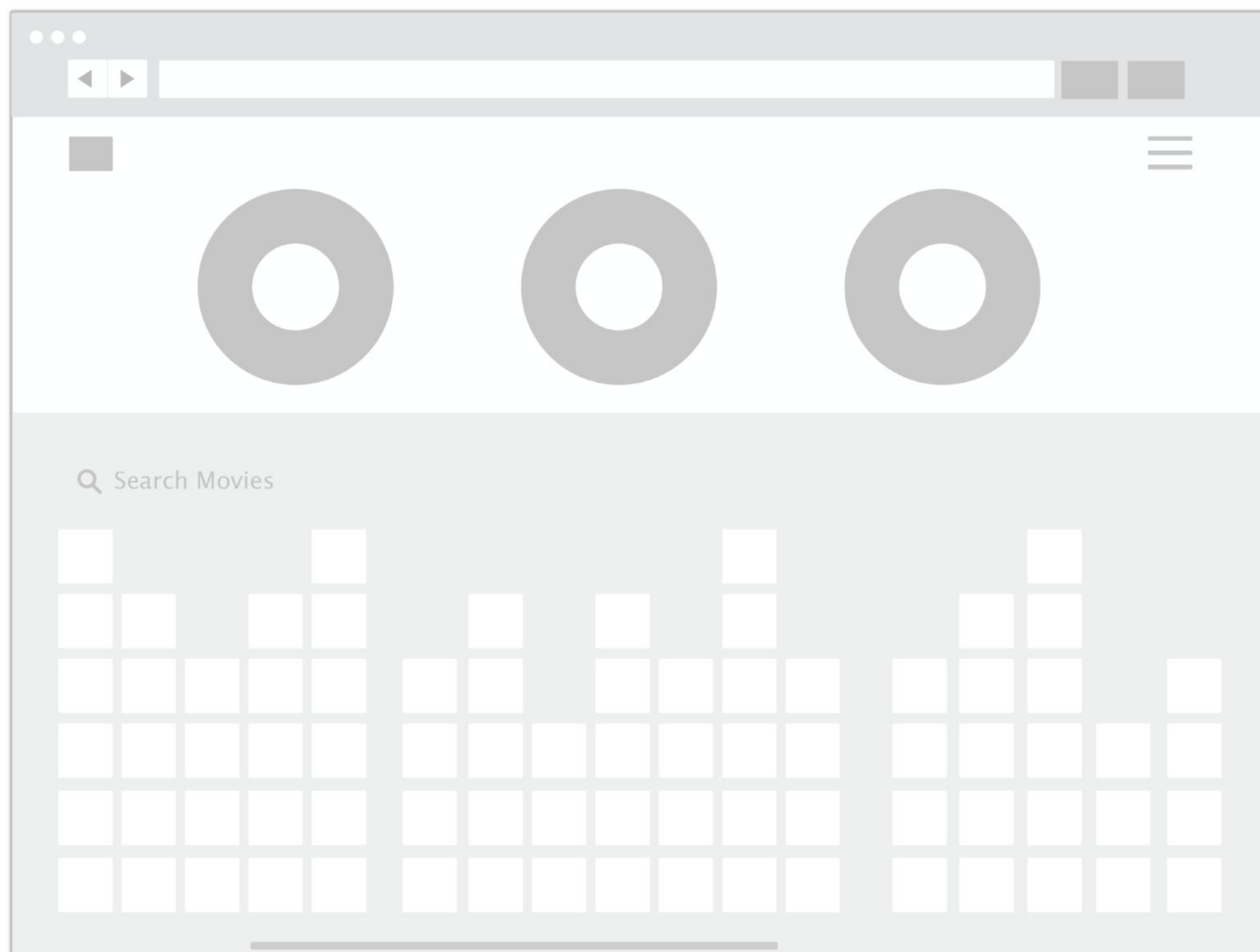
2. Visualization height



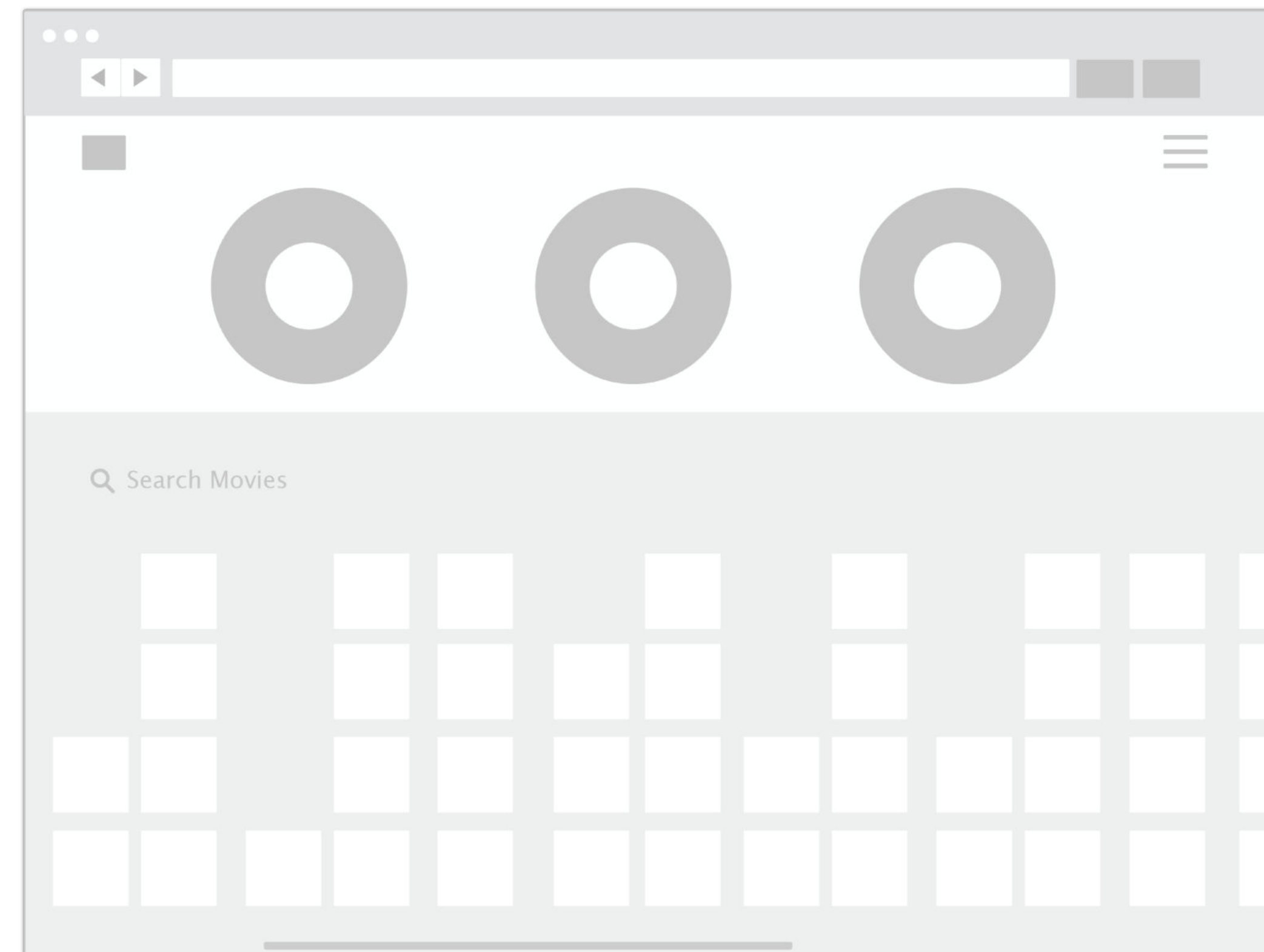
Month View



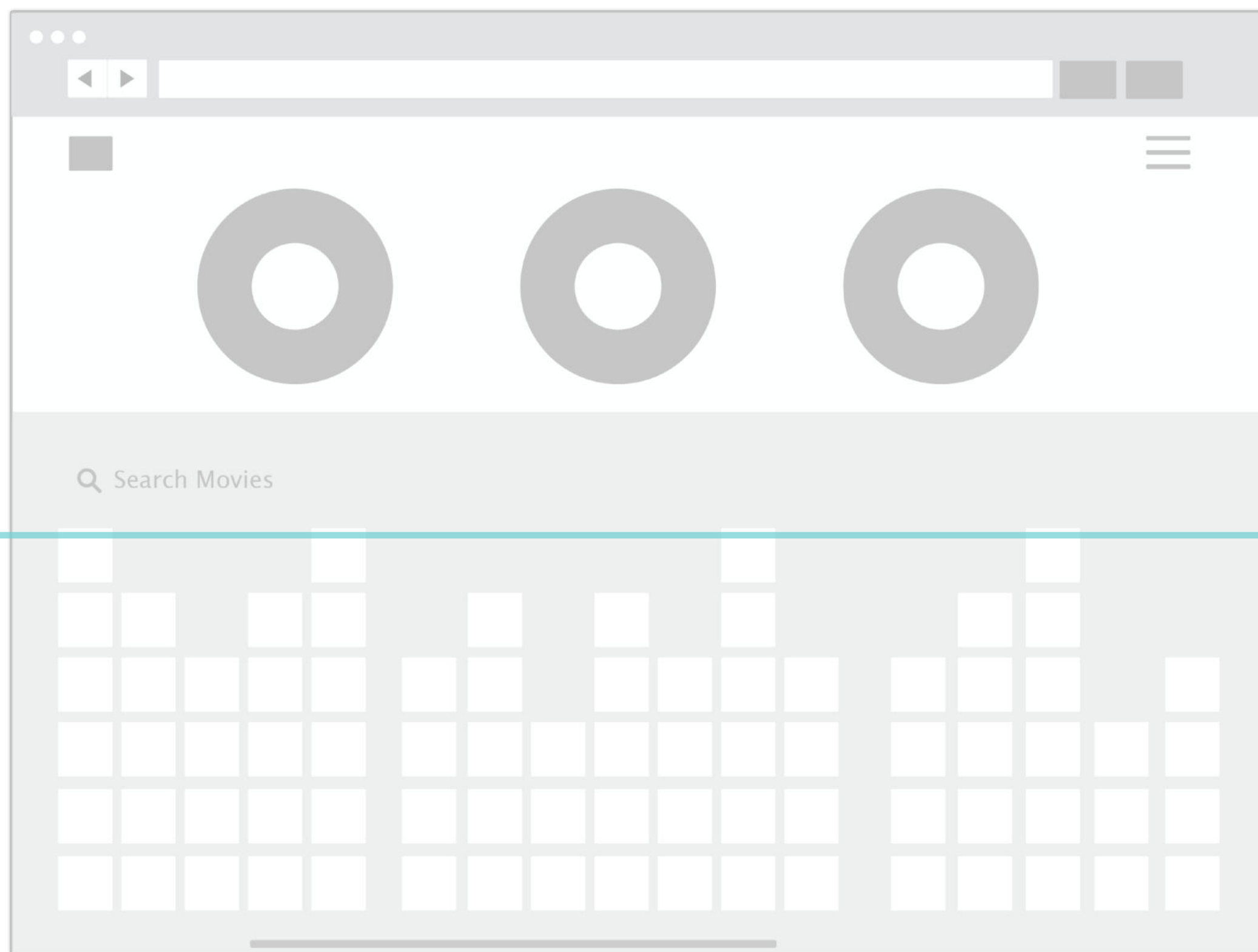
Month View zoomed



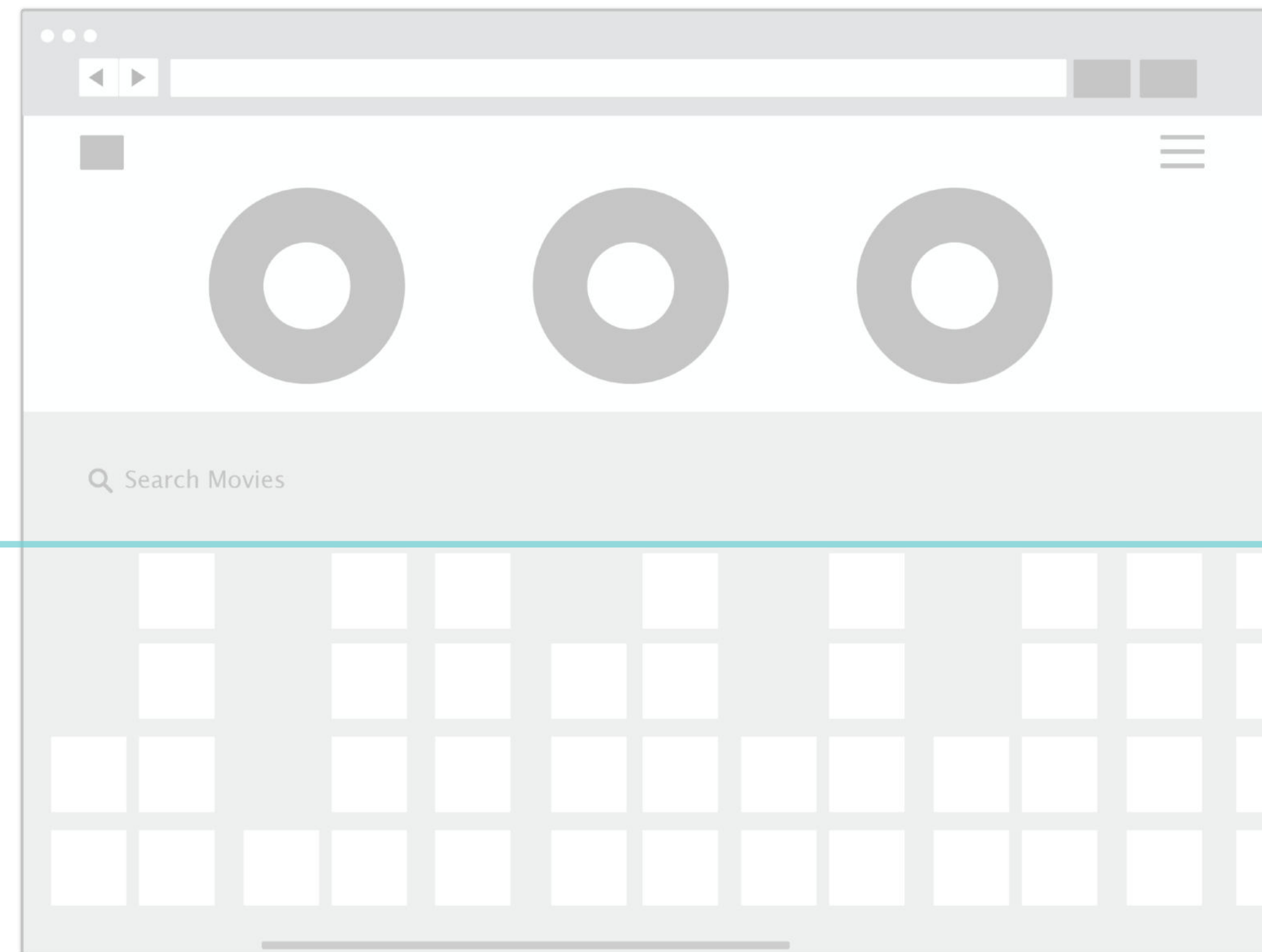
Month View



Month View zoomed

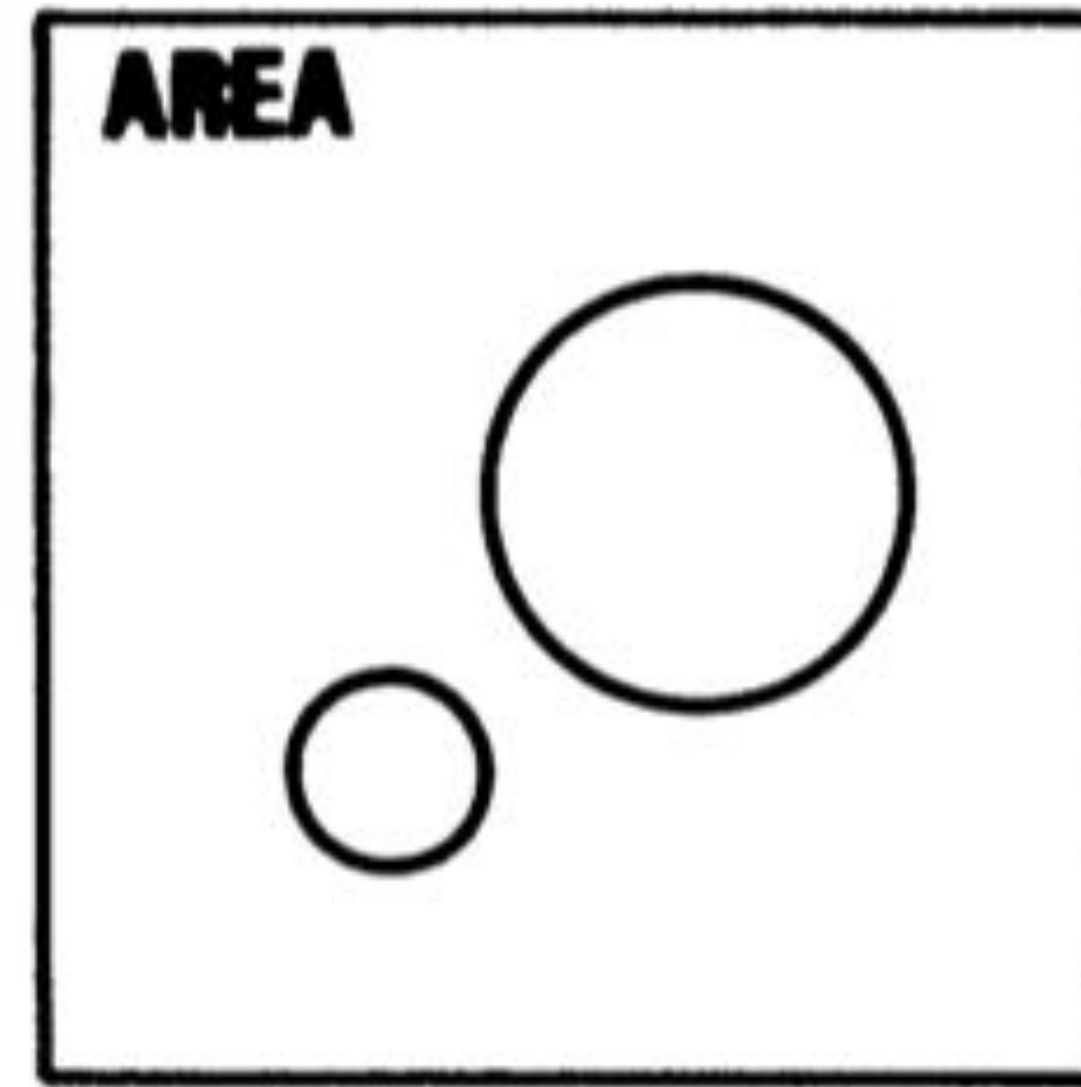
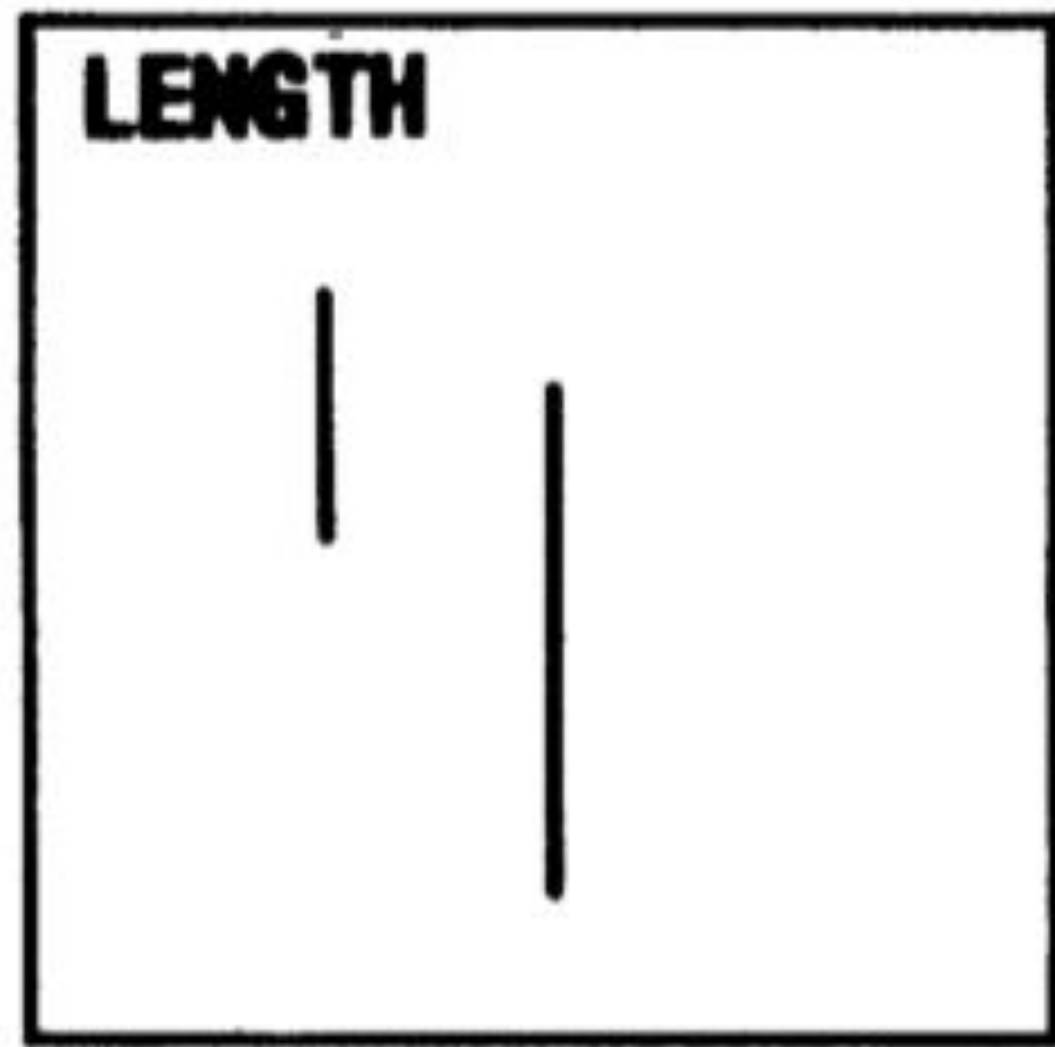


Month View

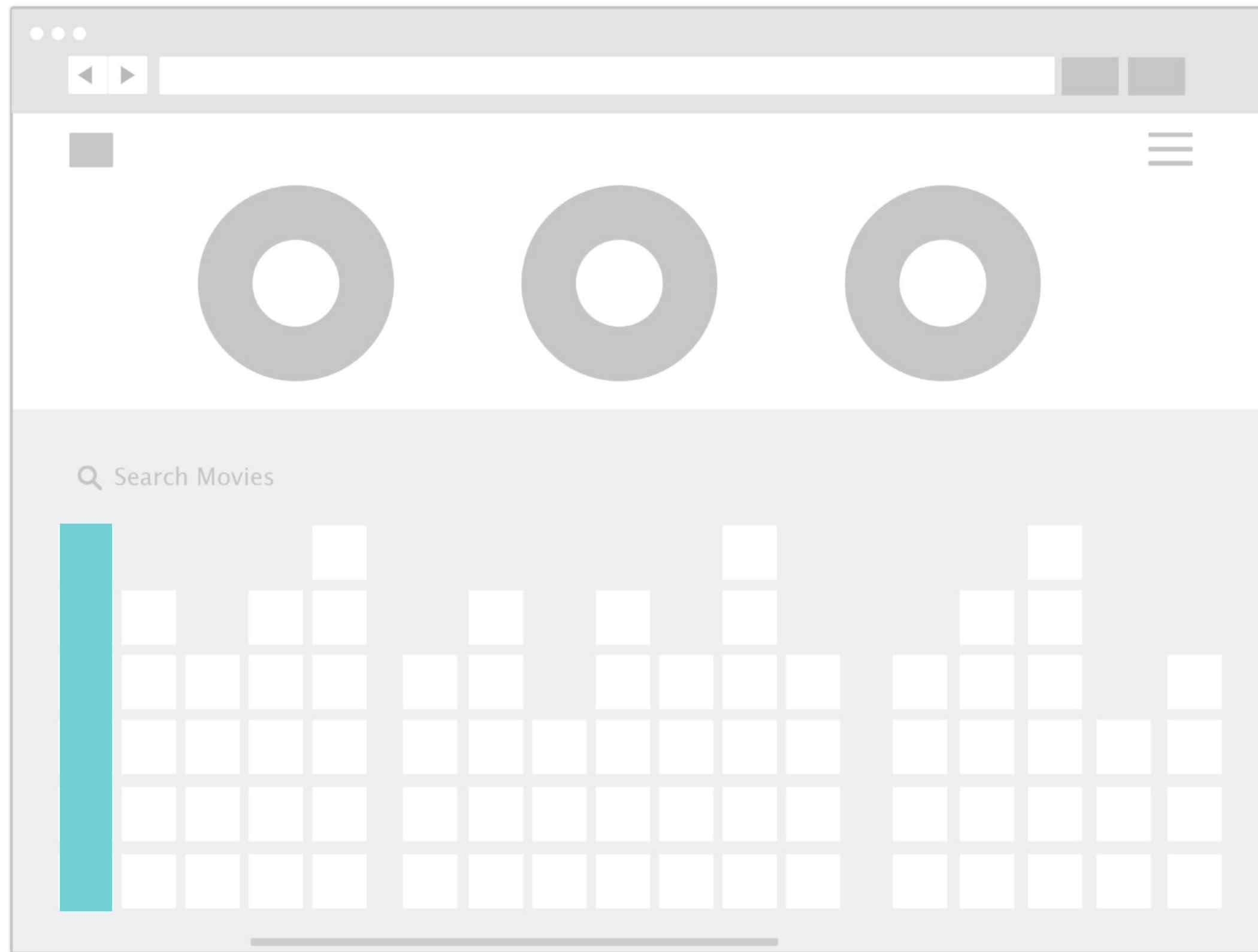


Month View zoomed

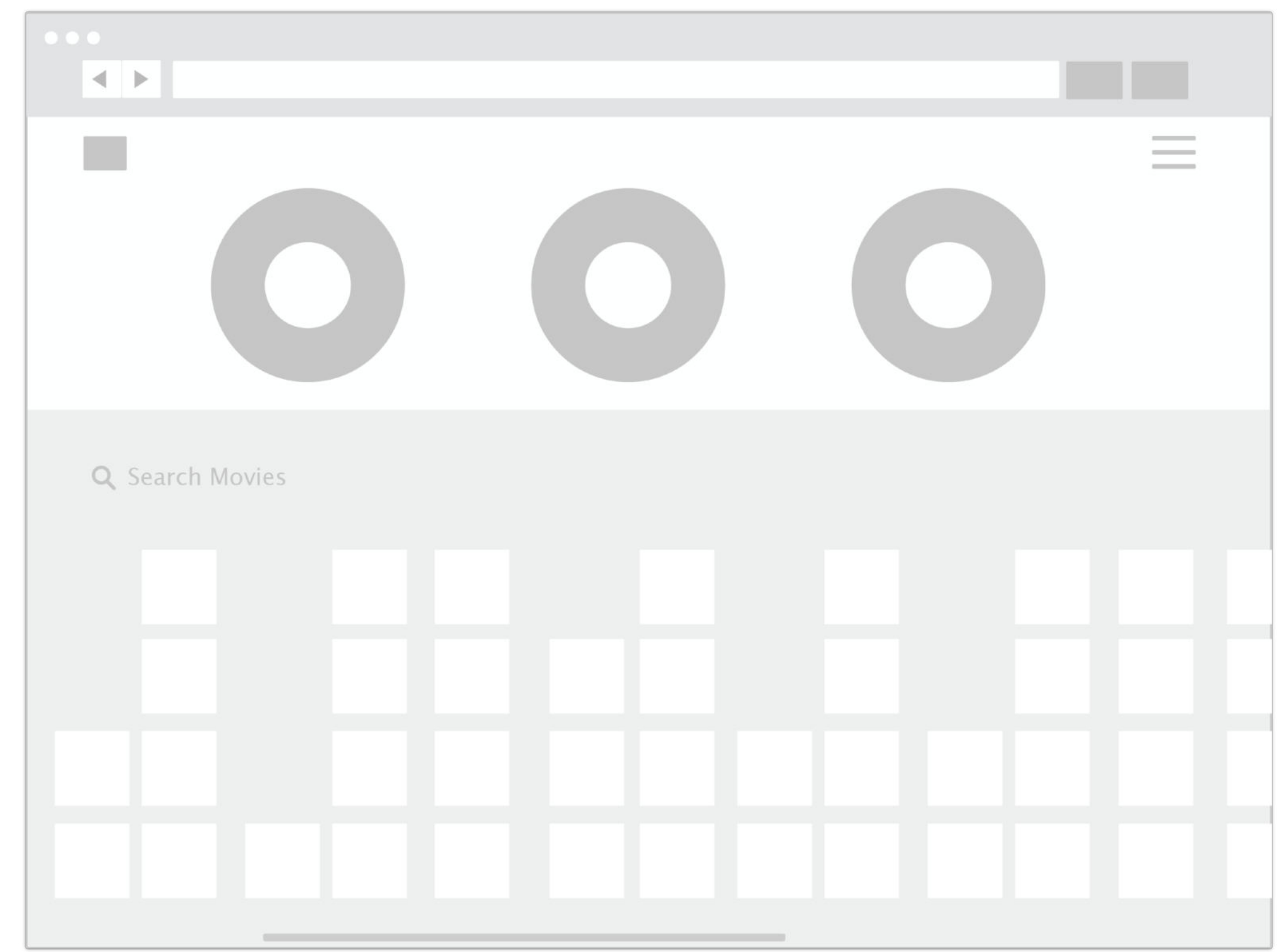
Visualization height



Line Vs Area

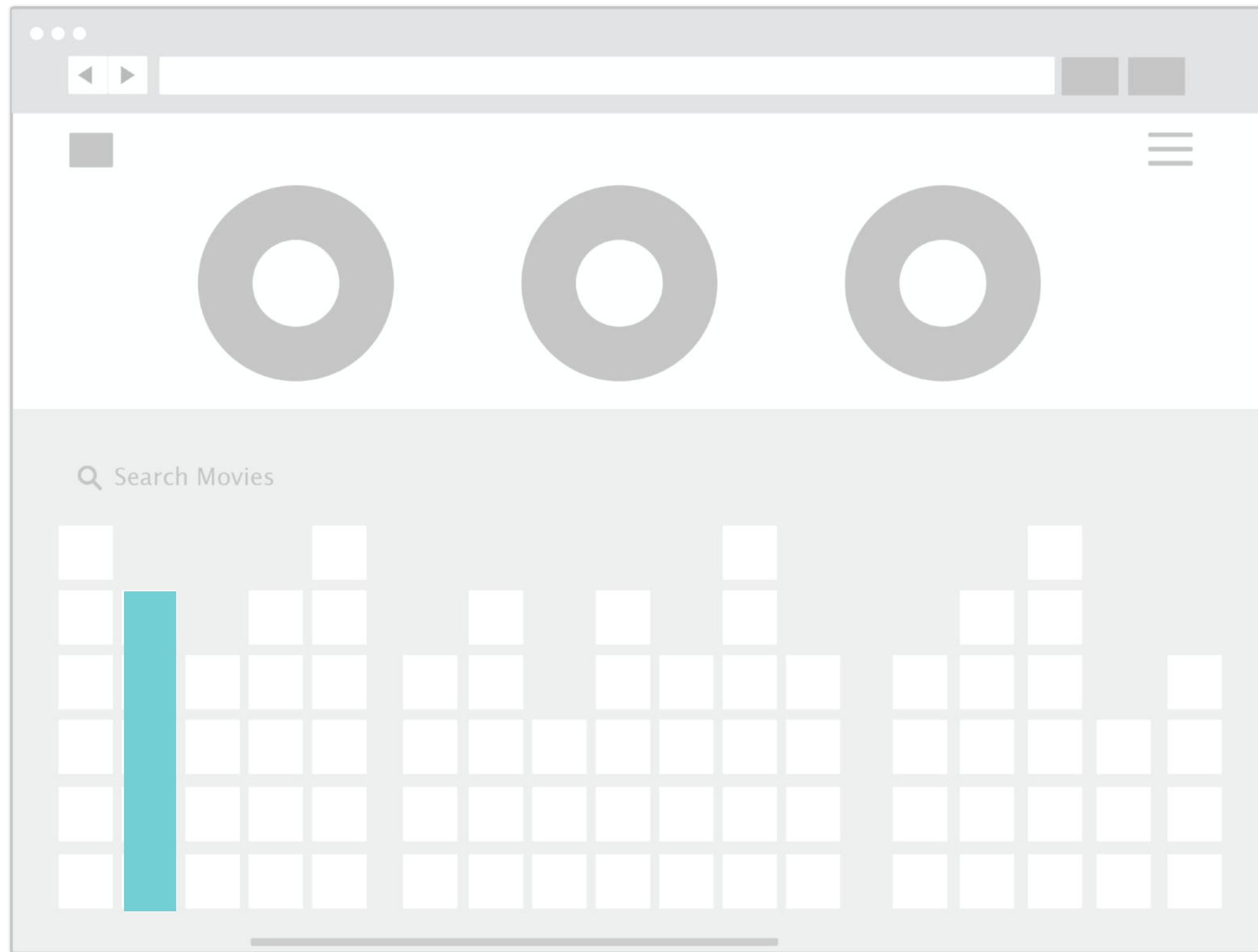


Month View

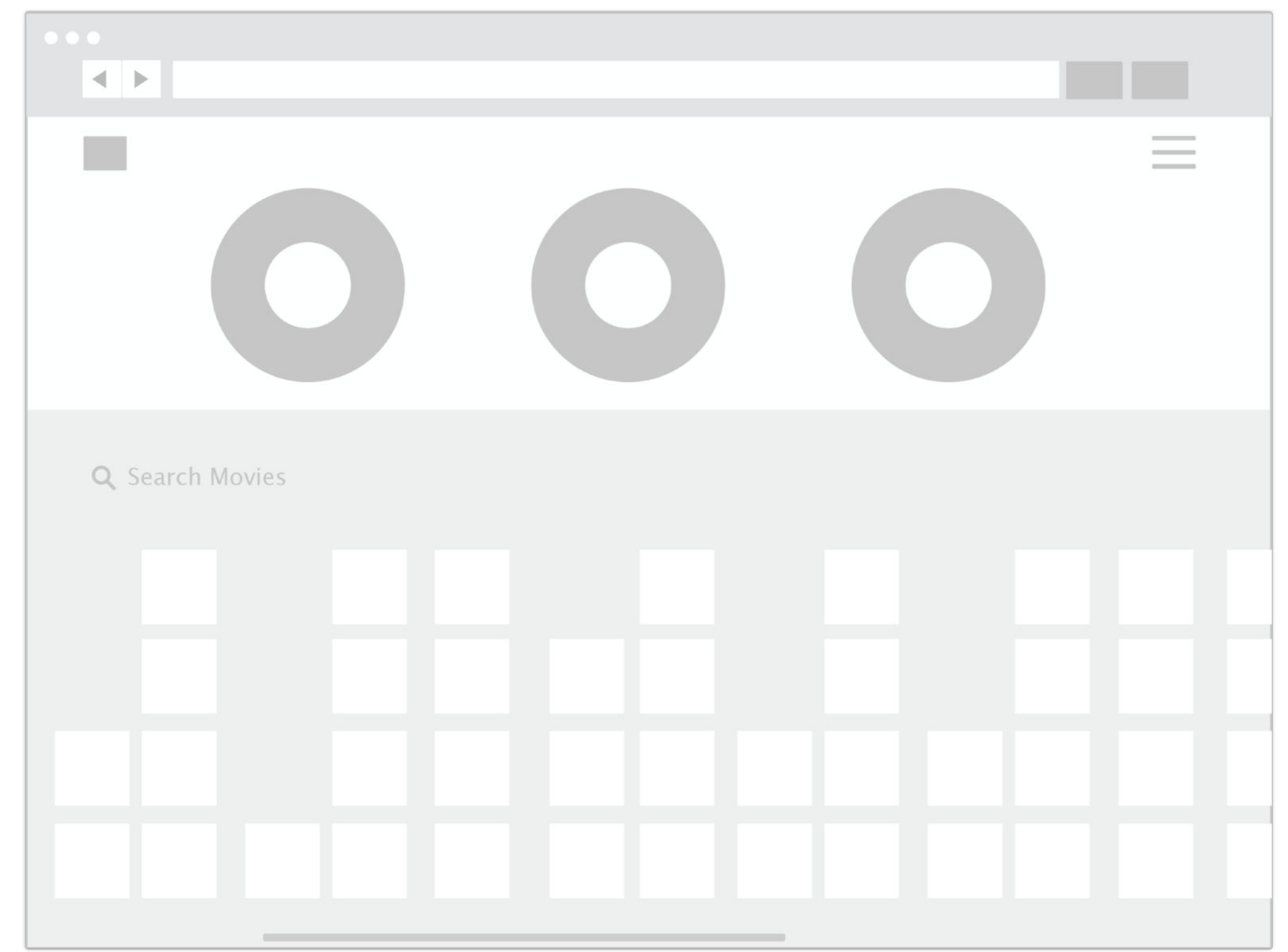


Month View zoomed

Line Vs Area

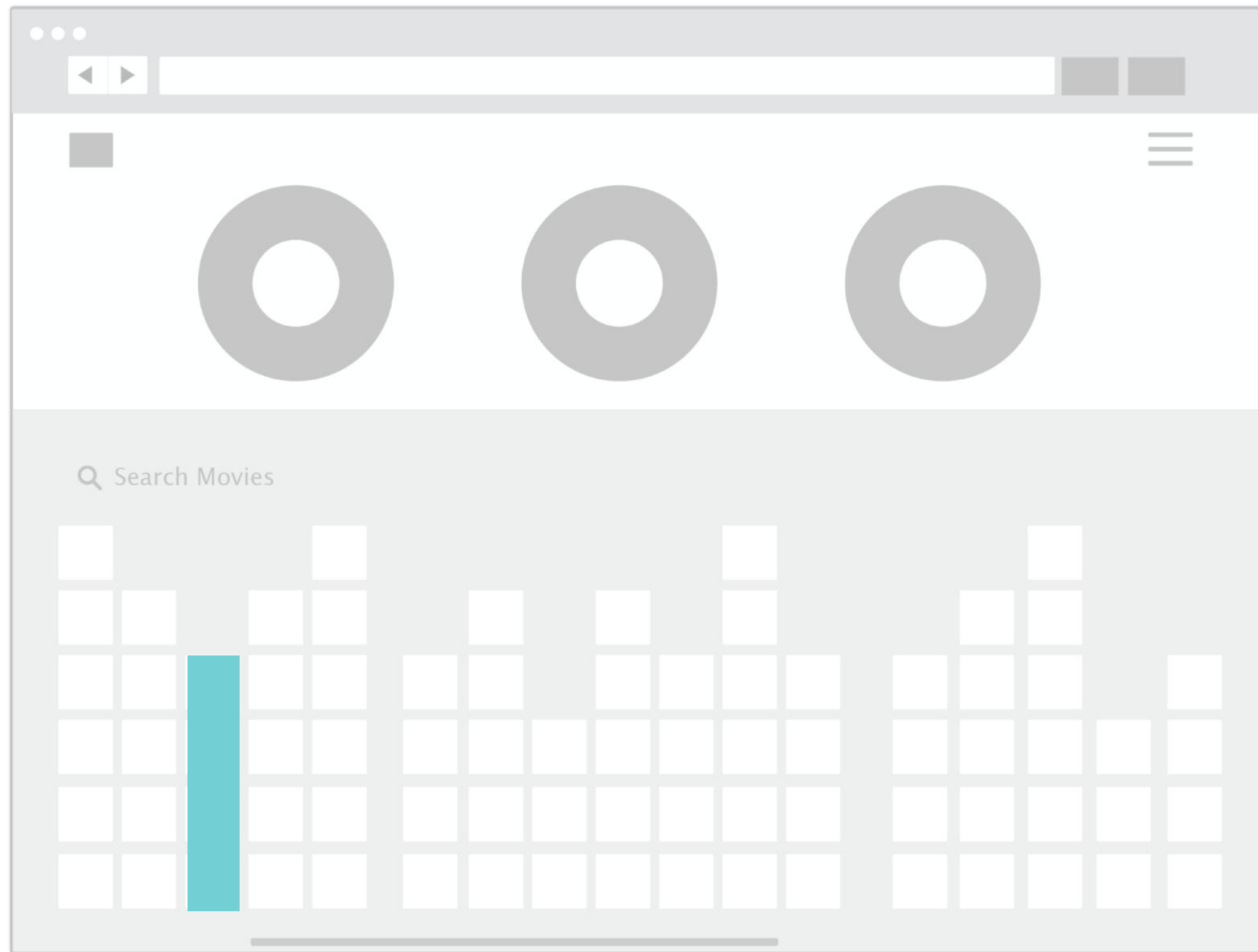


Month View

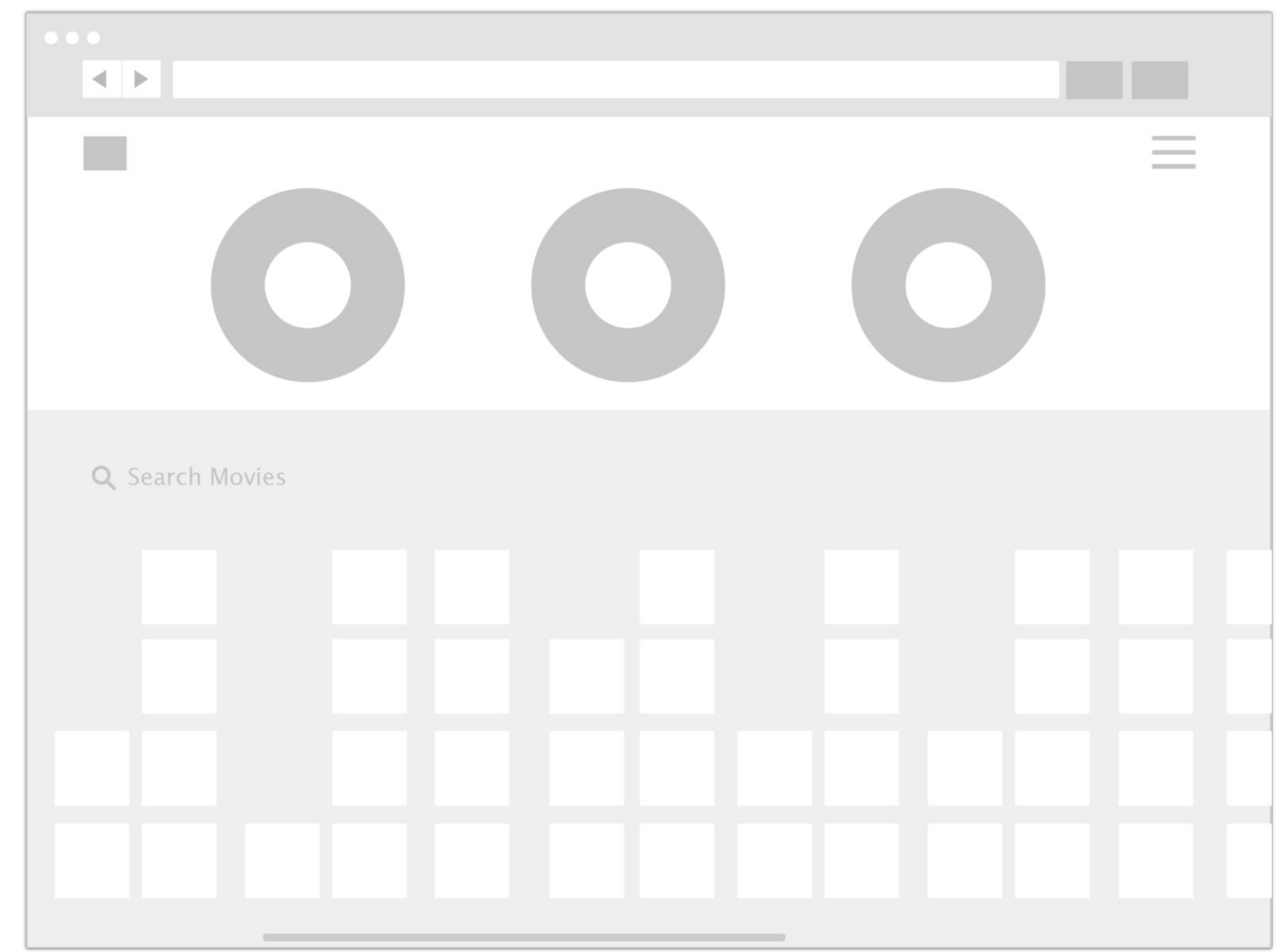


Month View zoomed

Line Vs Area

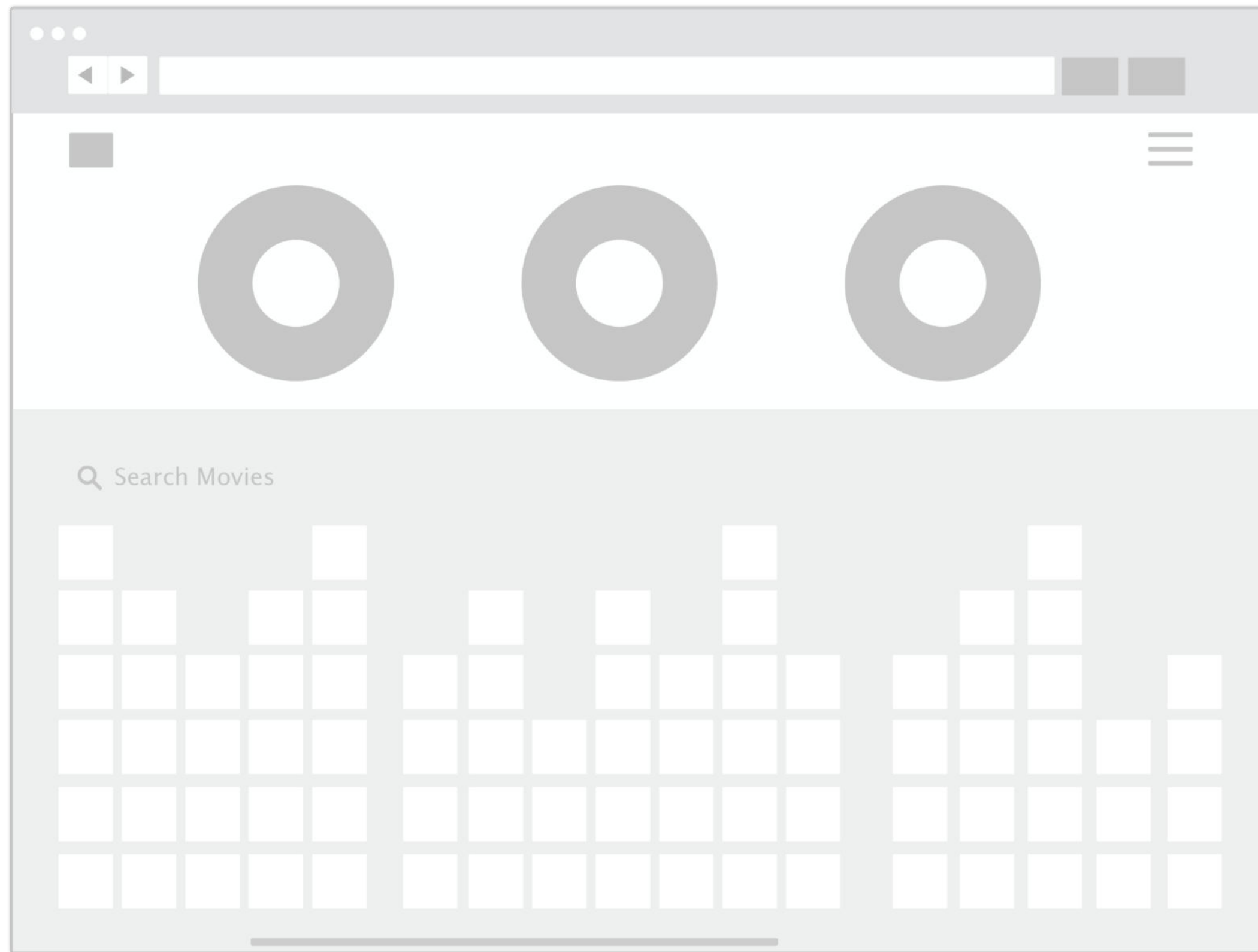


Month View

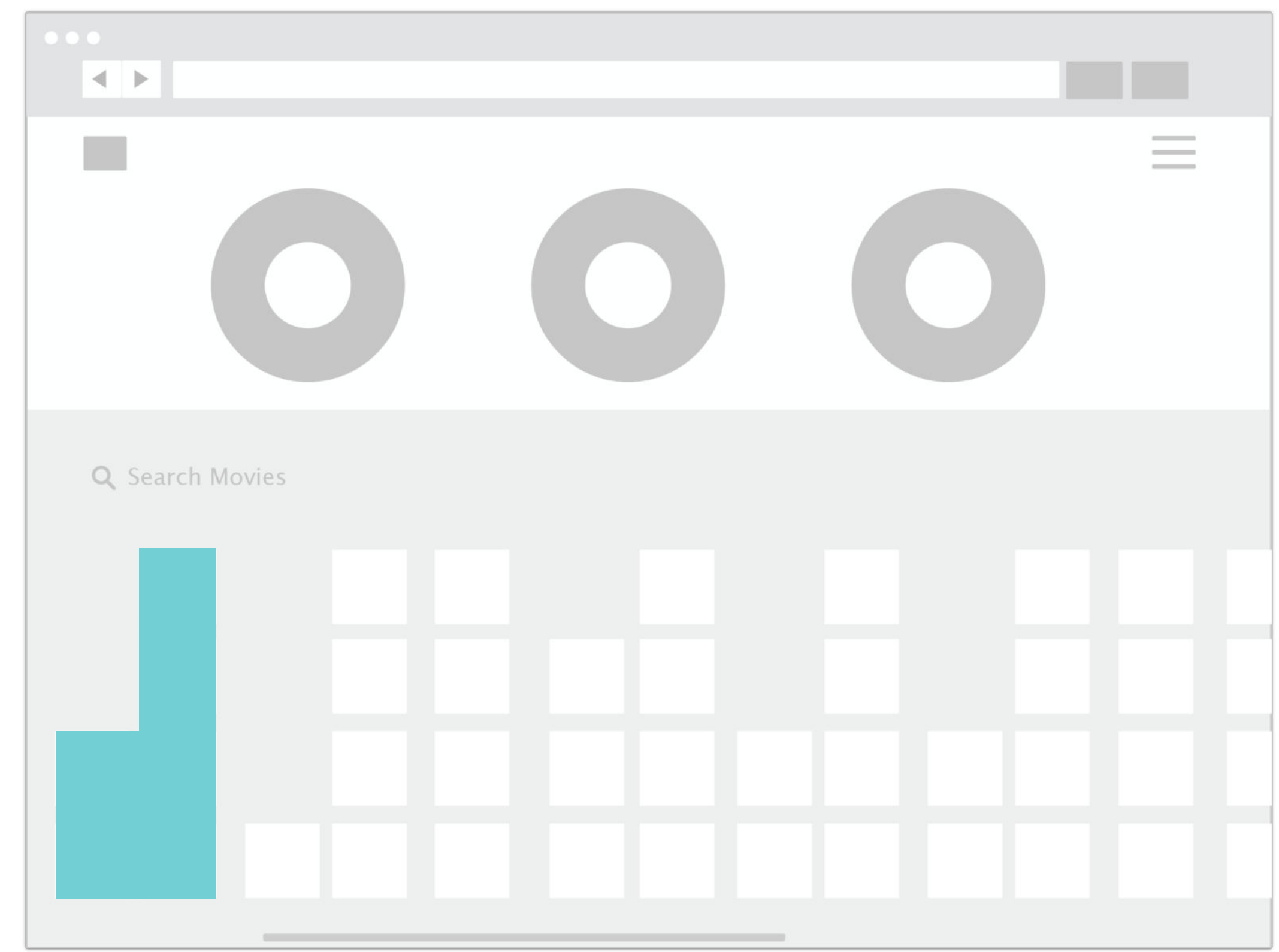


Month View zoomed

Line Vs Area

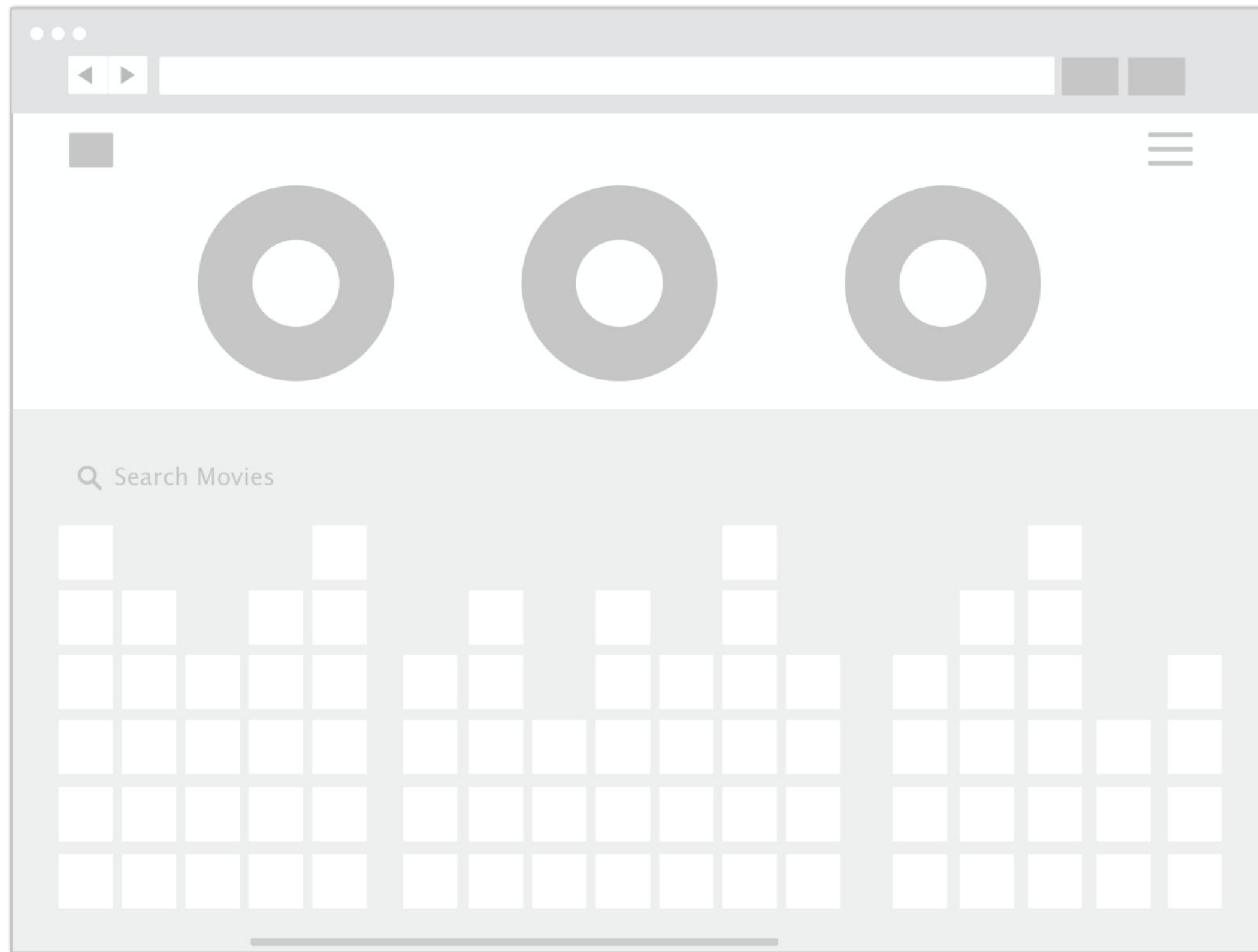


Month View

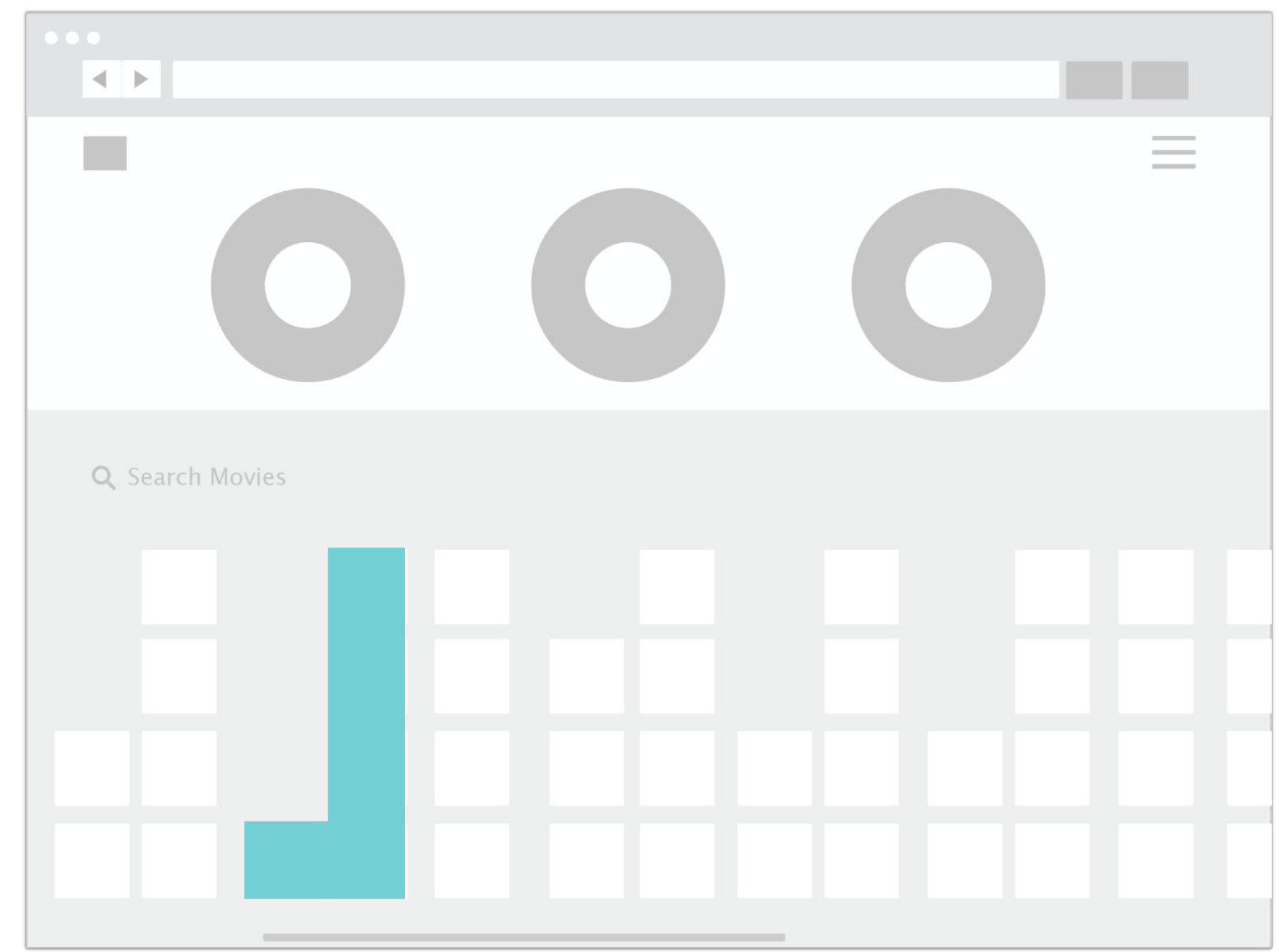


Month View zoomed

Line Vs Area

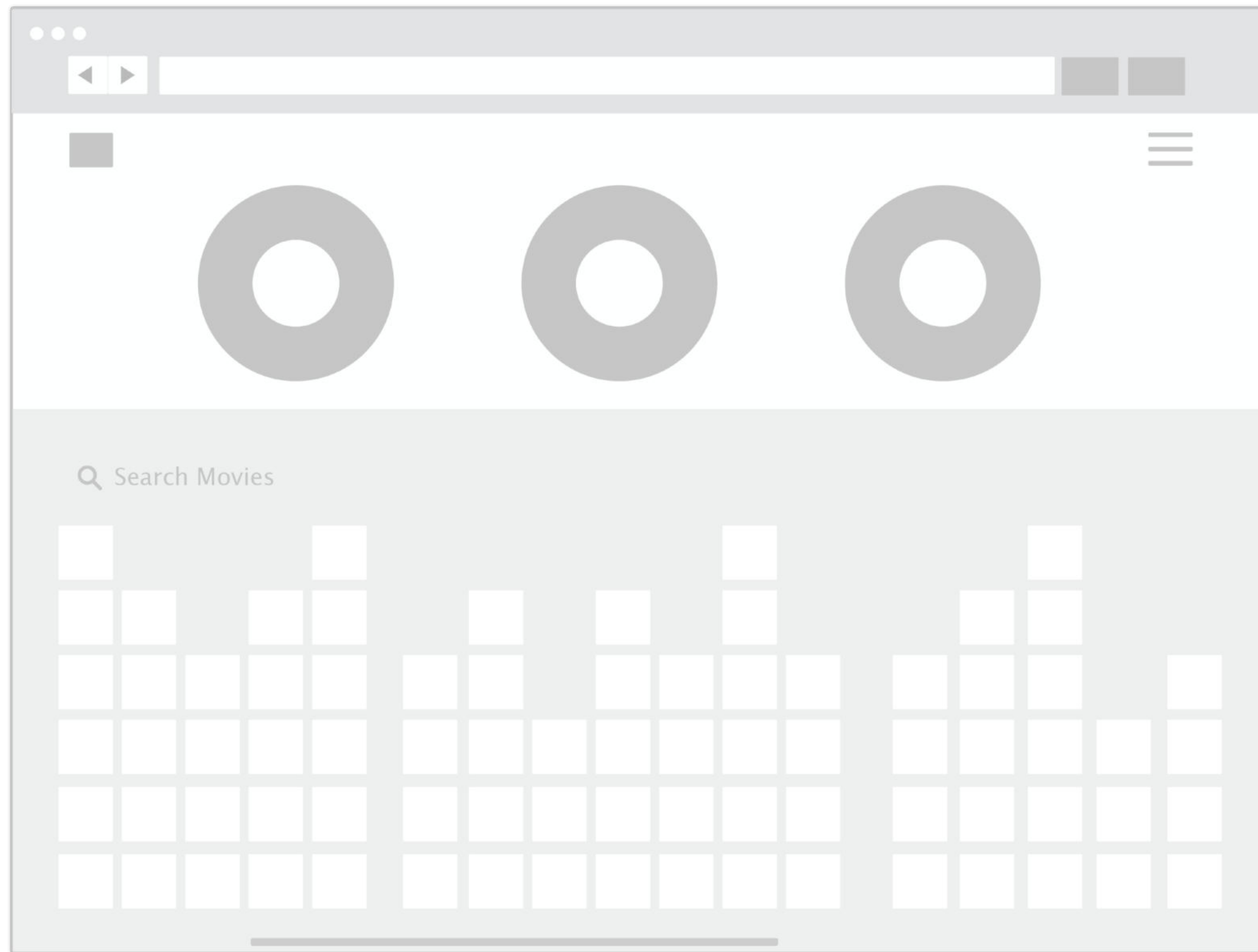


Month View

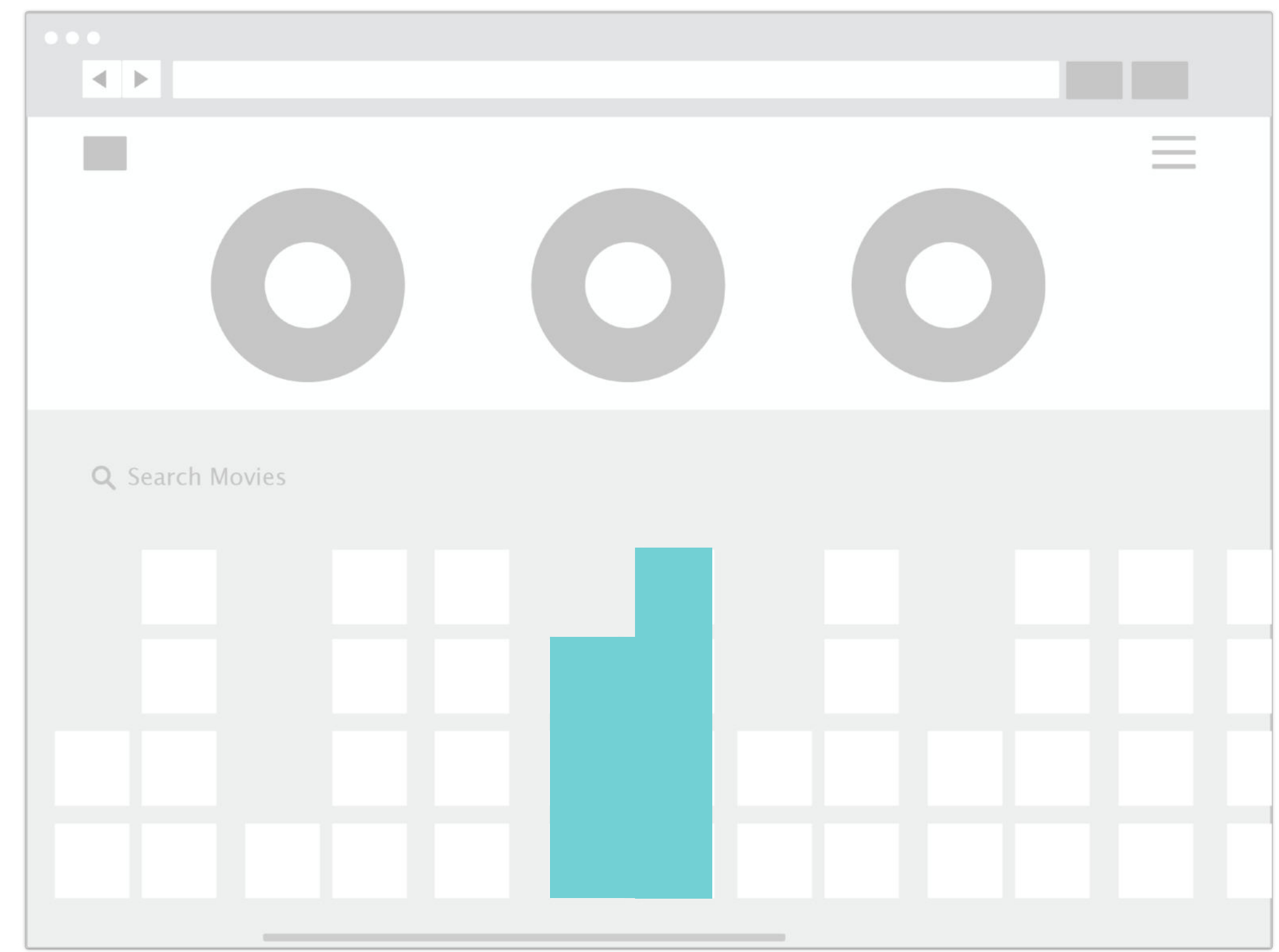


Month View zoomed

Line Vs Area

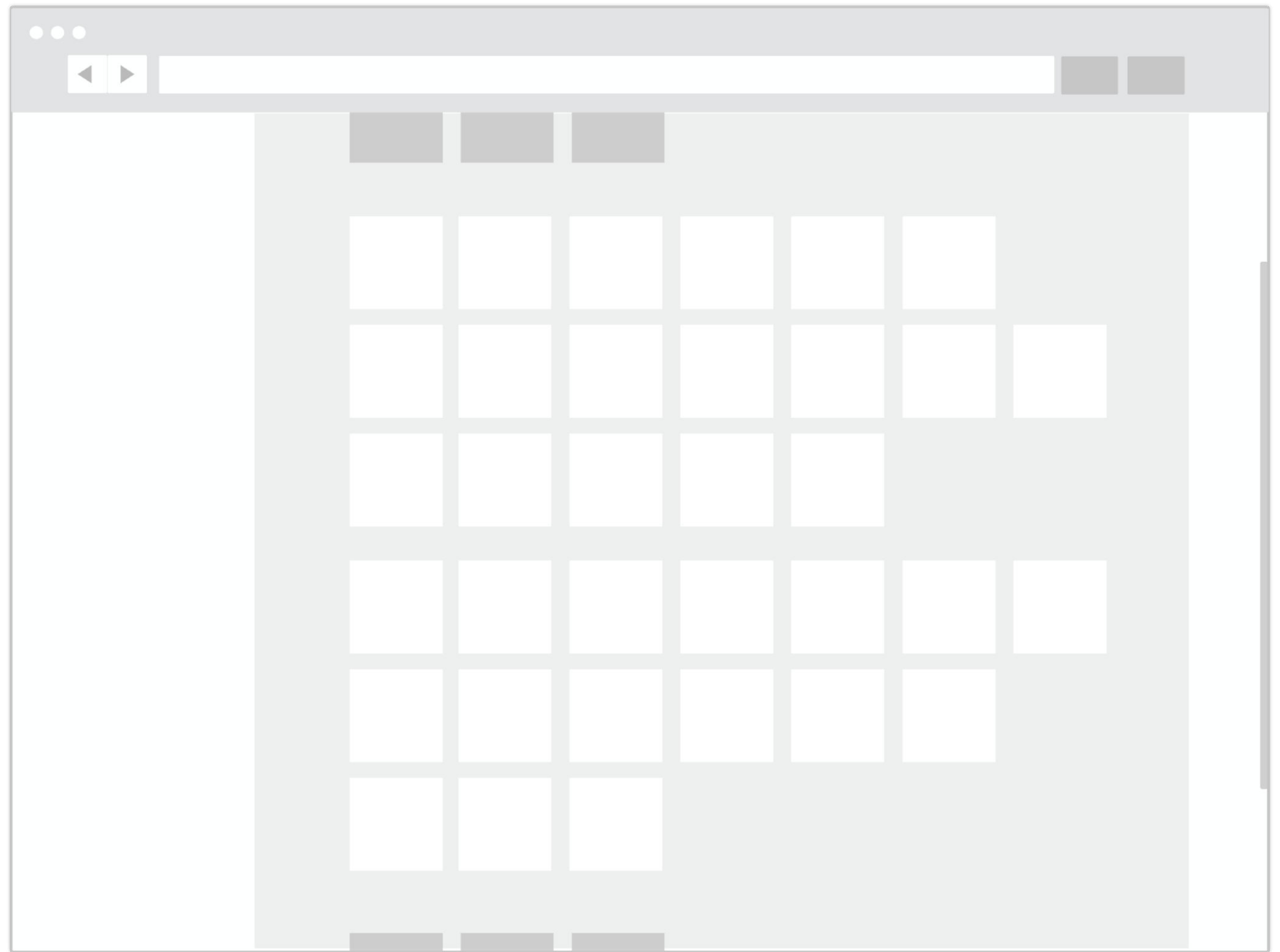


Month View

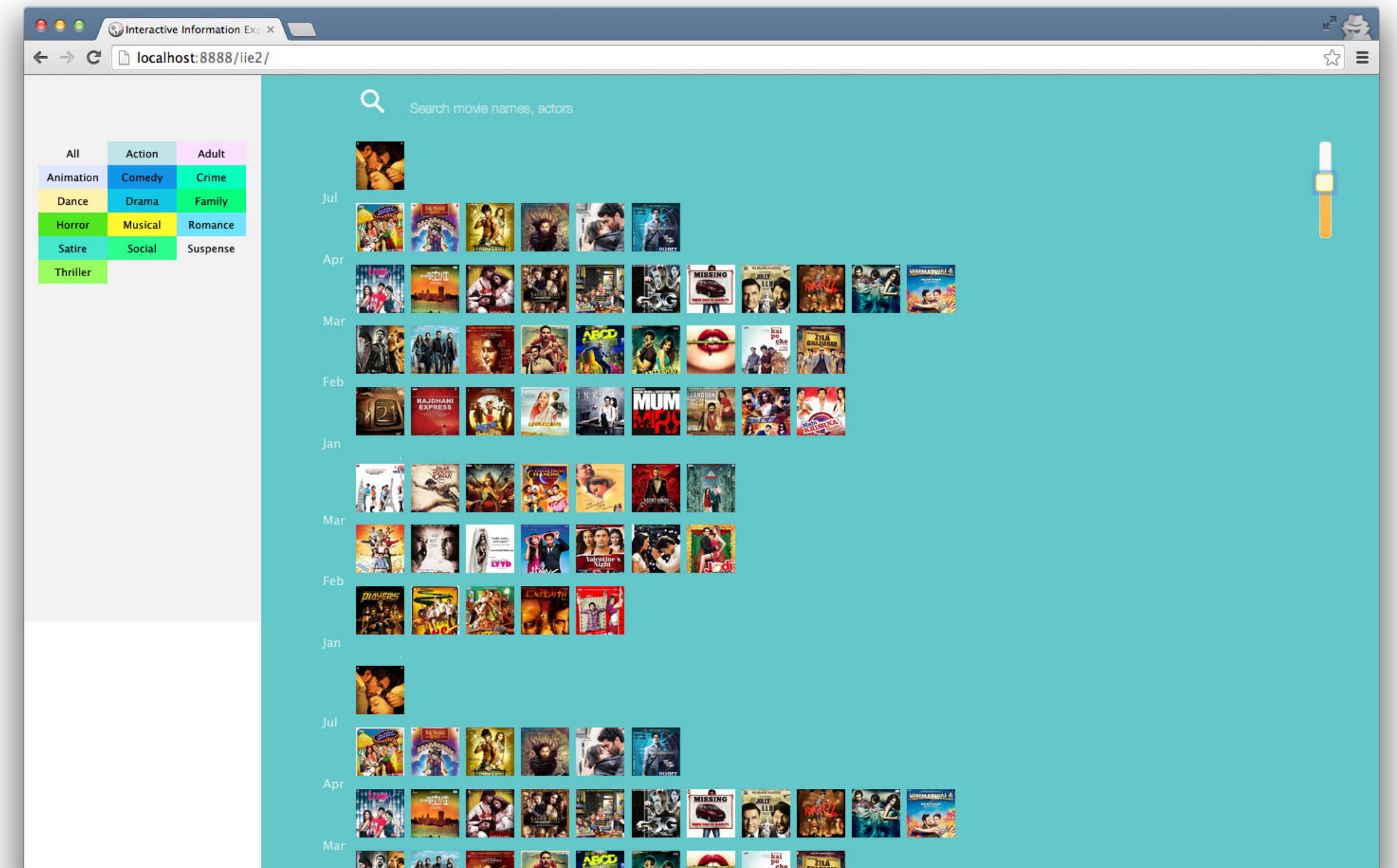
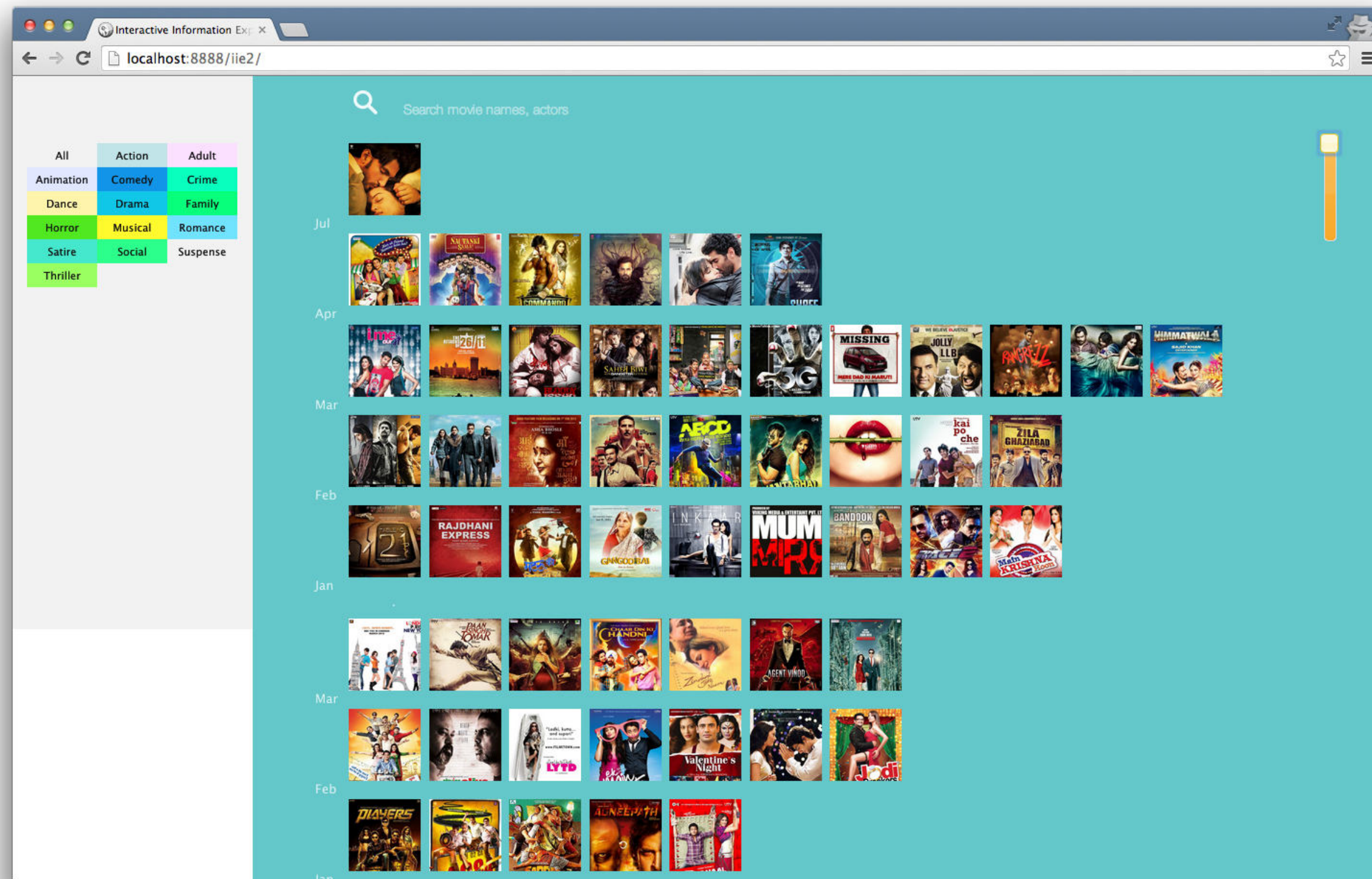


Month View zoomed

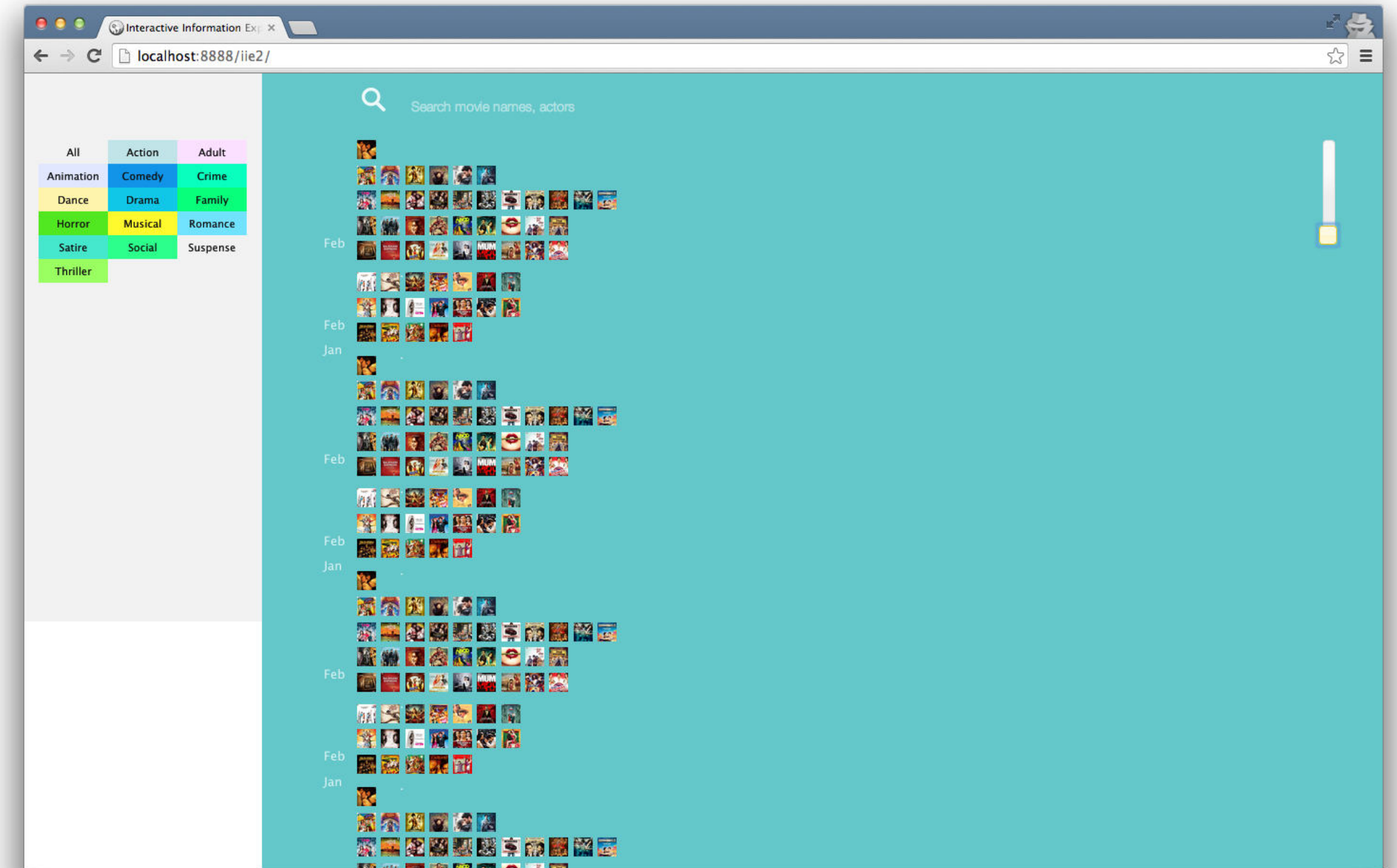
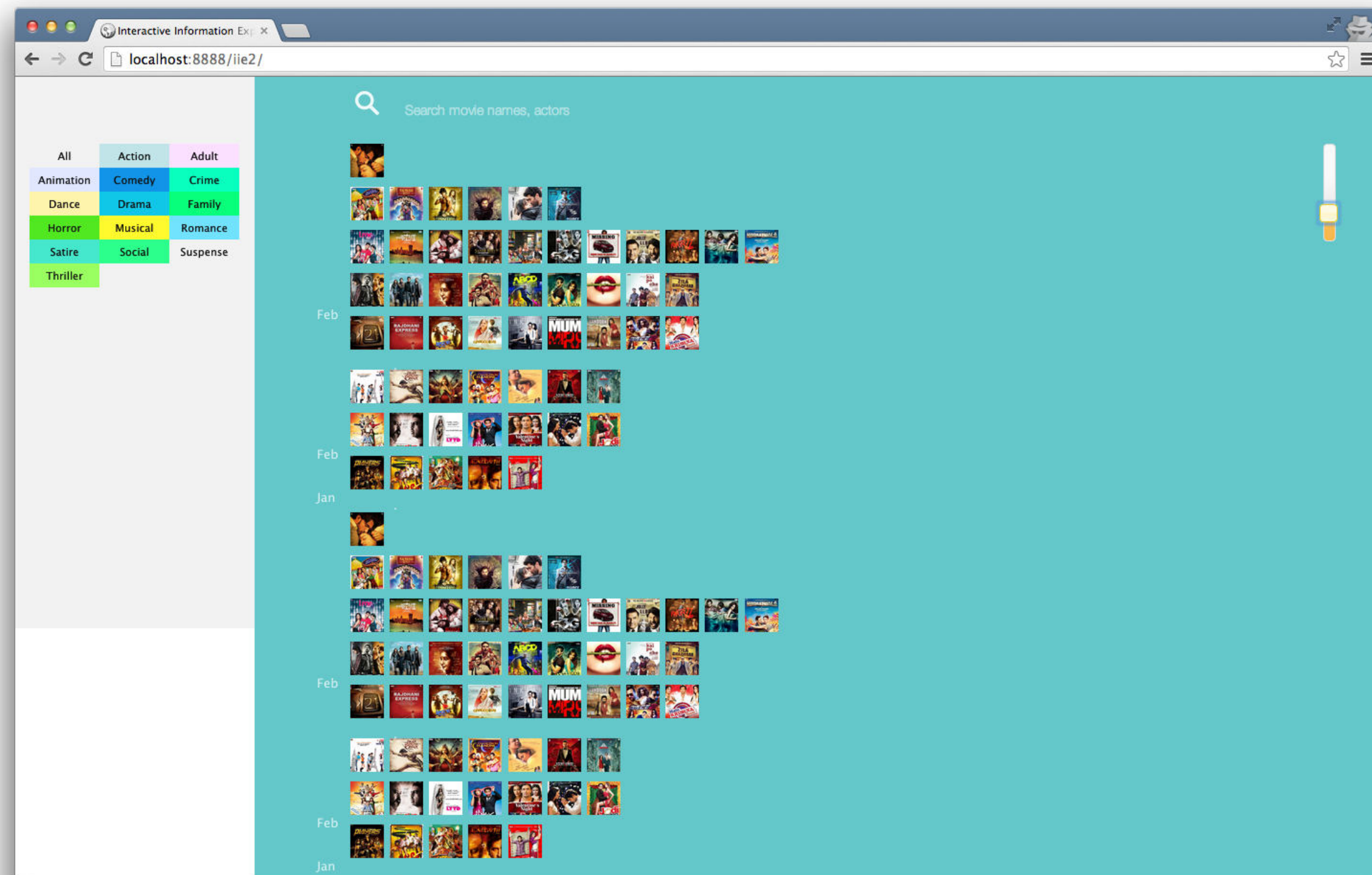
Timeline:
Fixed max
width



User Test | Thumbnail width



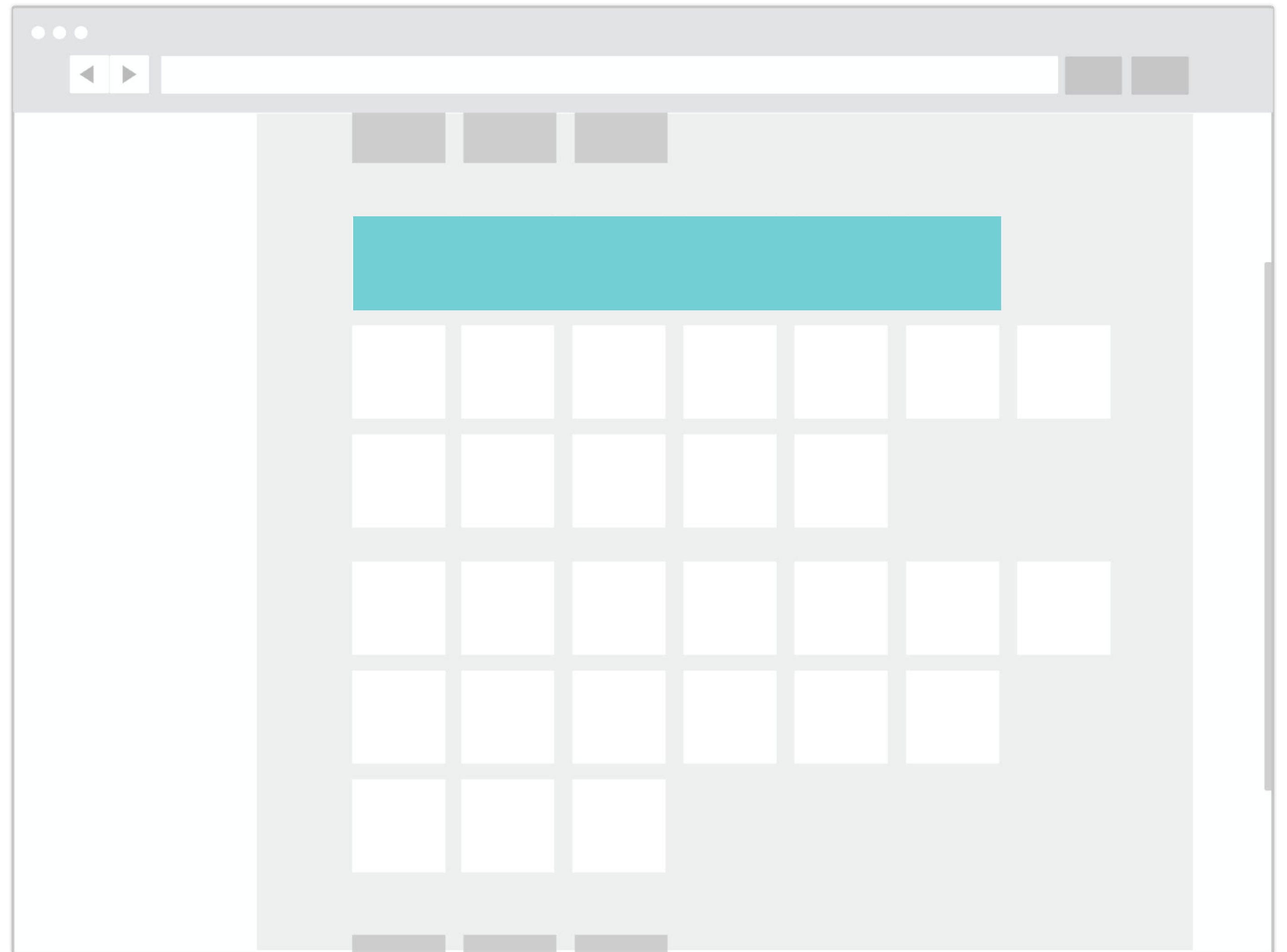
User Test | Thumbnail width



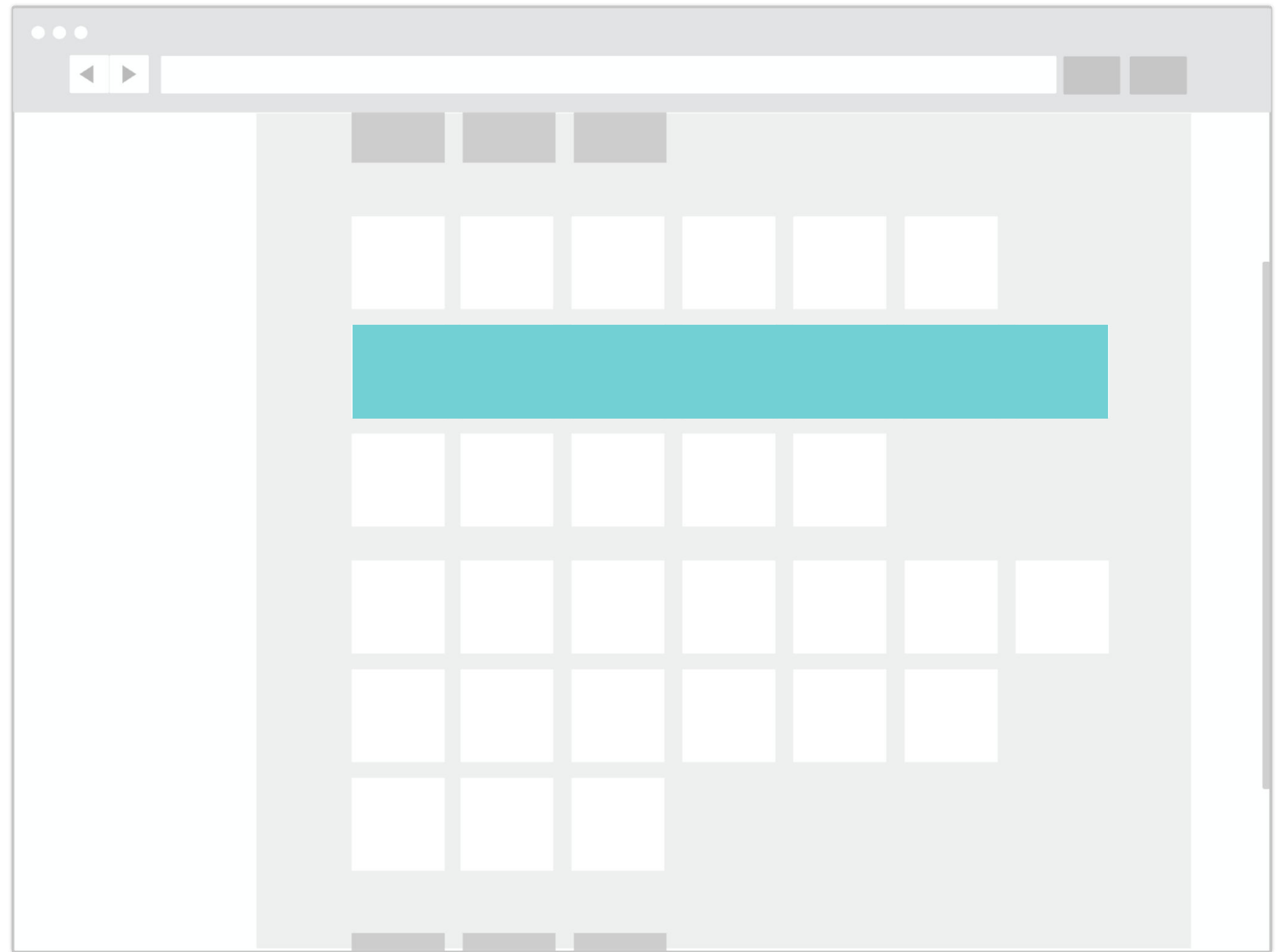
Thumbnail width

54px \pm 7

Timeline: Monthly stacks



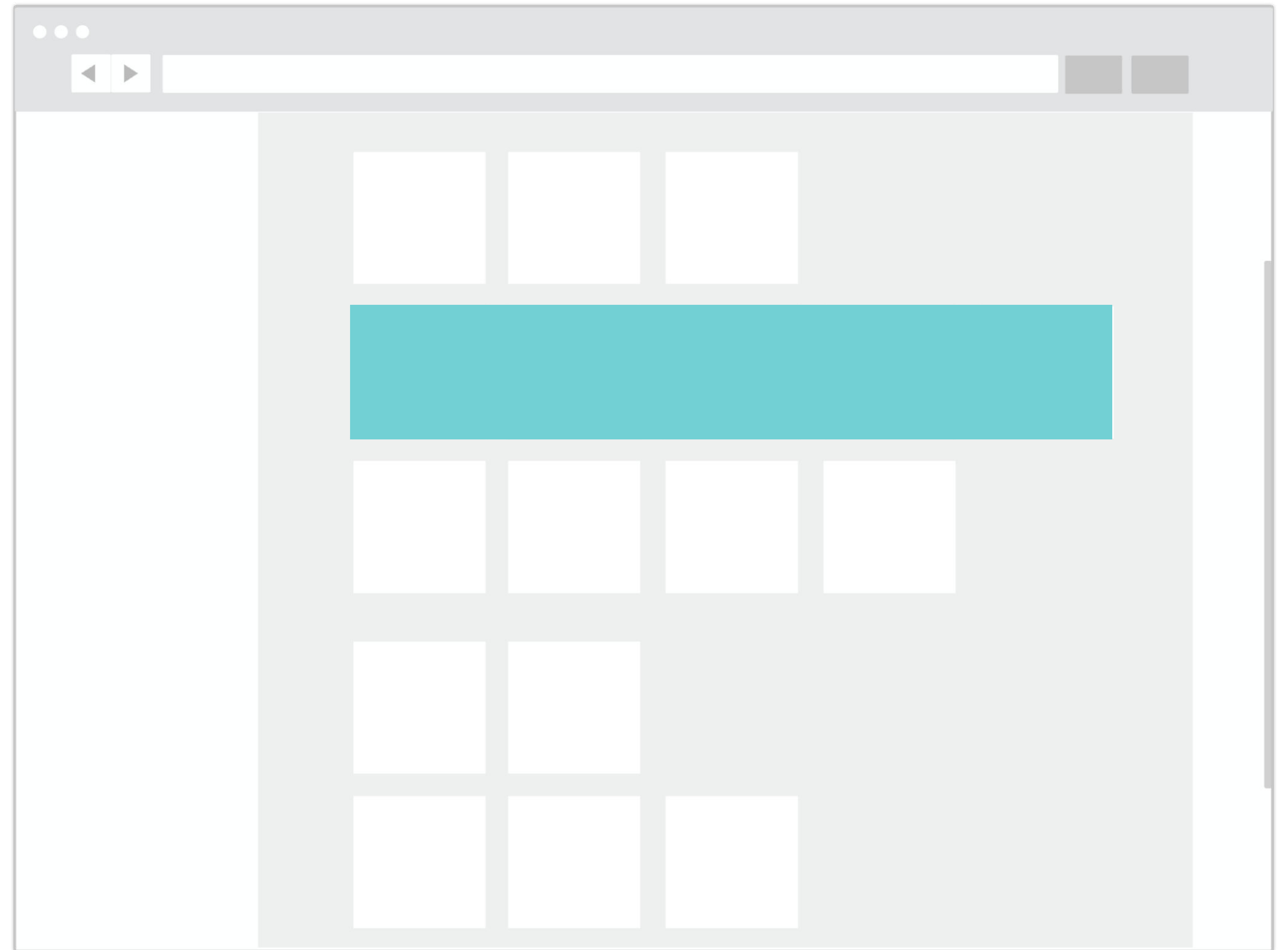
Timeline: Monthly stacks



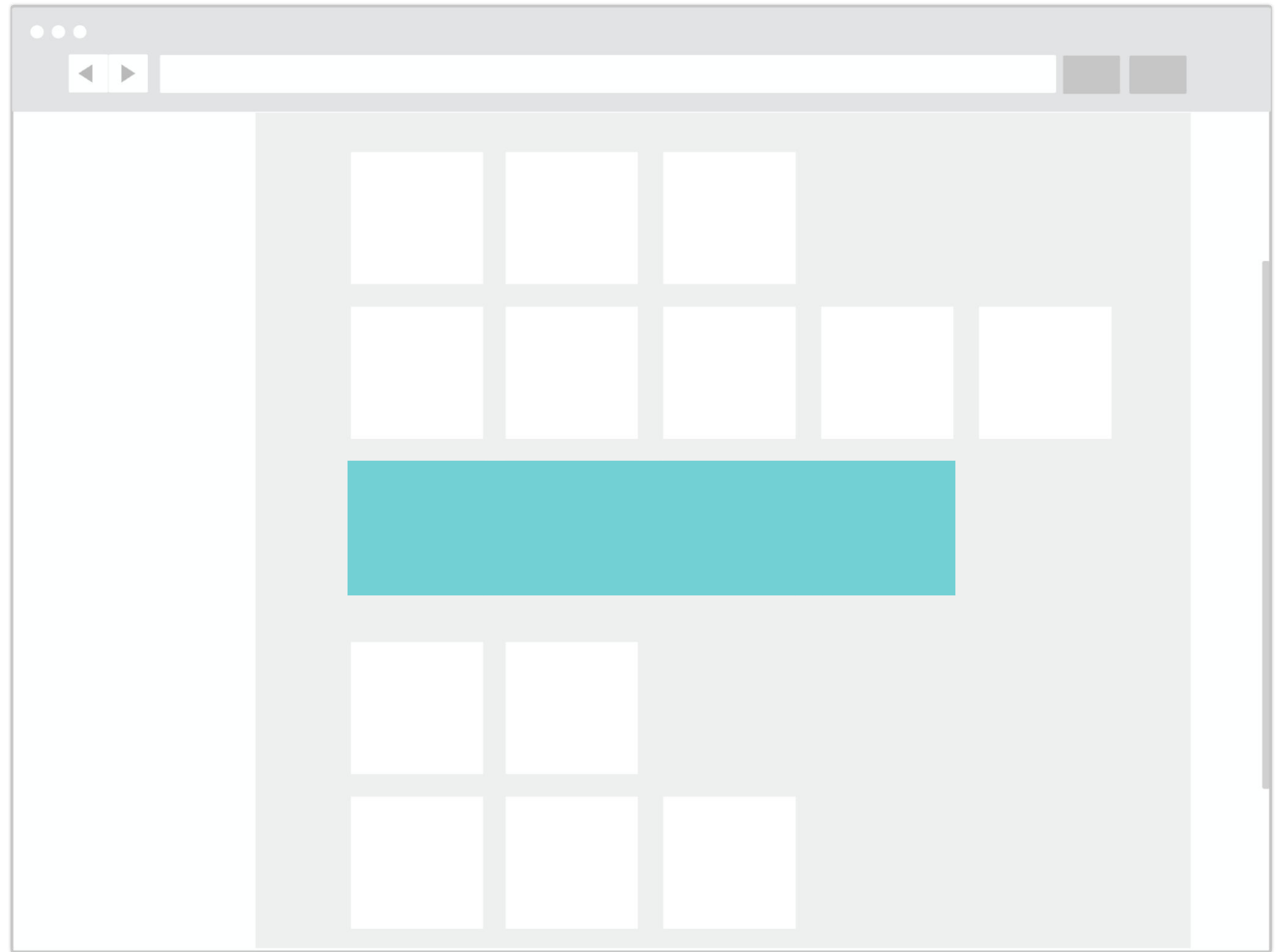
Timeline: Monthly stacks



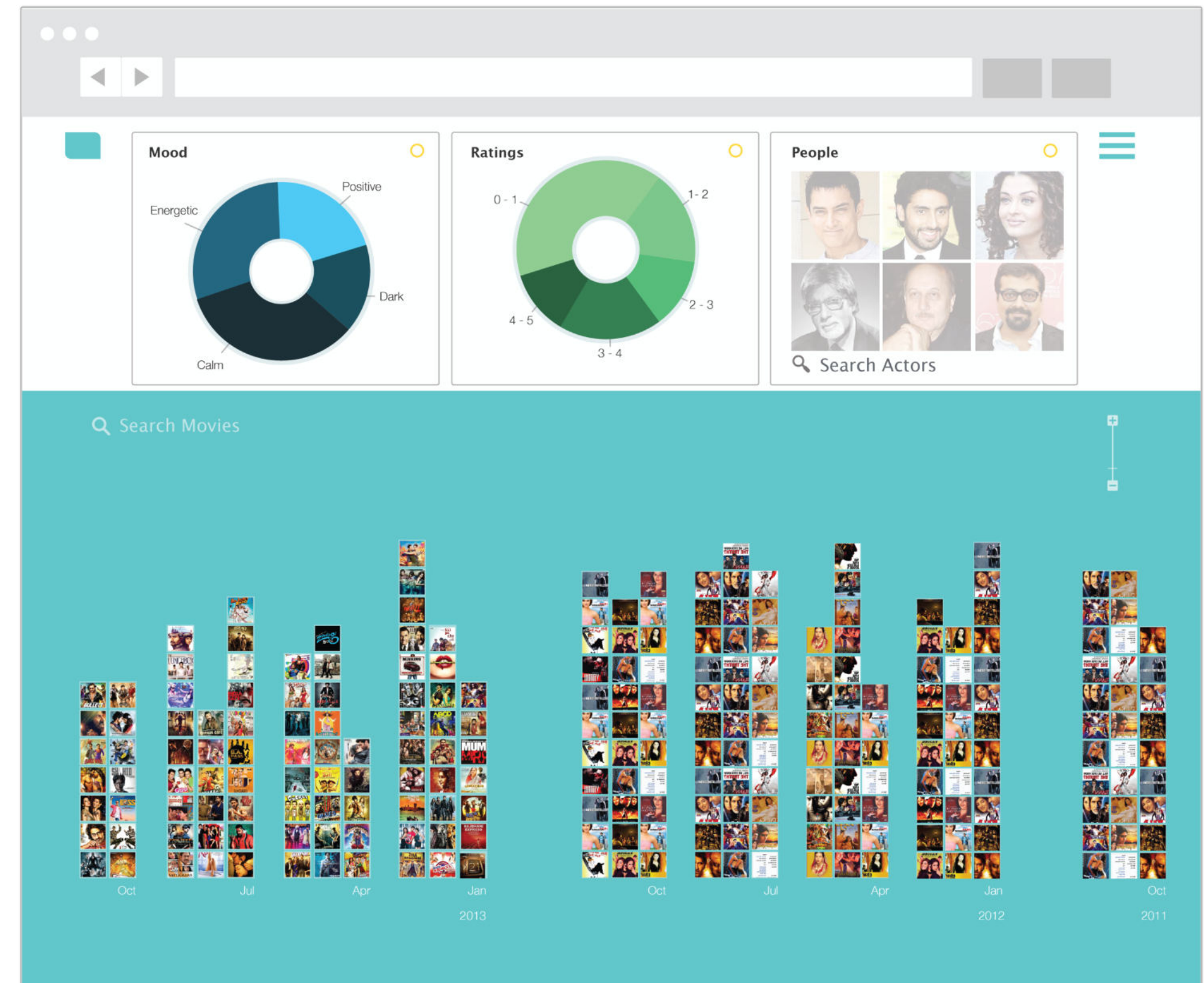
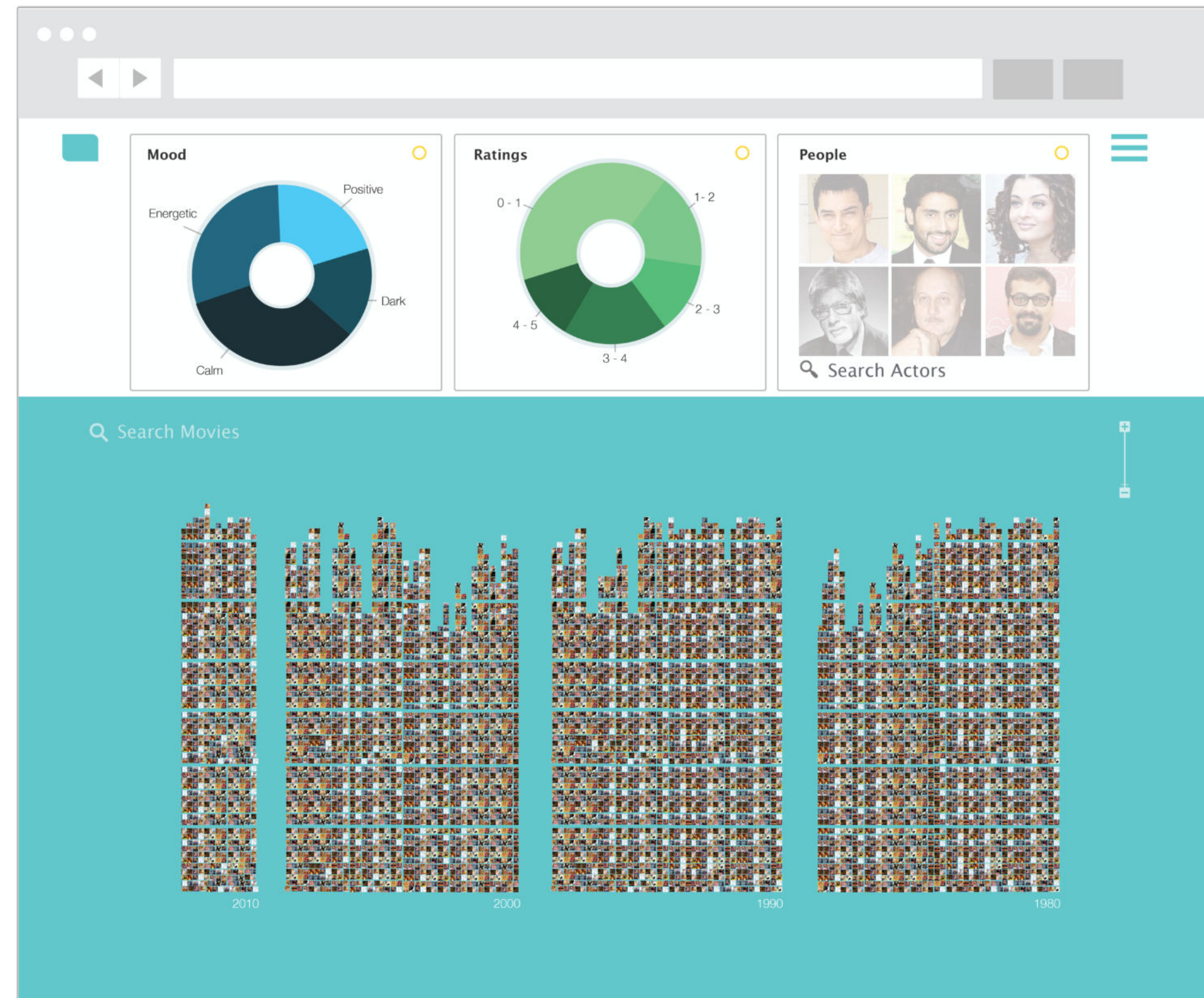
Timeline: Monthly stacks



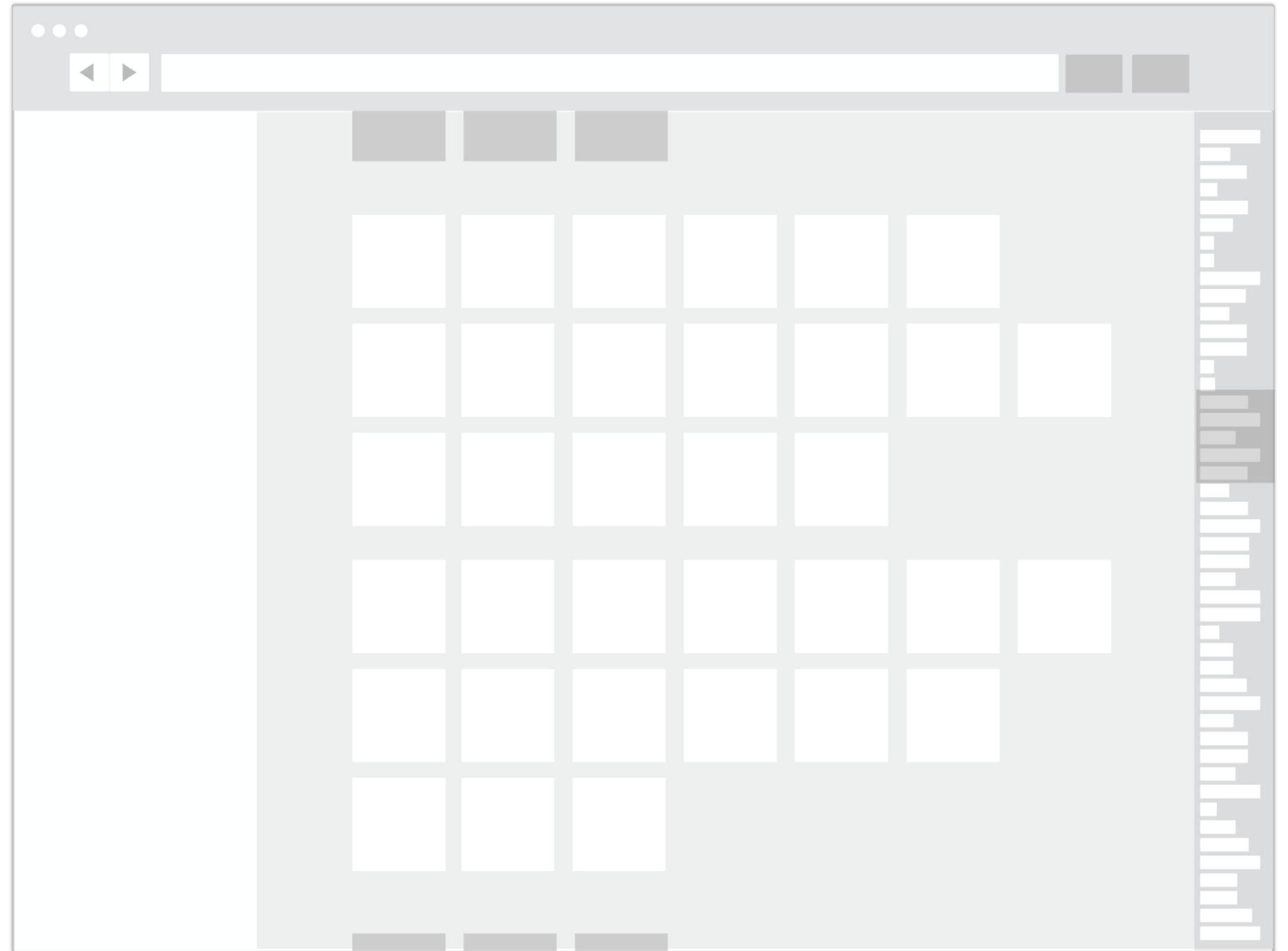
Timeline: Monthly stacks



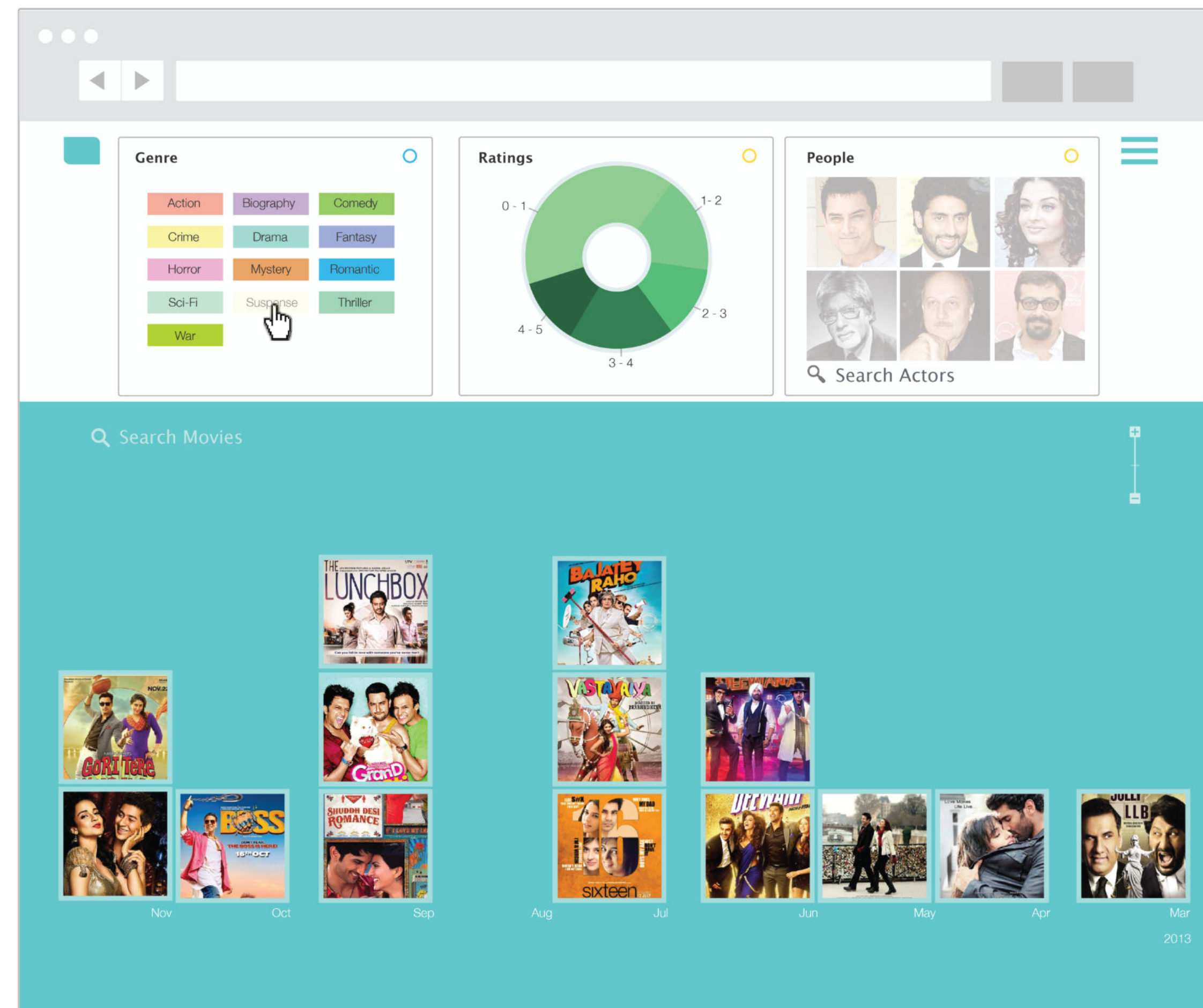
3. Zoom Overview



Timeline: Customized Scroller

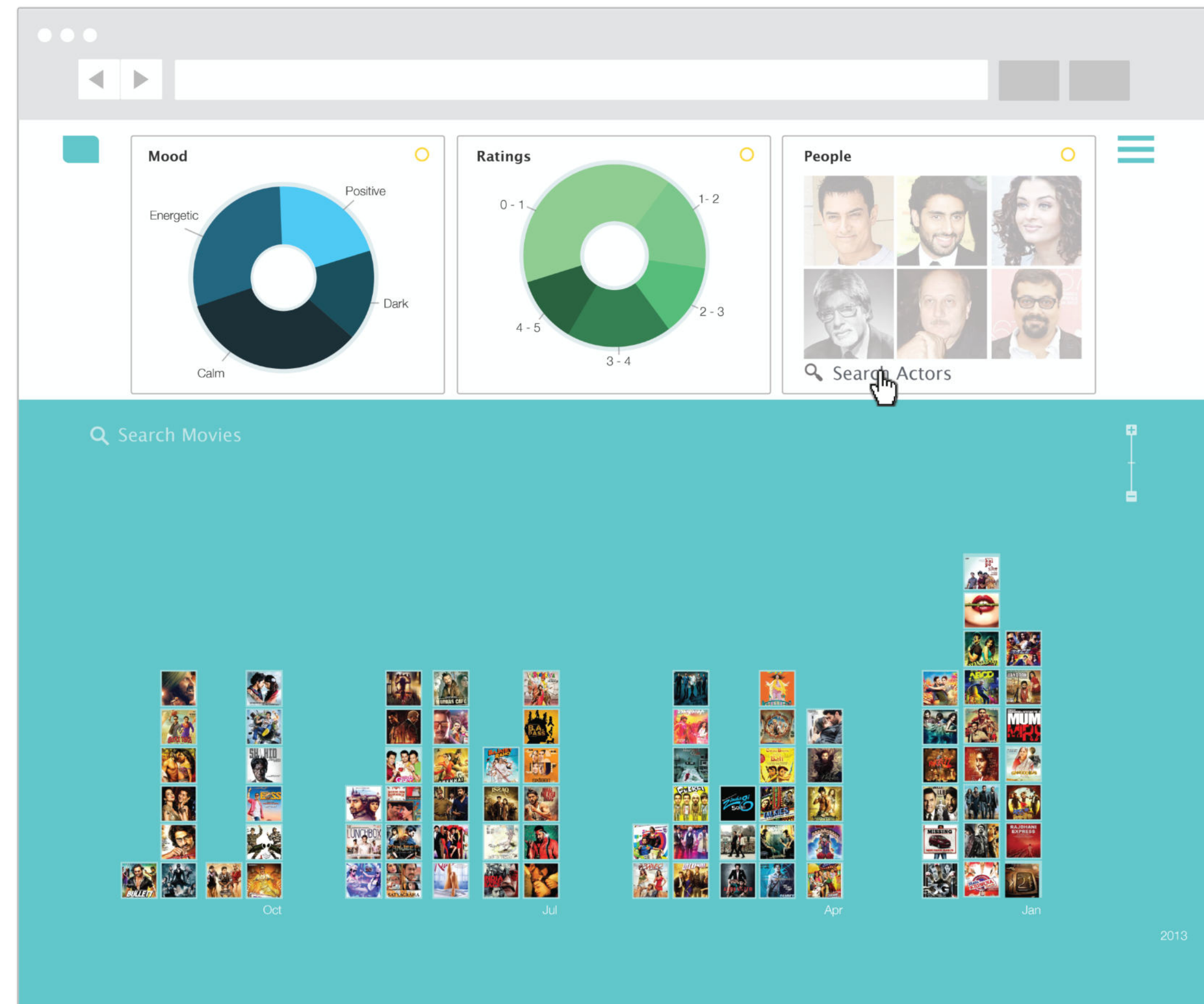


4. Filter

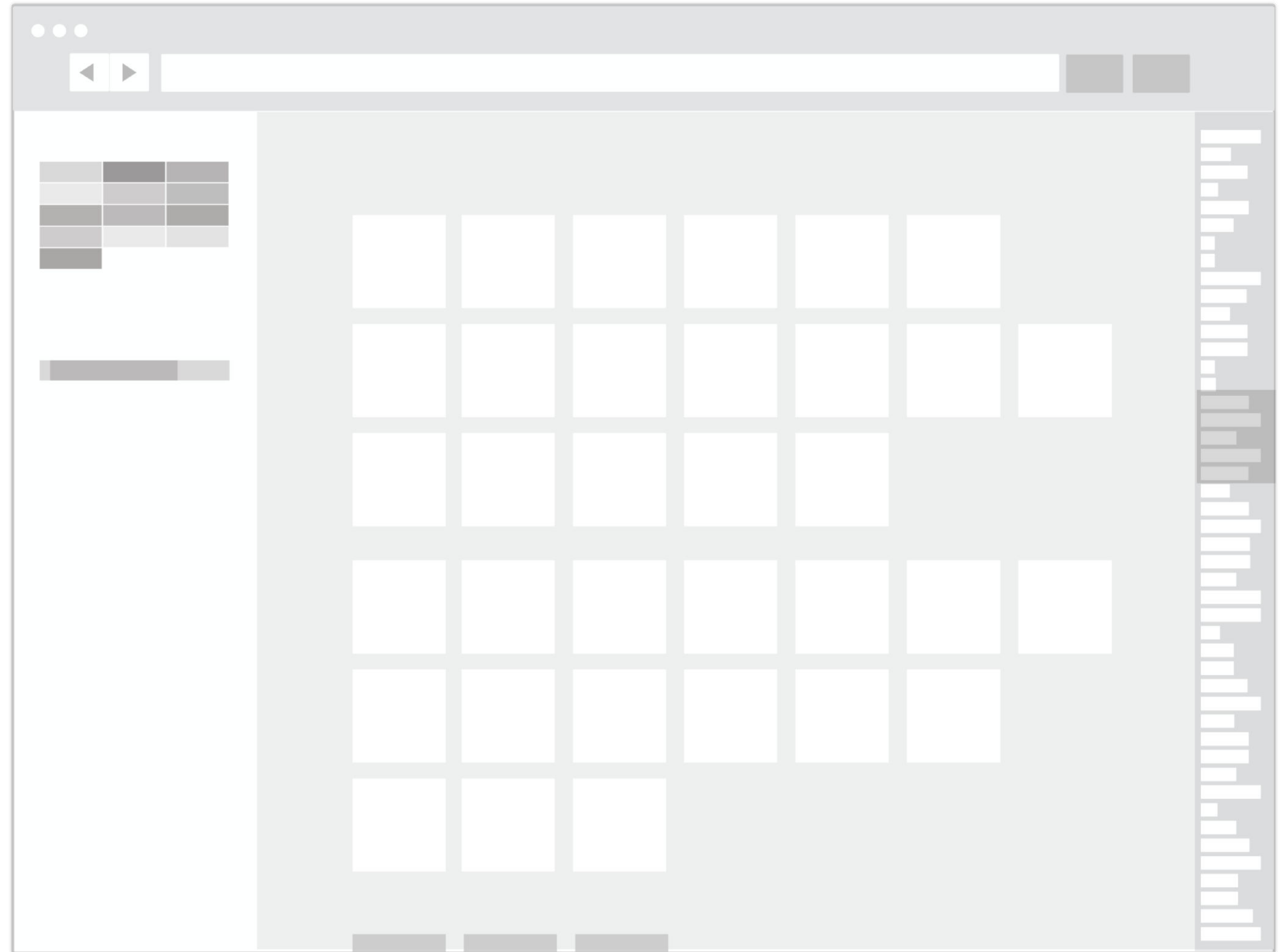


Main filters

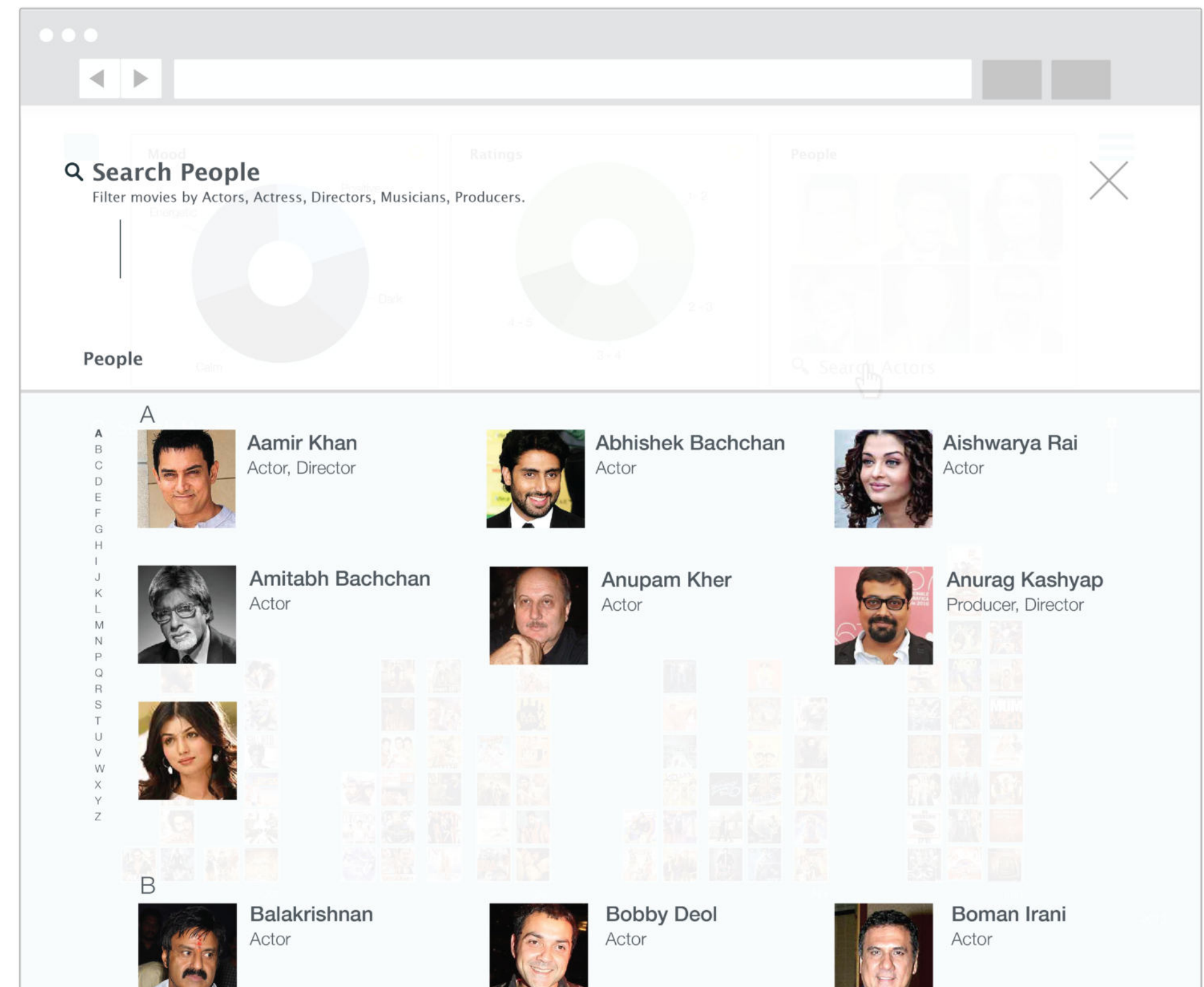
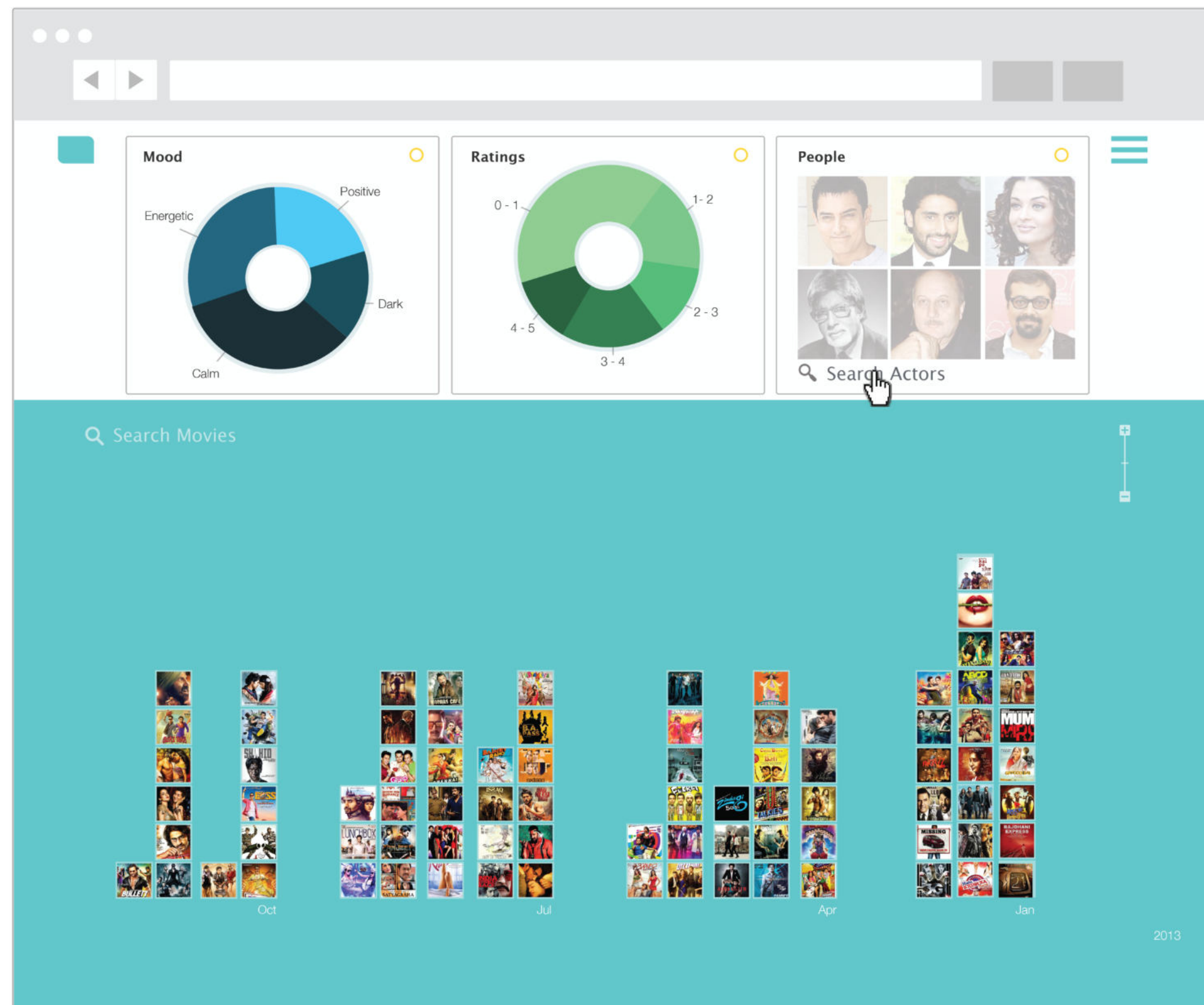
- Genre
- Rating
- People
- Mood



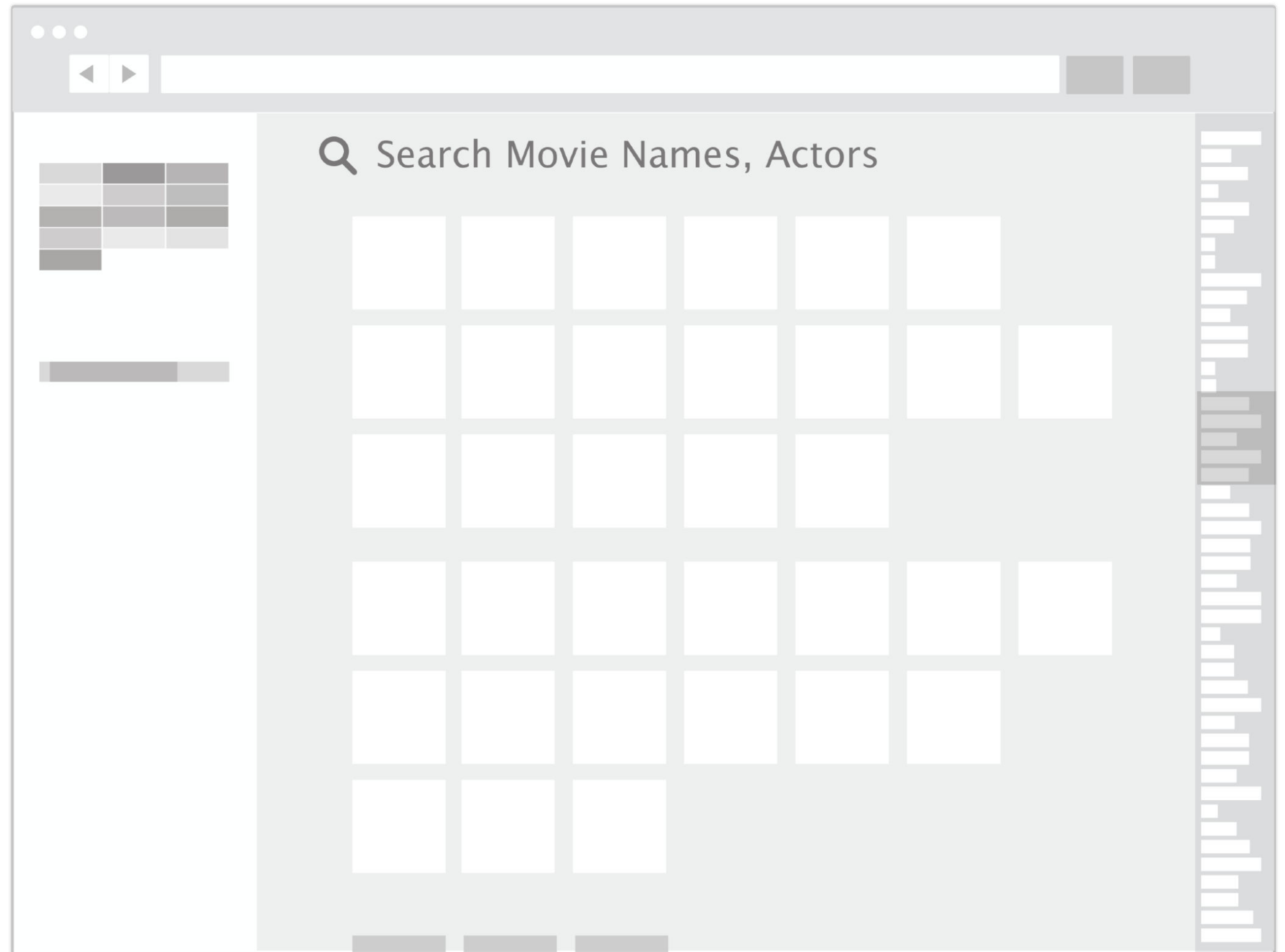
Filters:



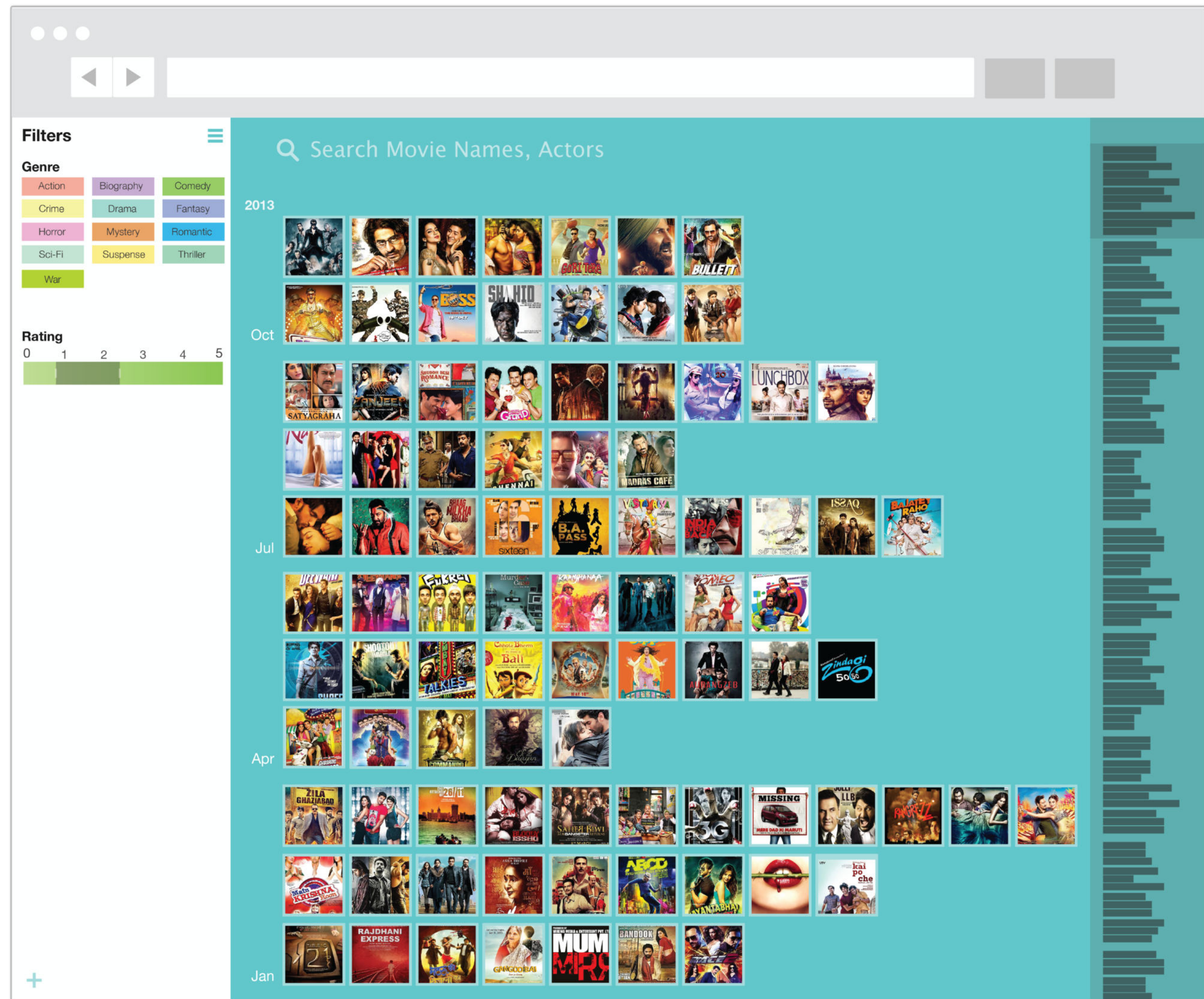
4. Search: People & Movies

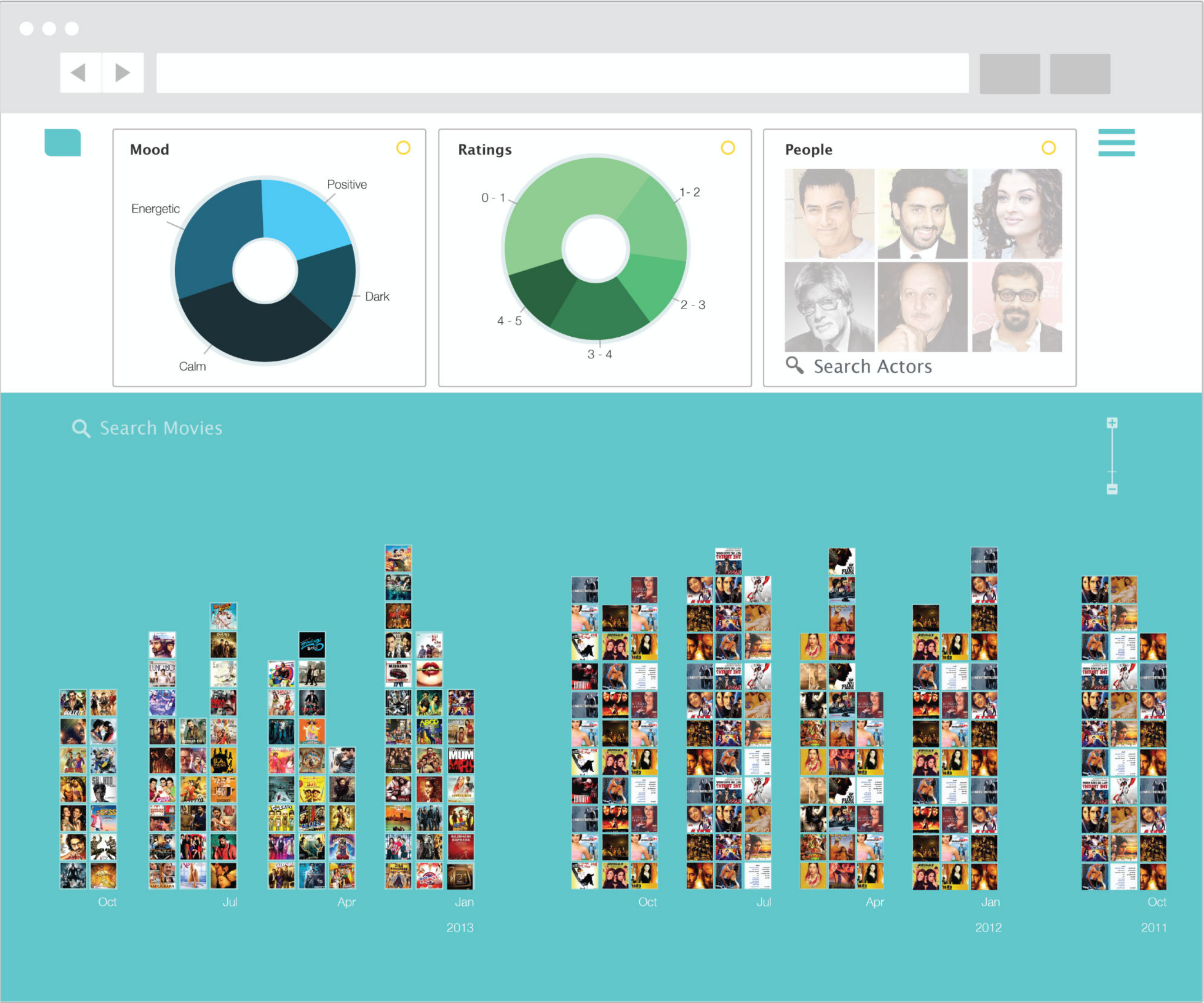


Search:



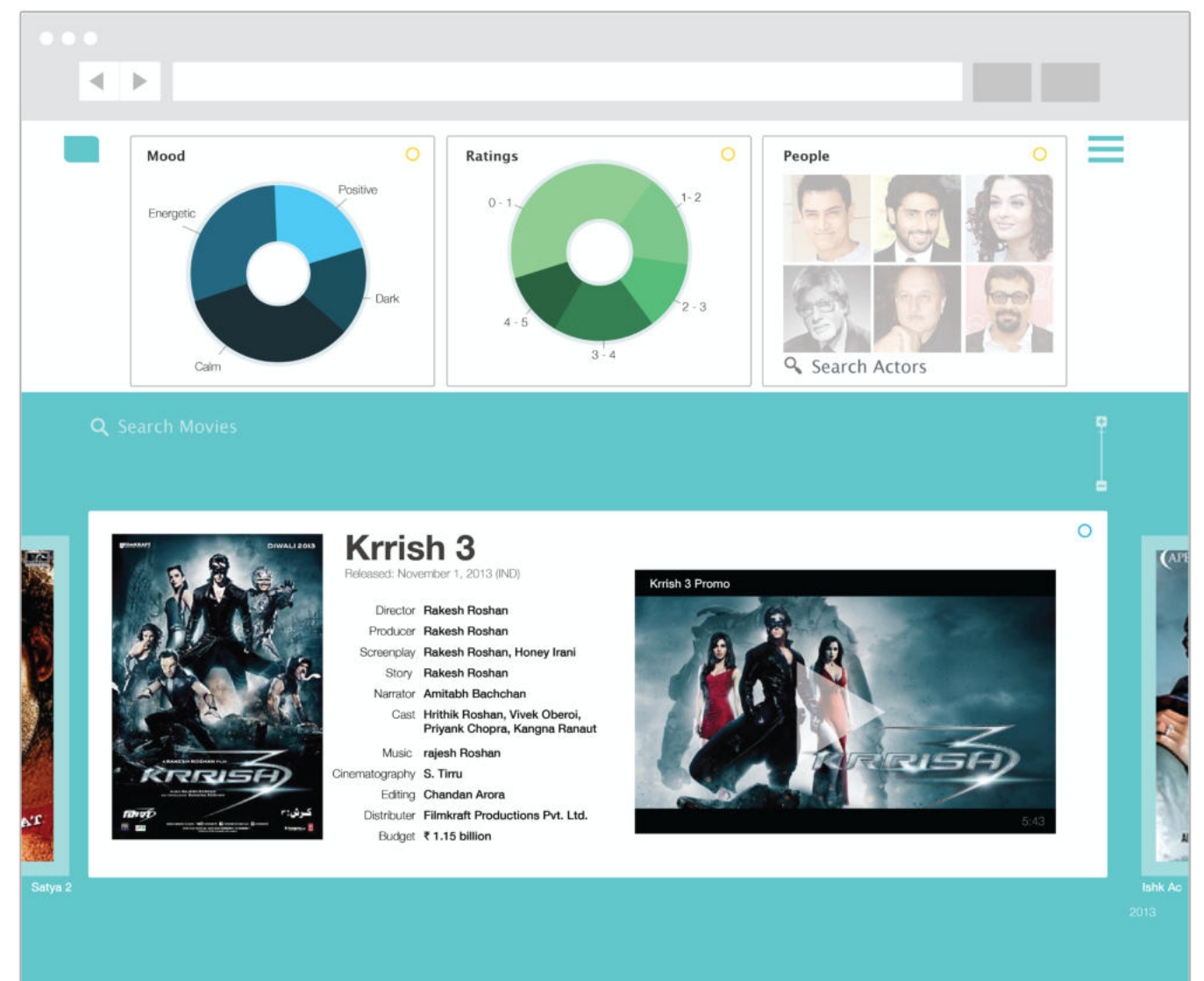
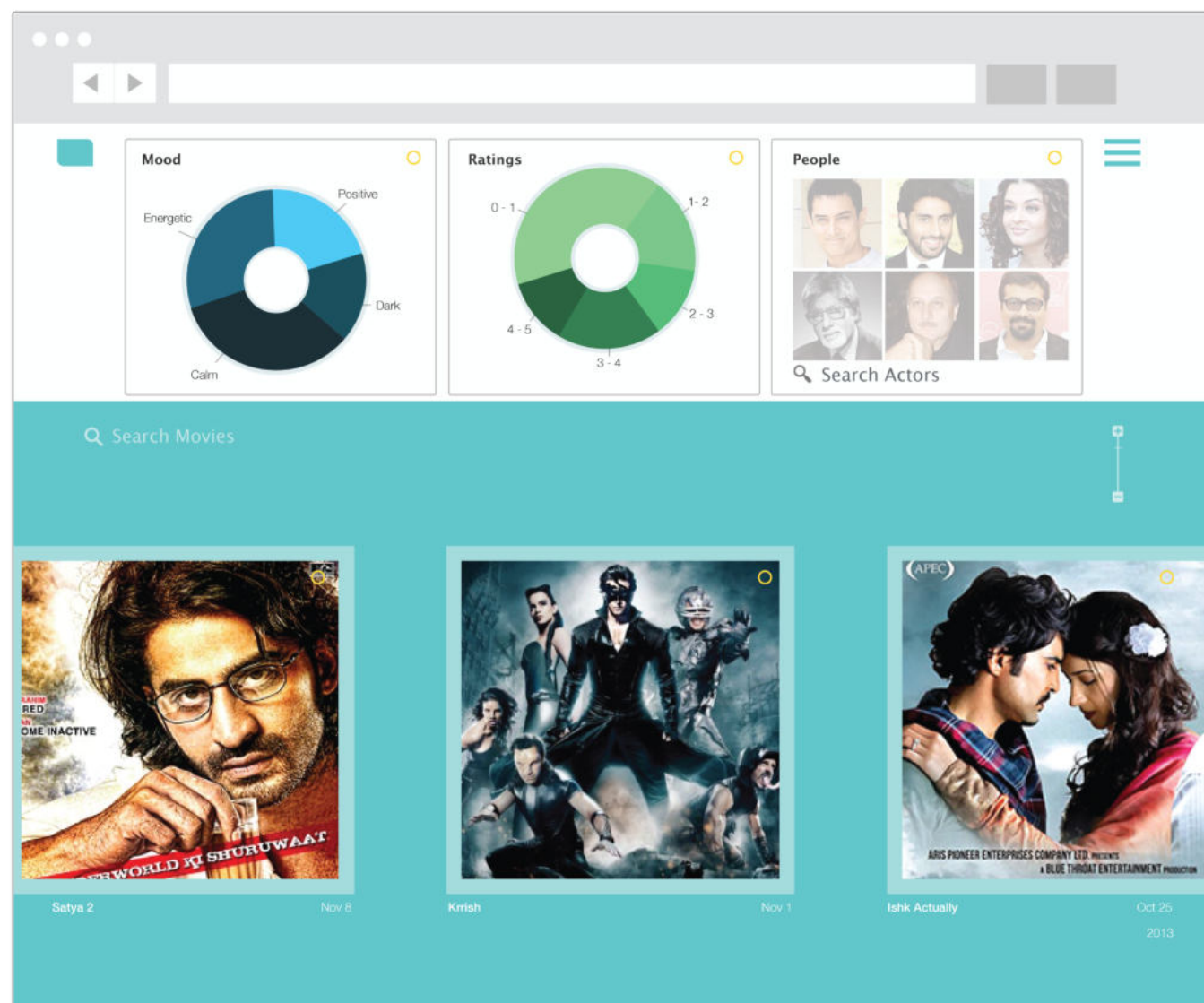
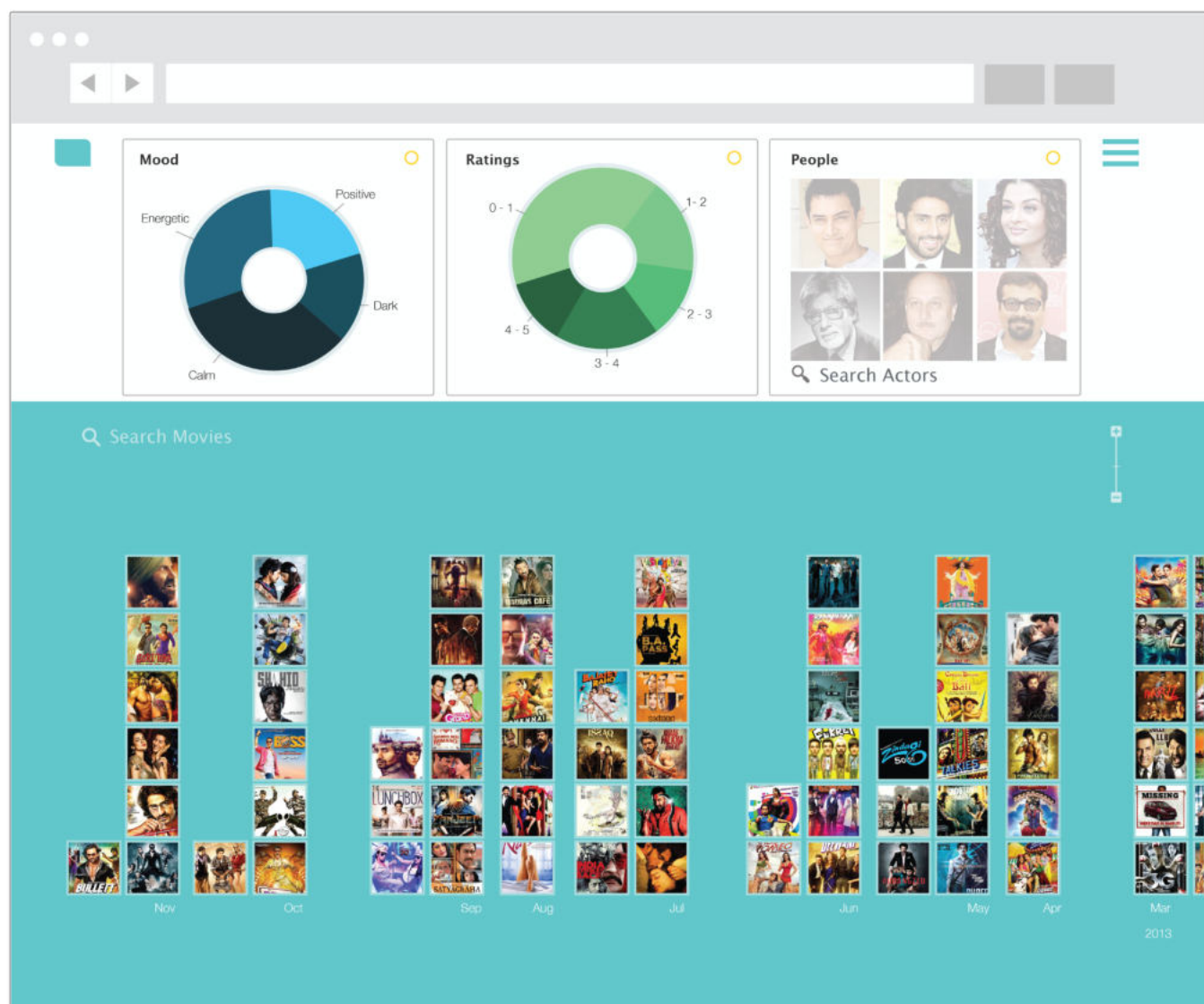
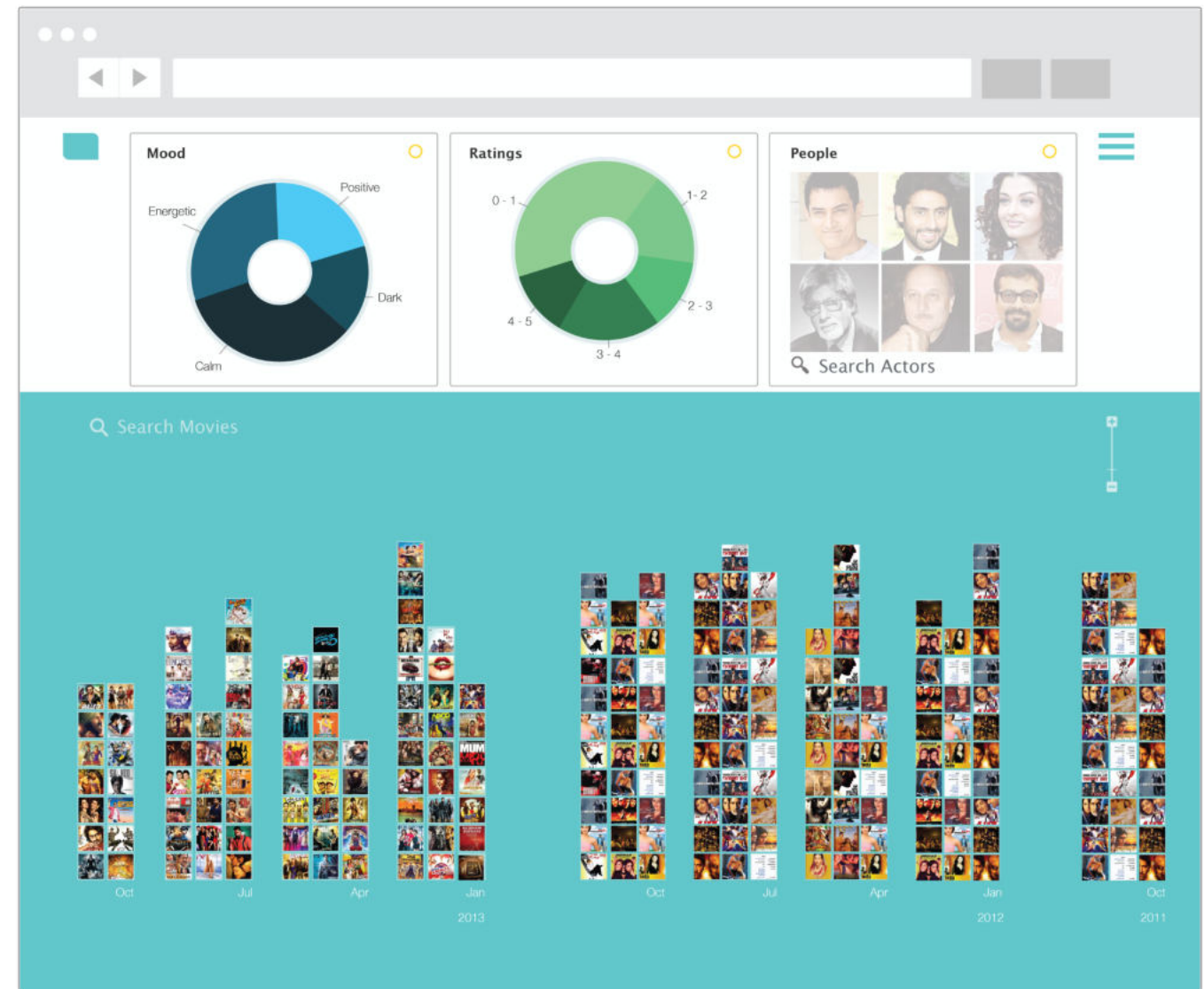
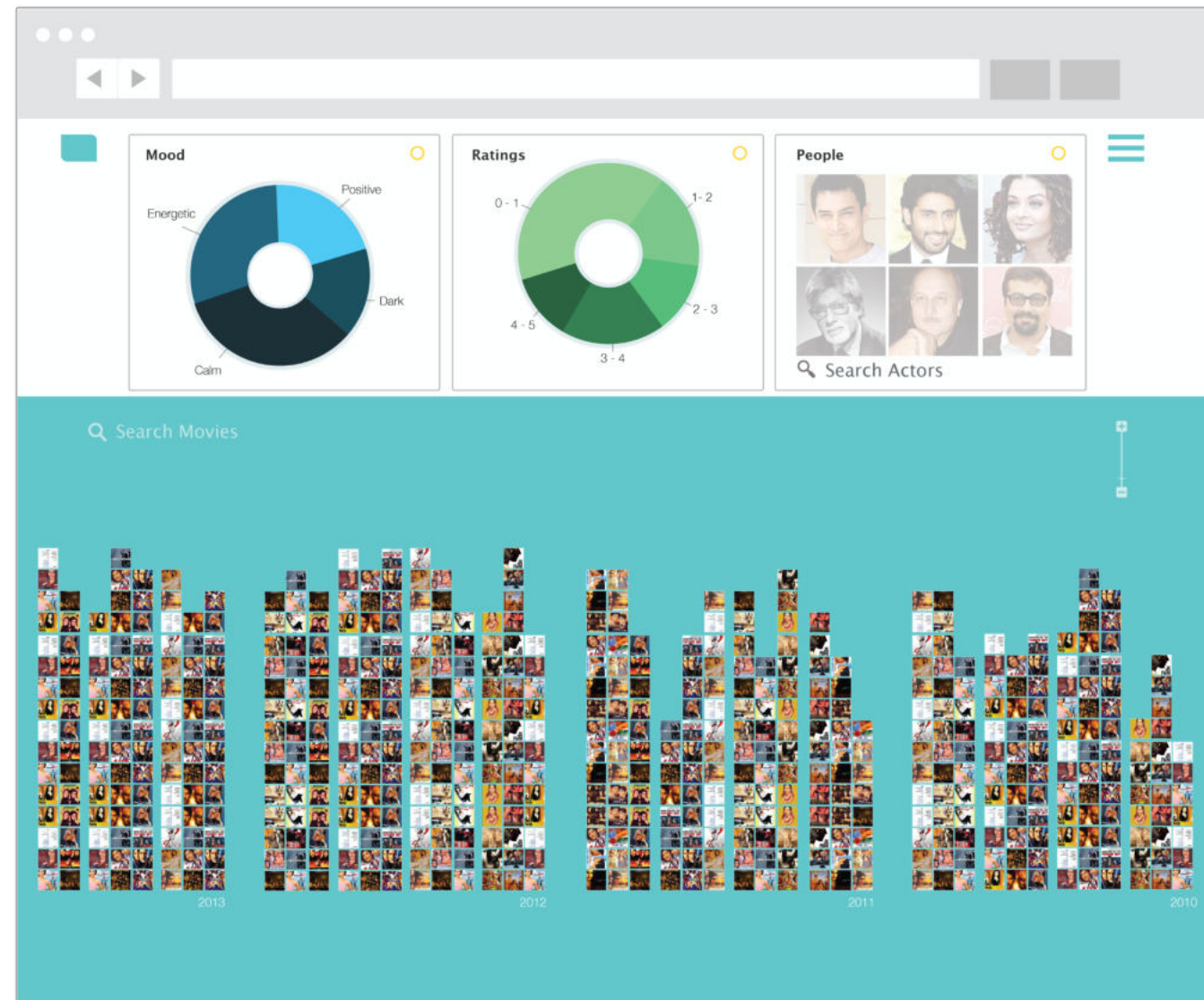
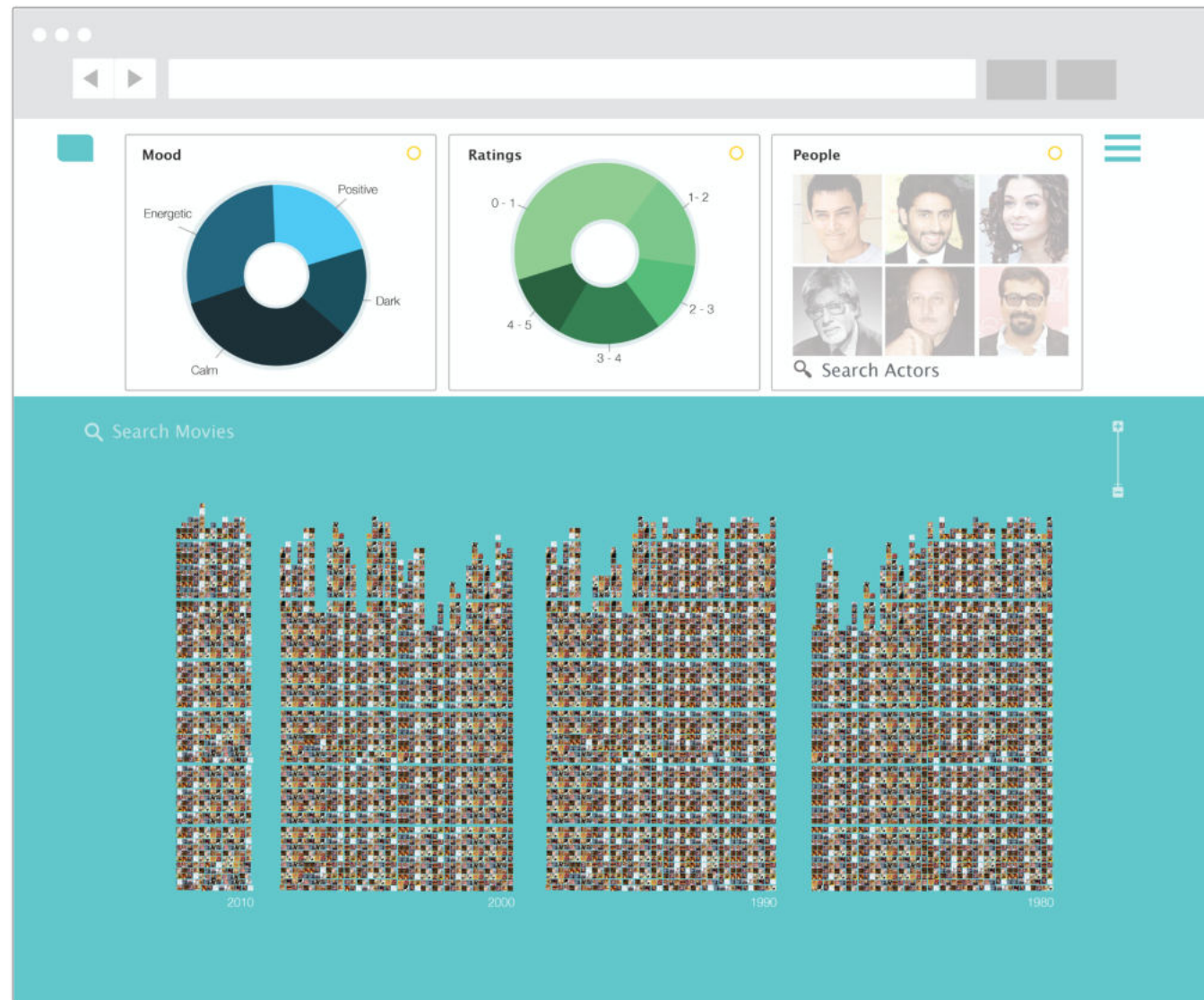
UI Mockups





Task 1

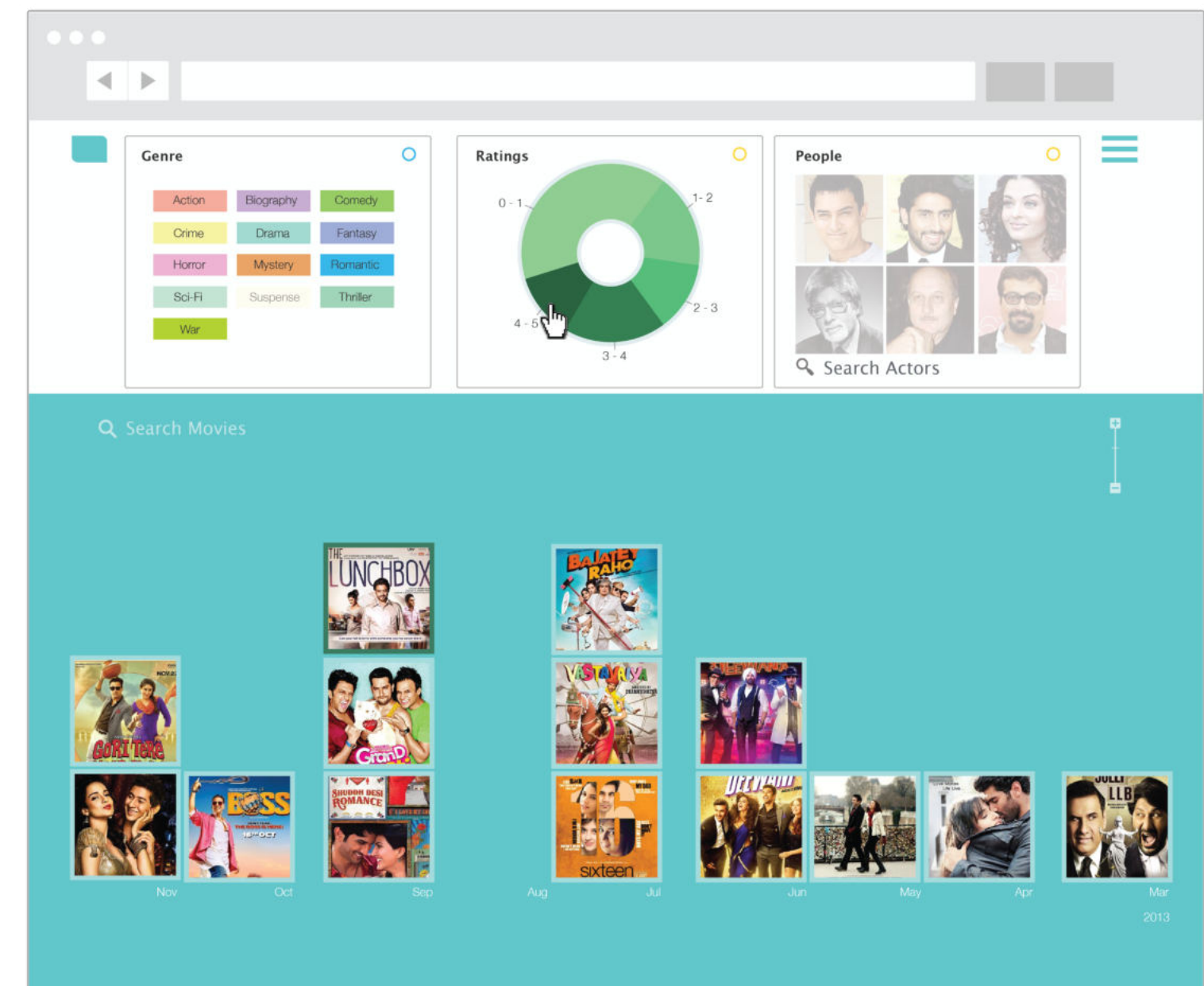
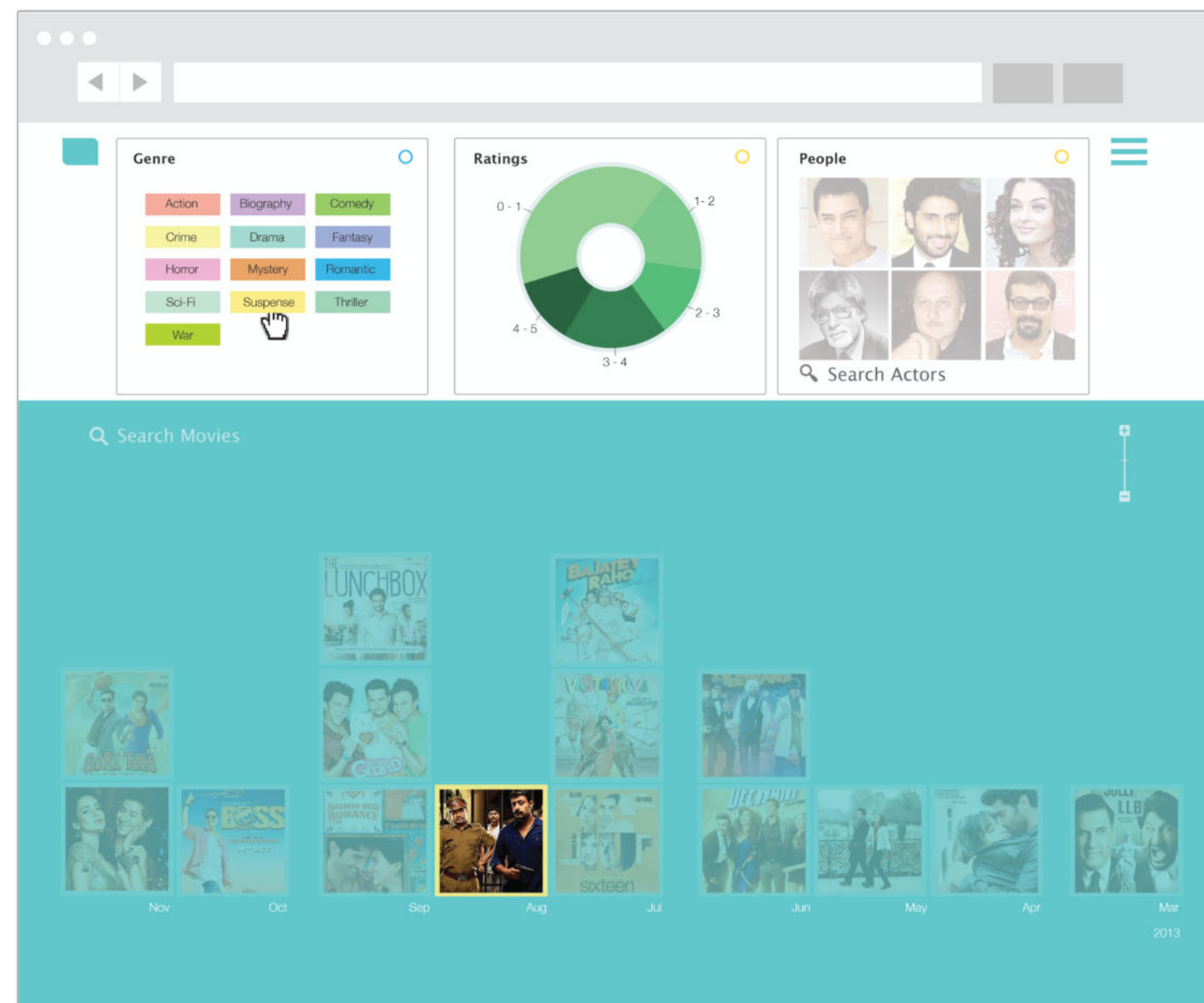
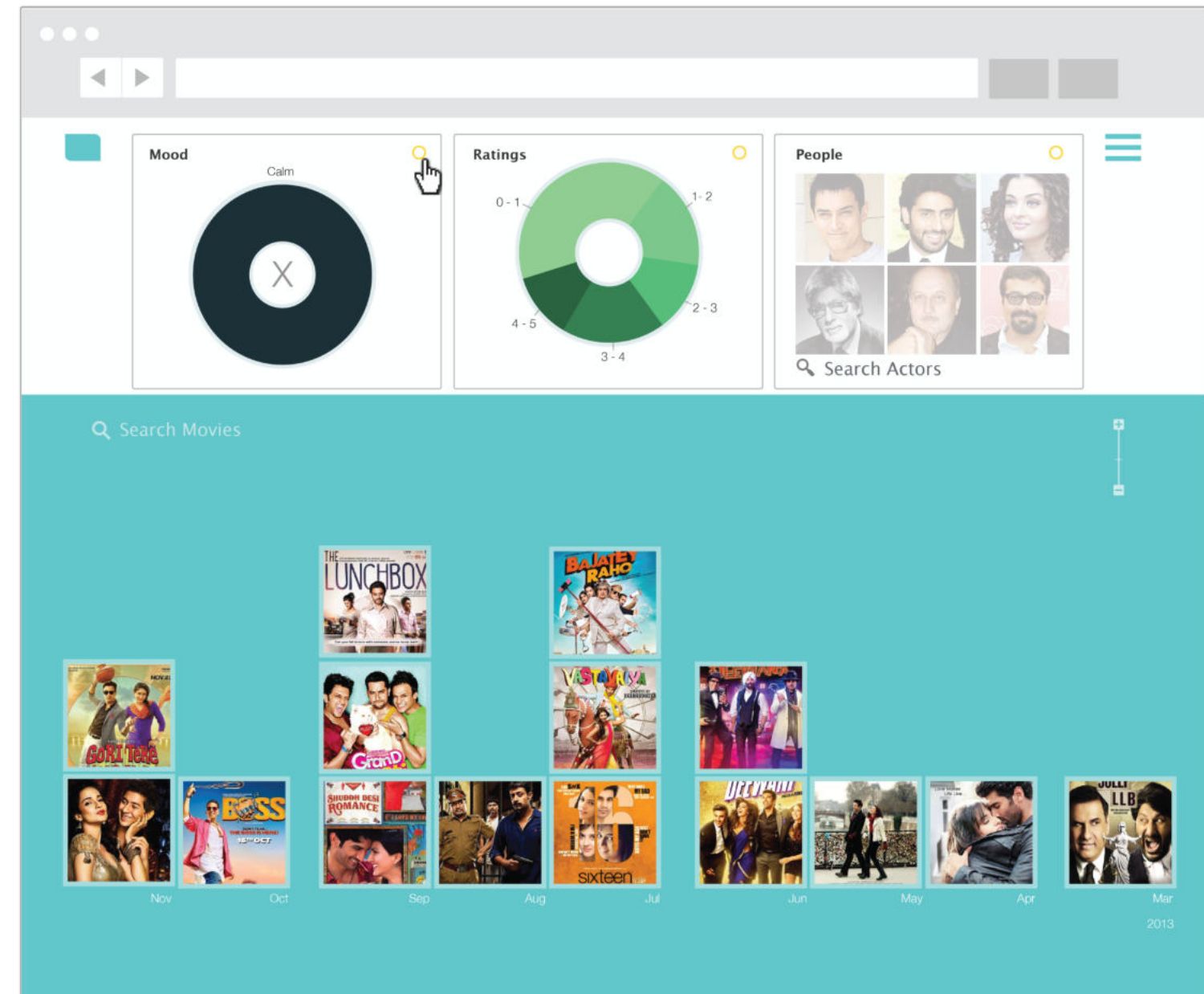
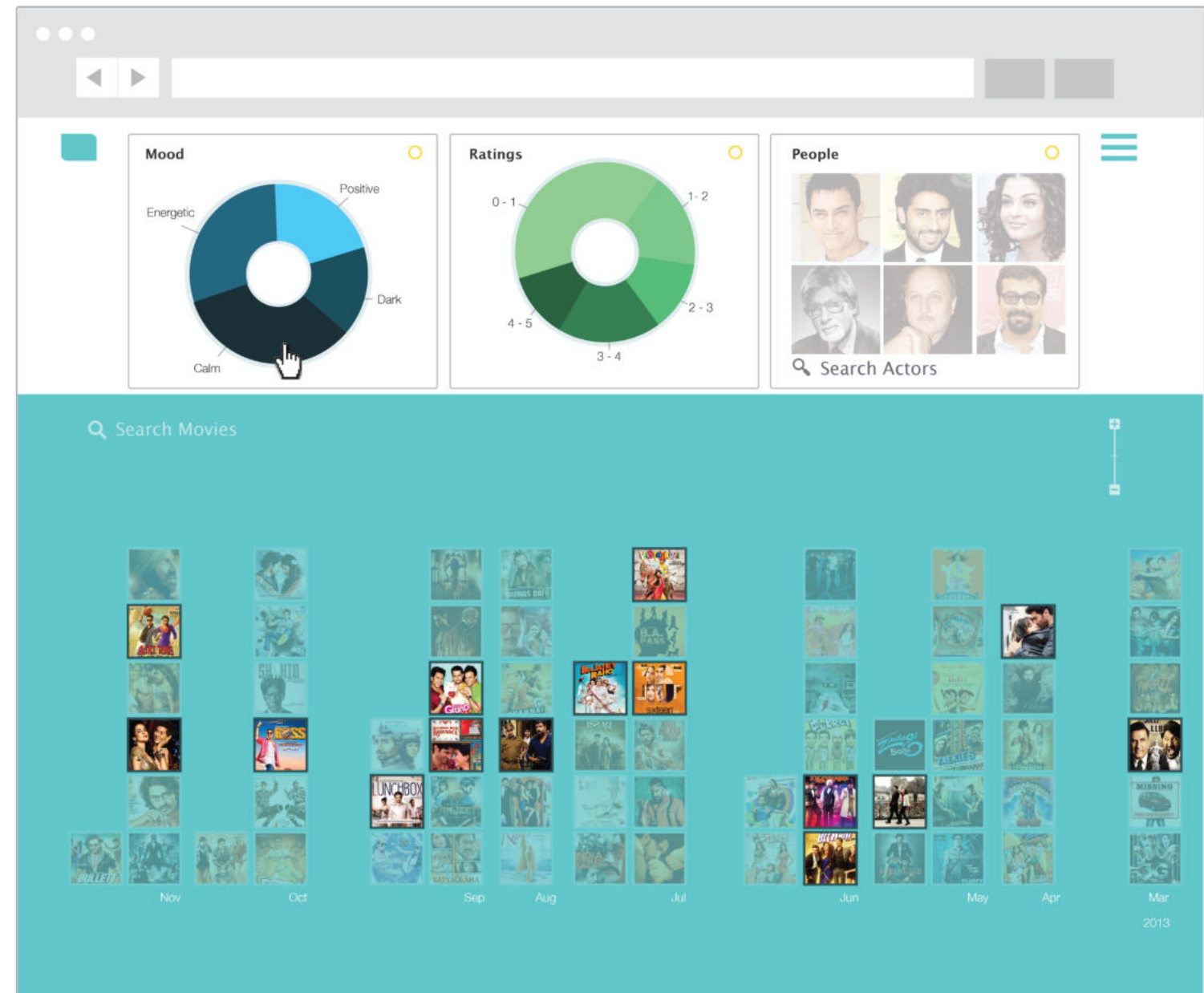
Find a movie released in Jun 1st week, 2013

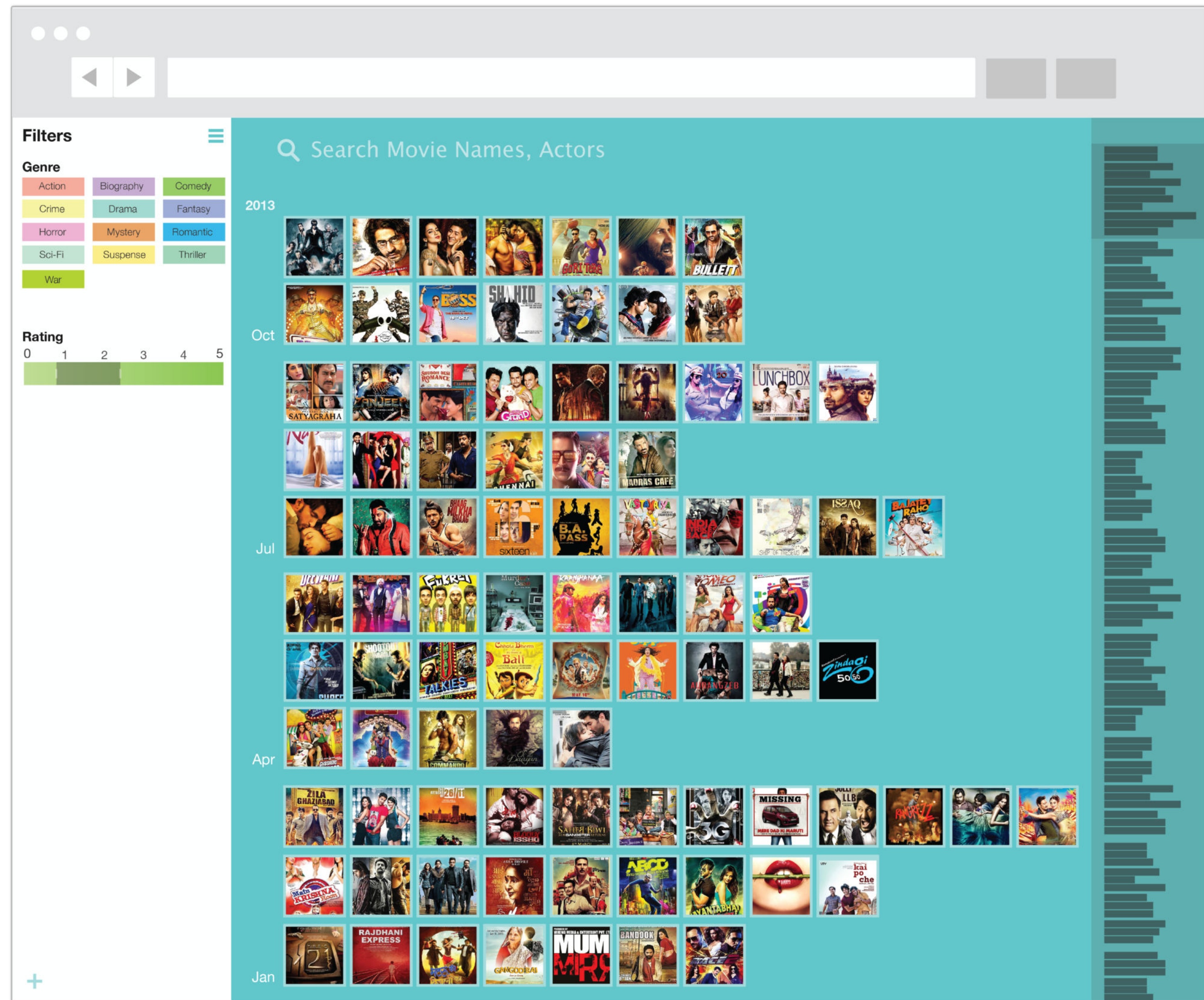




Task 2

Find the 'highest rated', 'drama' movie from '2013'.





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Filters

Genre

Action

Crime

Horror

Sci-Fi

War

Biography

Drama

Mystery

Suspense

Comedy

Fantasy

Romantic

Thriller

Rating

0

1

2

3

4

5

Q Search Movie Names, Actors

2013

Nov

RED

WHILE SHE WAS OUT

ONE INACTIVE

NEW WORLD K SHUBUWAAT

Oct

SATYAGRAHA

PRAKASH JHA

ZANJEER

APPOORVA LAKHA

THE LUNCHBOX

KARAN JOHAR

SEEING IS MISBELIEVING

Sep

SATYAGRAHA

PRAKASH JHA

ZANJEER

APPOORVA LAKHA

THE LUNCHBOX

KARAN JOHAR

SEEING IS MISBELIEVING

Aug

SATYAGRAHA

PRAKASH JHA

ZANJEER

APPOORVA LAKHA

THE LUNCHBOX

KARAN JOHAR

SEEING IS MISBELIEVING

+

Jan 10, 2014

◀

▶

Filters

Genre

Action

Crime

Horror

Sci-Fi

War

Biography

Drama

Mystery

Suspense

Comedy

Fantasy

Romantic

Thriller

Rating

0

1

2

3

4

5

Q Search Movie Names, Actors

2013

Nov

RED

OMG INACTIVE

NEW WORLD K SHOHUWAAT

Oct

SATYAGRAHA

PRAKASH JHA

ZANJEER

RELIANCE ENTERTAINMENT

APPOORVA LAGHU

THE LUNCHBOX

UTV PICTURES

KARAN JOHAR

SEEING IS MISBELIEVING

Sep

SATYAGRAHA

PRAKASH JHA

ZANJEER

RELIANCE ENTERTAINMENT

APPOORVA LAGHU

THE LUNCHBOX

UTV PICTURES

KARAN JOHAR

SEEING IS MISBELIEVING

Aug

SATYAGRAHA

PRAKASH JHA

ZANJEER

RELIANCE ENTERTAINMENT

APPOORVA LAGHU

THE LUNCHBOX

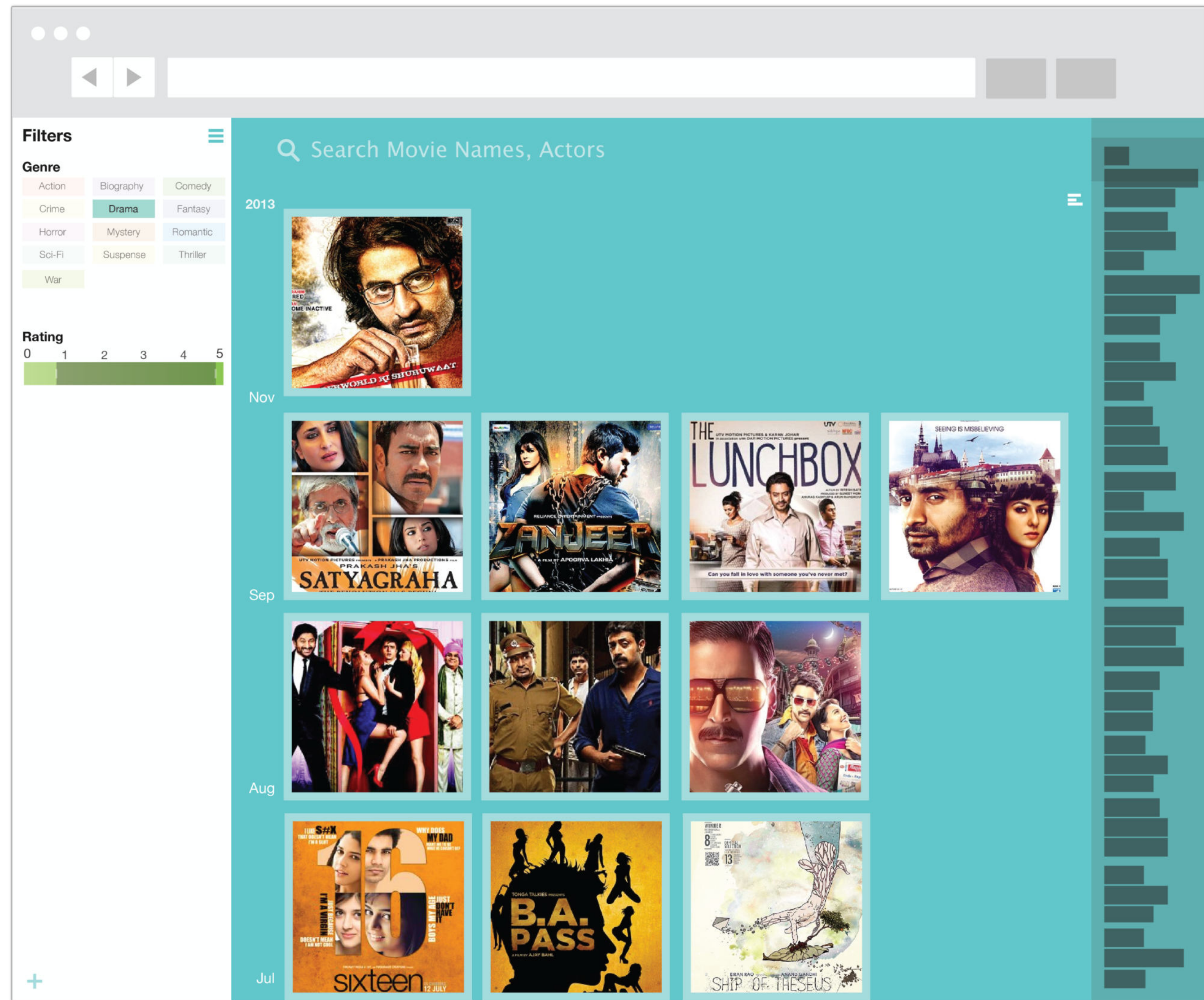
UTV PICTURES

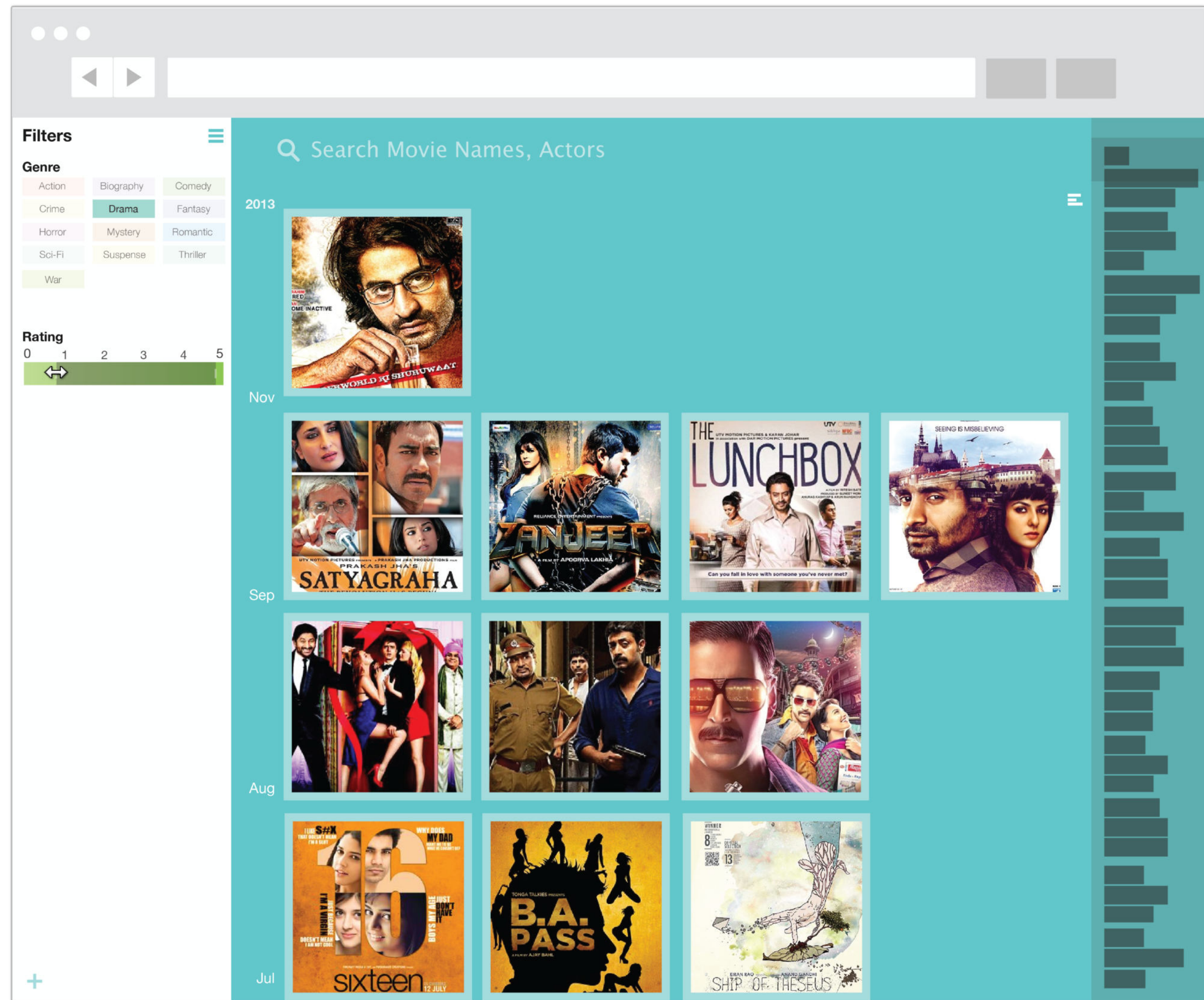
KARAN JOHAR

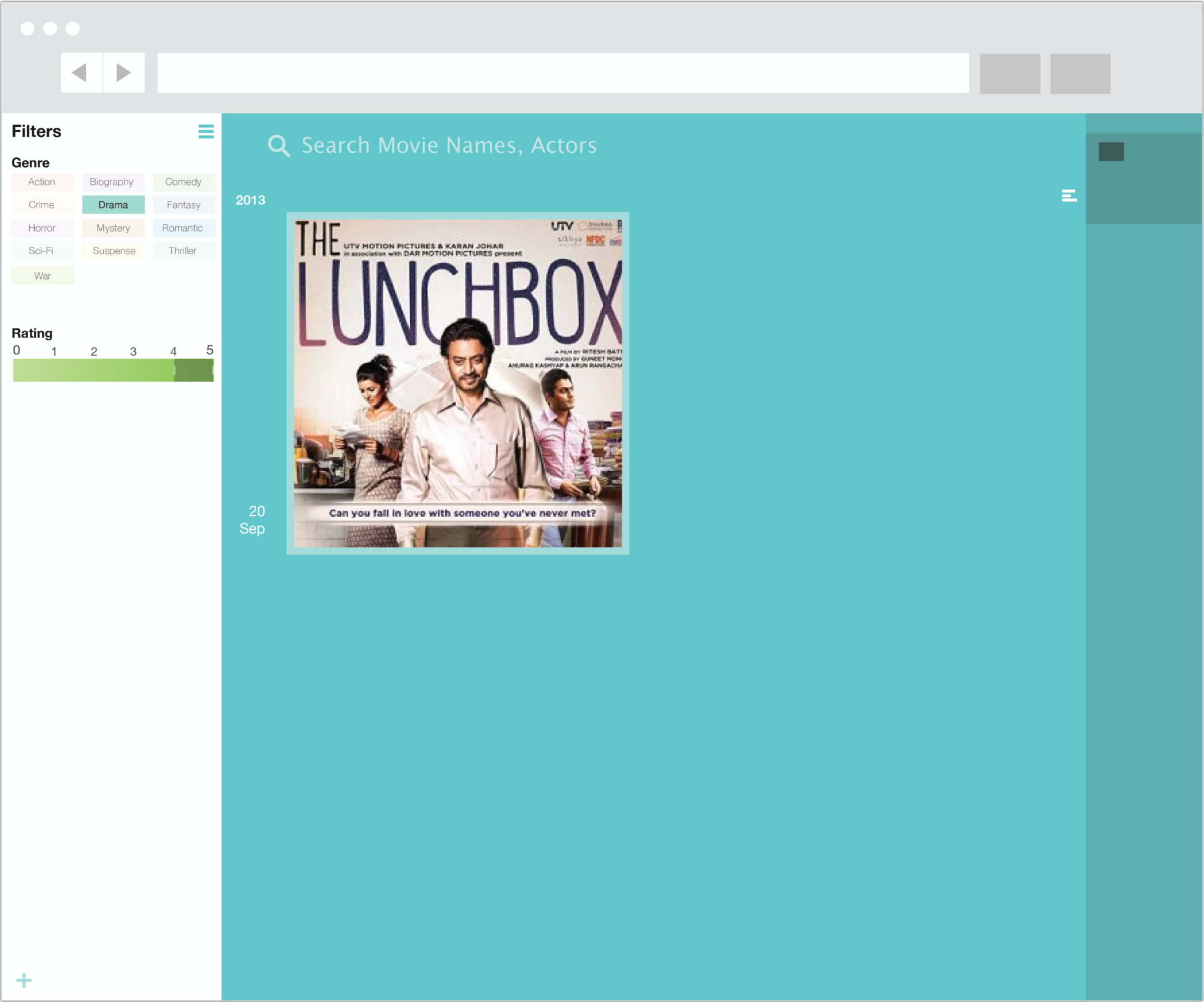
SEEING IS MISBELIEVING

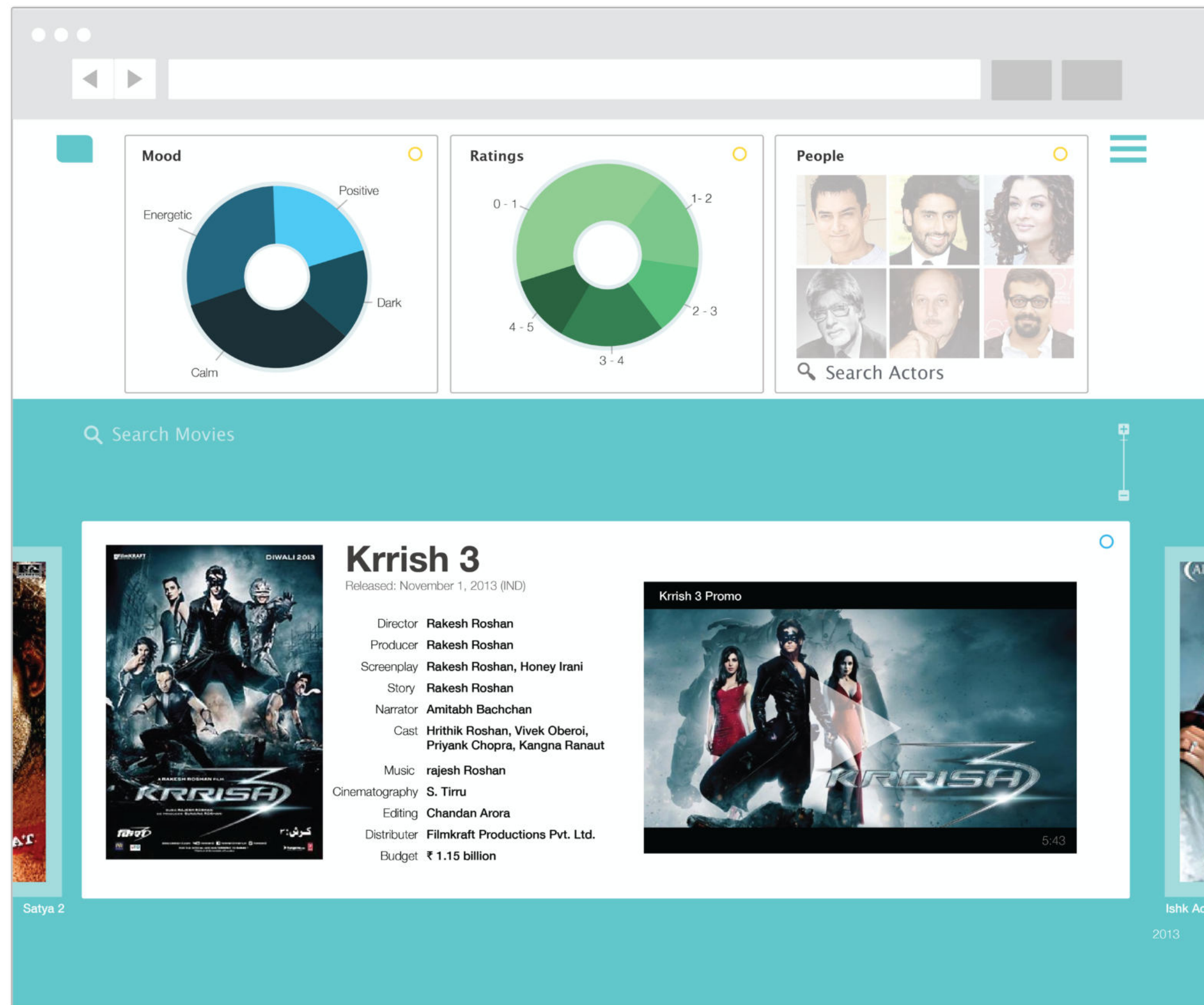
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Jan 10, 2014

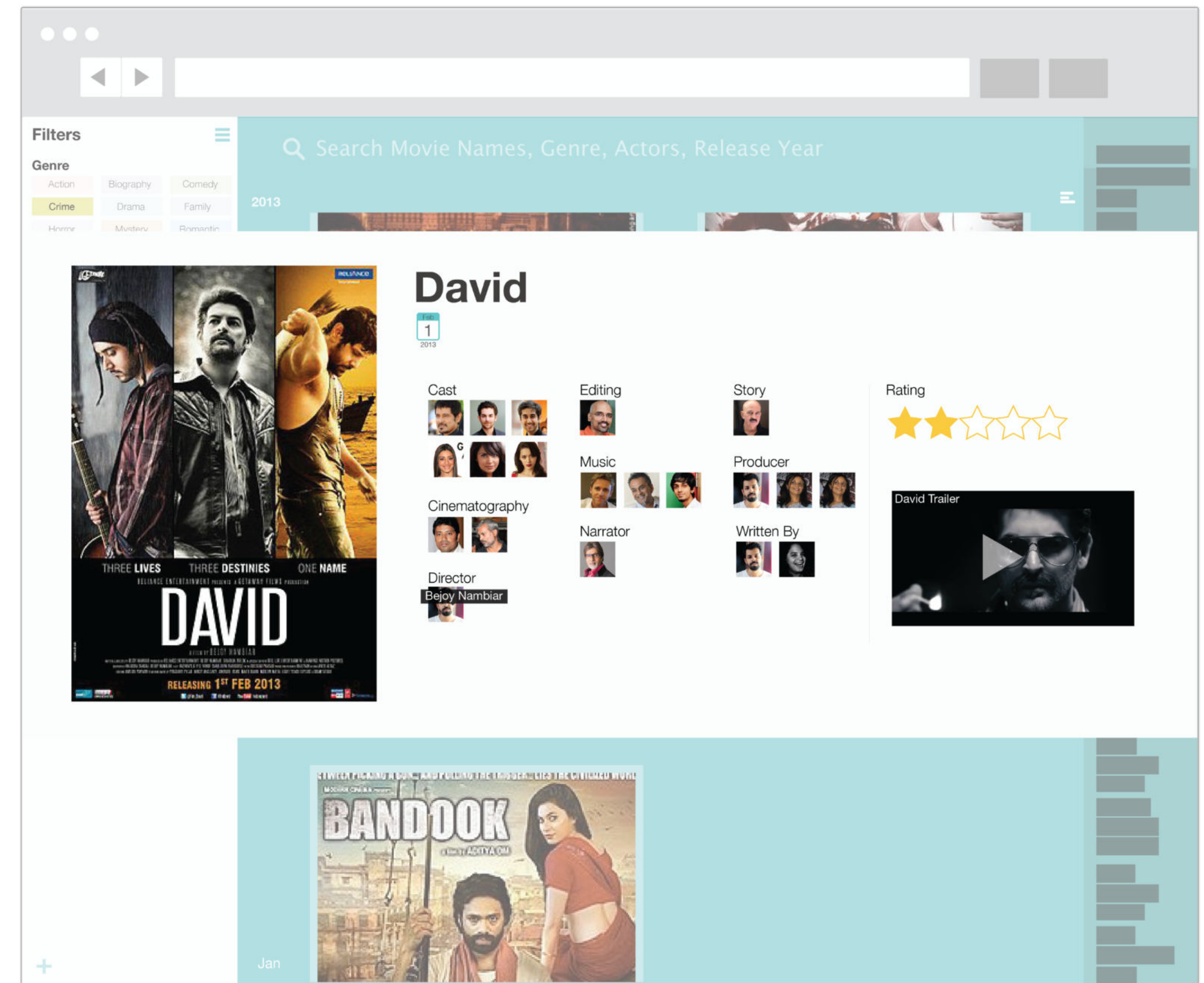








Previous Concept



Current Concept

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▶

Filters

Genre

Action

Crime

Horror

Biography

Drama

Mystery

Comedy

Family

Romantic

2013

Search Movie Names, Genre, Actors, Release Year

THREE LIVES

THREE DESTINIES

ONE NAME

DAVID

RELEASING 1ST FEB 2013

David

Feb 1 2013

Cast

Cinematography

Director

Bejoy Nambiar

Editing

Music

Narrator

Story

Producer

Written By

Rating

★ ★ ★ ★ ★

David Trailer

+

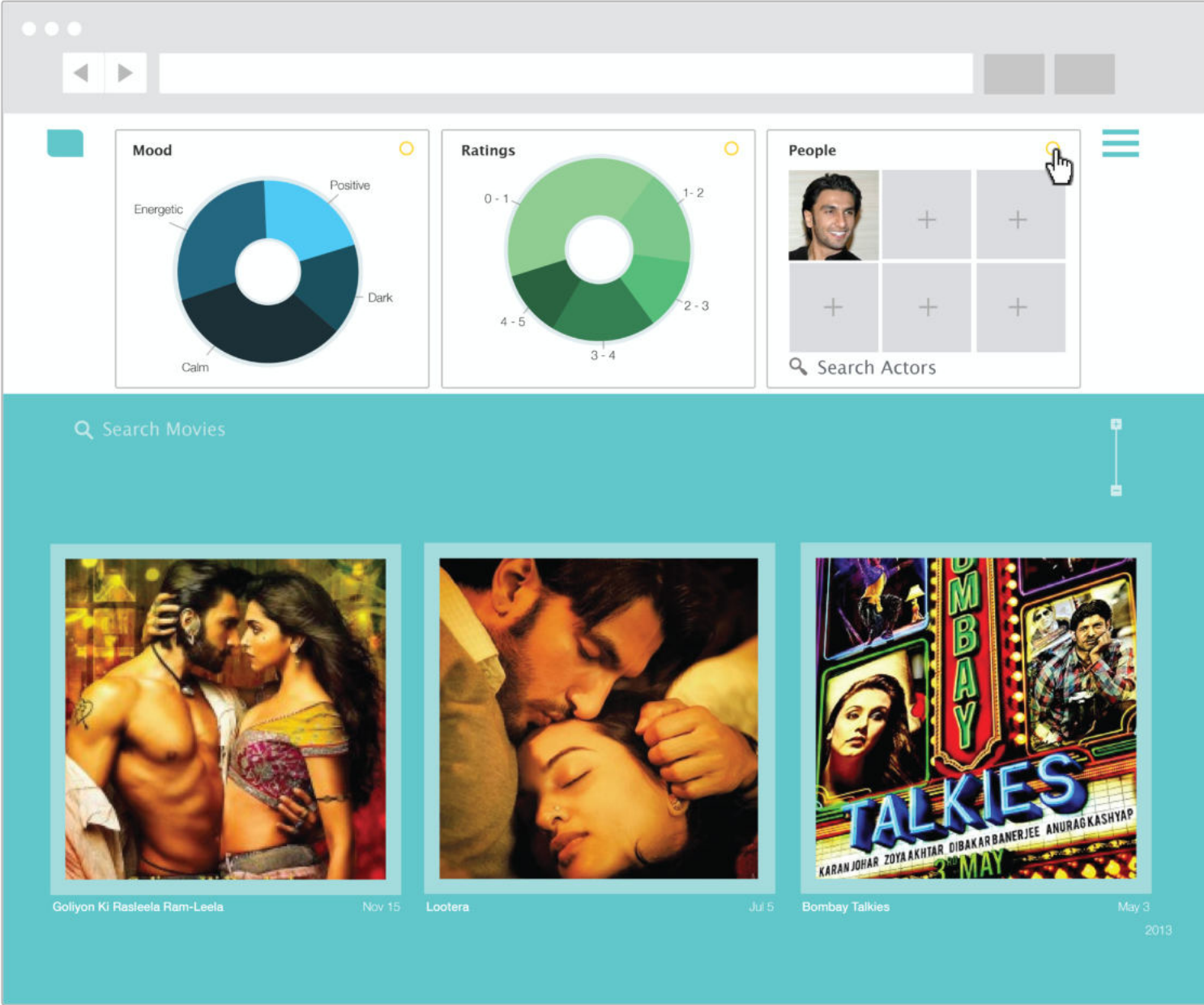
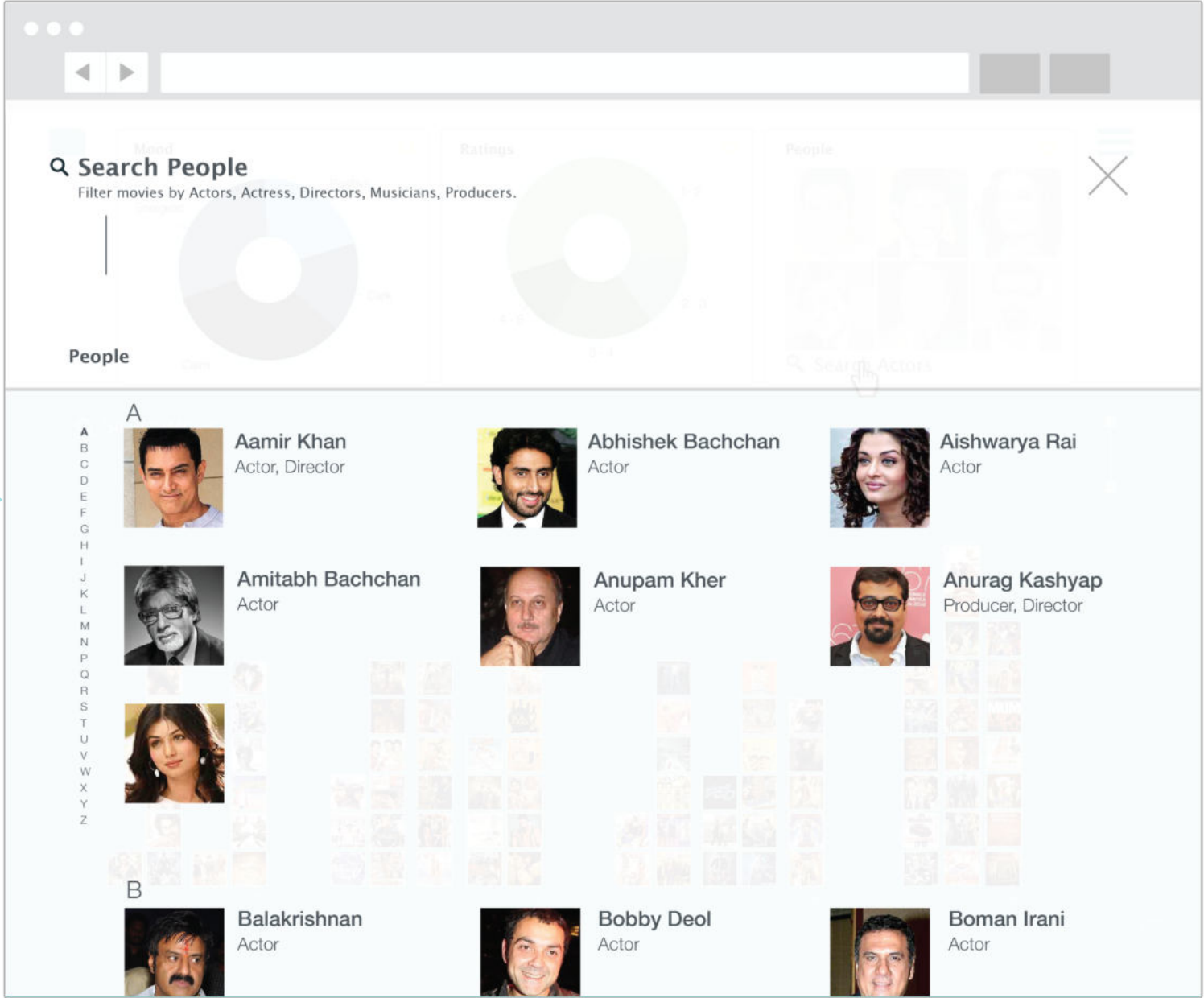
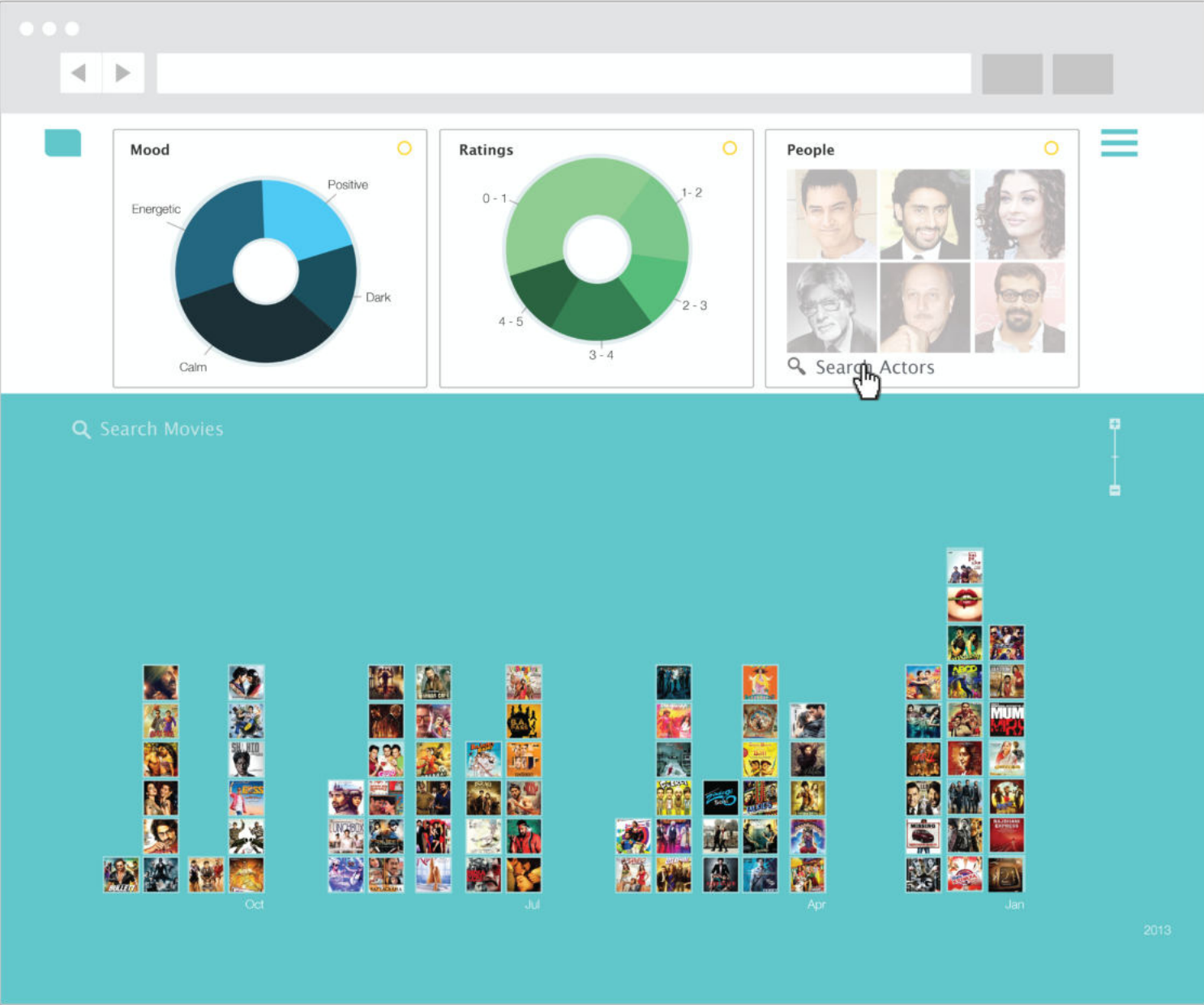
Jan

BANDOOK

Jan 10, 2014

Task 3

Find ‘how many’ movies casted
‘Niwazuddin Siddique’ in 2013





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Filters

Genre

Action

Crime

Horror

Sci-Fi

War

Biography

Drama

Mystery

Suspense

Comedy

Fantasy

Romantic

Thriller

Rating

0

1

2

3

4

5

2013

20 Sep

THE LUNCHBOX

UTV MOTION PICTURES & KARAN JOHAR in association with DAR MOTION PICTURES present

Can you fall in love with someone you've never met?

13 May

UM BAY

TALKIES

KARAN JOHAR ZOYA AKHTAR DIBAKAR BANERJEE ANURAG KASHYAP

3RD MAY

22 Mar

WIDE FRAME PICTURES

Siddique

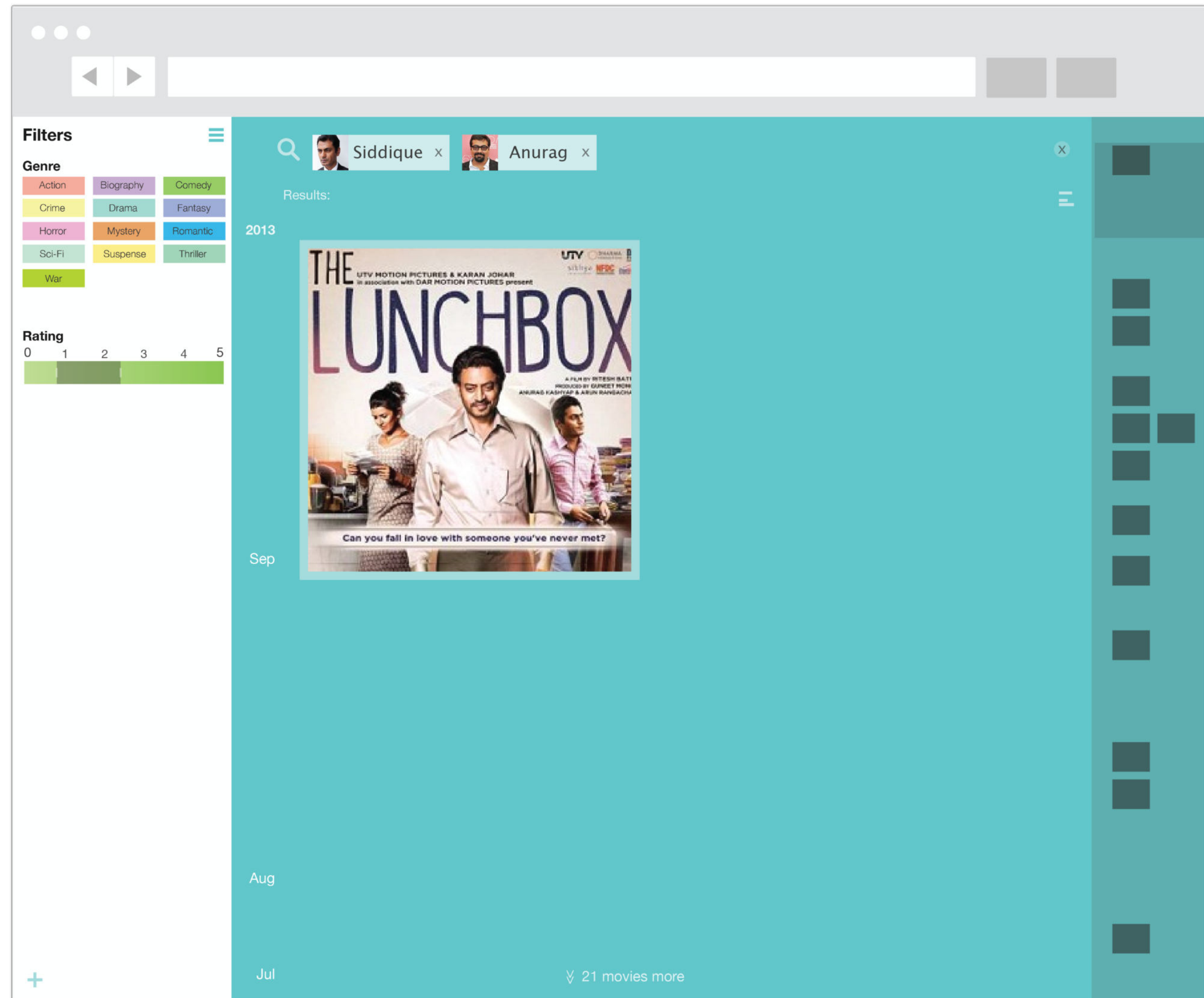
×

Results:

×

≡

Jan 10, 2014



◀

▶

Filters

Genre

Action

Crime

Horror

Sci-Fi

War

Biography

Drama

Mystery

Suspense

Comedy

Fantasy

Romantic

Thriller

Rating

0

1

2


3

4

5

2013

3 May



Results:

Siddique

Bombay

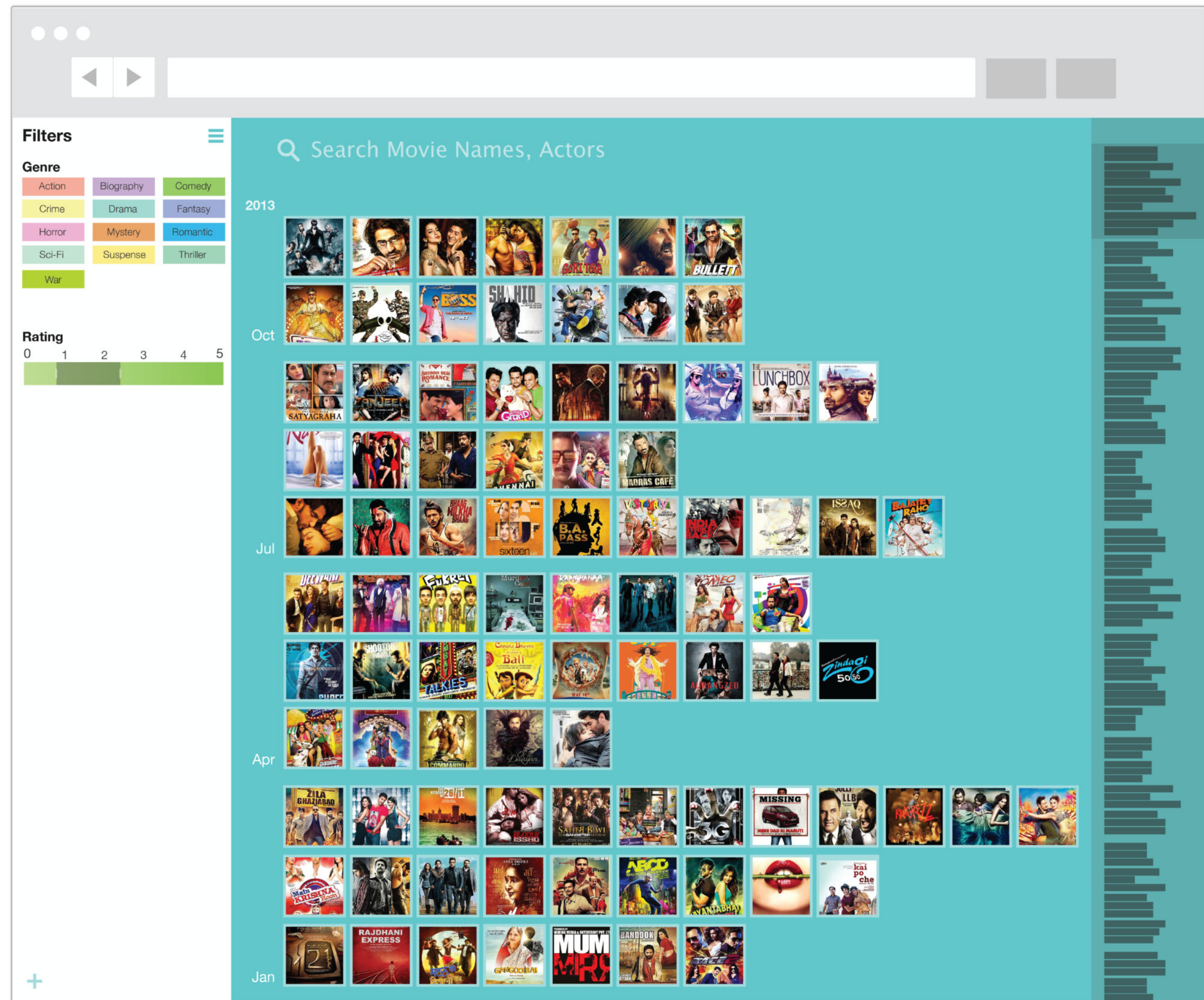
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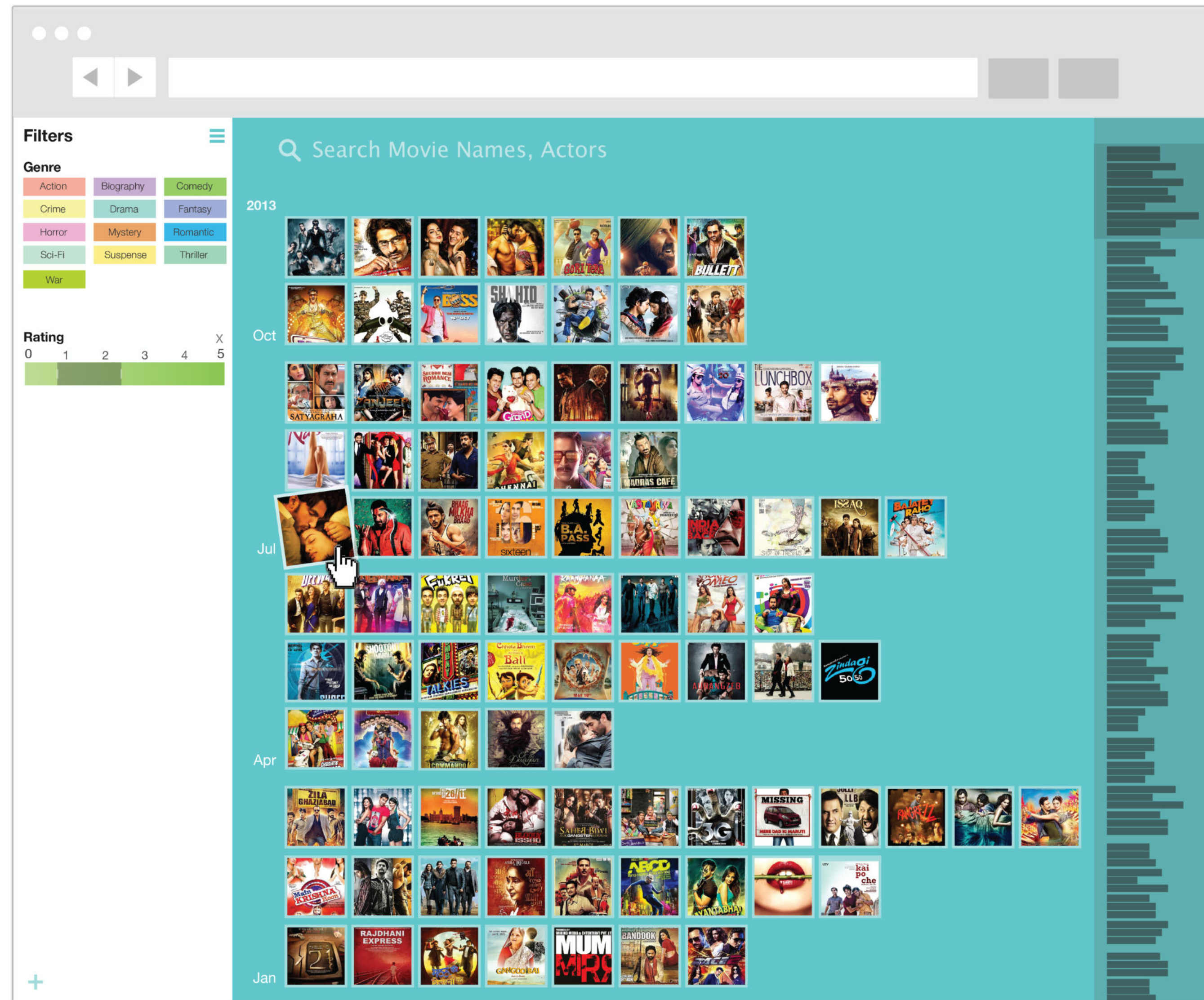
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×

×

Movie-Movie Connections





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▶

Filters

Genre

ActionBiographyComedyCrimeDramaFantasyHorrorMysteryRomanticSci-FiSuspenseThrillerWar

Rating

012345

Search Movie Names, Actors

2013

Oct

See Connections

Jul

Apr

Jan

Jan 10, 2014

Filters

Genre

Action

Biography

Comedy

Crime


Drama

Fantasy


Search Movie Names, Actors

2013

Lootera




Ranveer Singh

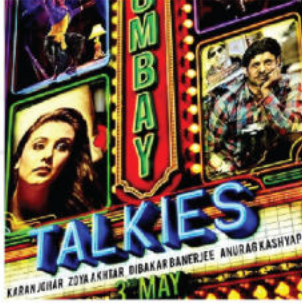


Producer

Anurag Kashyap




Writer



Music Director

Amit trivedi



Apr

ZILA GHAZIABAD

20/11

SATUR RANG

MISSING

LLB

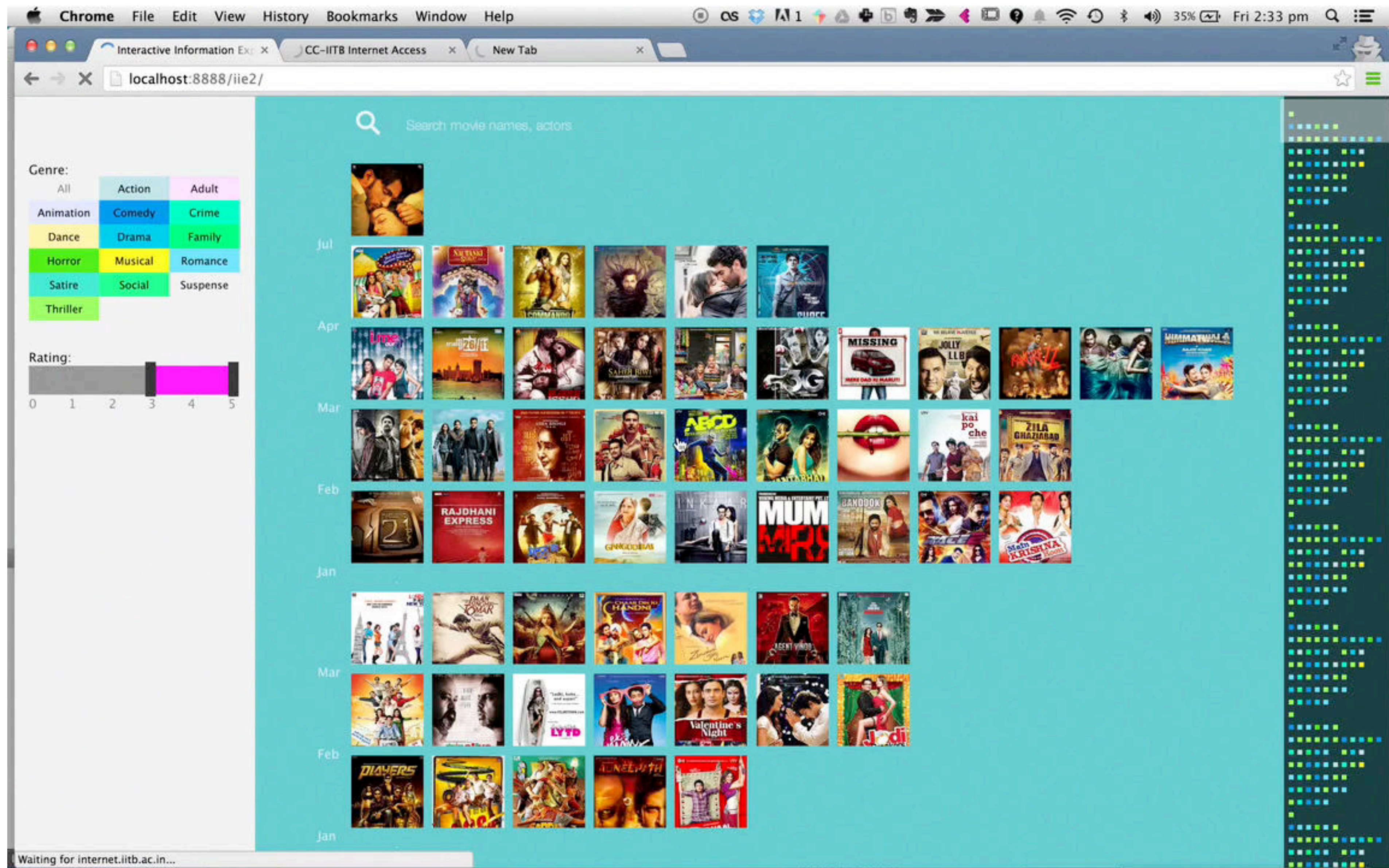
RAJDHANI EXPRESS

21

MUM

BANDOOK

Jan



Evaluation & Observations

Think Aloud Testing

1. 7 users were explained what is IIE
2. They are given the tasks (as in walkthrough) & mockups are shown.
3. Asked to tell the steps to do the same on IIE & steps are noted
4. Asked to carry the task out in their own traditional way & steps are noted



Qualitative Observations

Traditional

Uses Google

Includes opening multiple browser tabs

No structure

Includes typing a lot of times

Includes reading

IIE

Structured steps

Includes clicks & scrolls

Includes less reading

Thumbnails help users

Absence of 'mood' filter disappointed users

Conclusion

- There are scopes for expansion
- IIE reduces human cognitive load while accessing the data
- IIE can be extended to multiple data-set

End

Questions & Feedbacks