Visual Design

Human Computer Interaction Research Gro
up Department of Computer Science

Bridging the Gulf of Evaluation

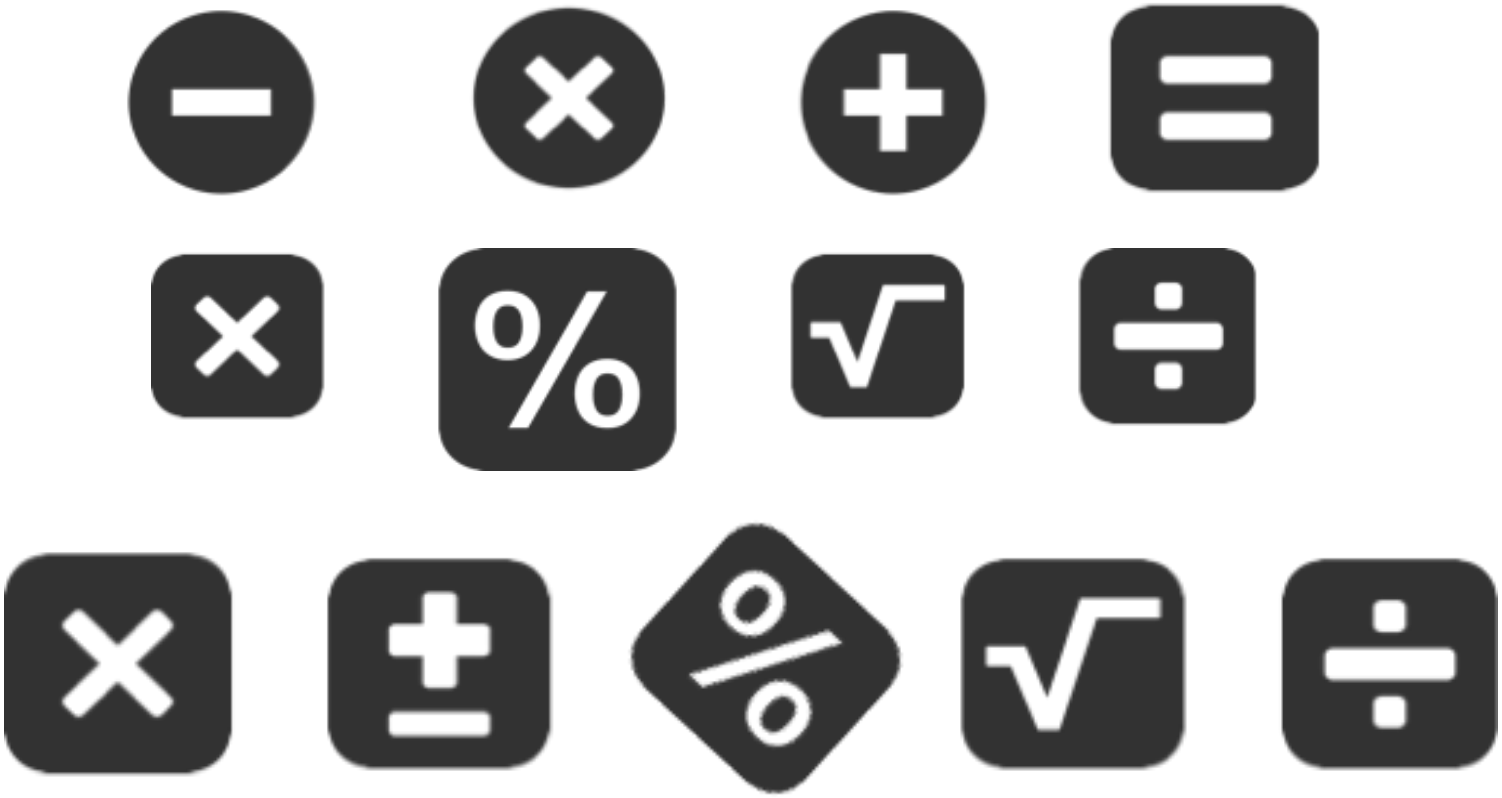
- We saw that in the action cycle we need to help people understand and integrate what they are perceiving and try to make sense of it
- Last lecture we talked about feedforward and feedback for supporting interaction and in particular at the Gulf of Execution
- In this lecture we discuss how to help on the other side
  - Give you basic tools to think about for visual design
  - Discuss creating hierarchies in interfaces
  - Discuss technical implementation of layout on the web

Visual Design

- Most of our systems are visual
  - (We will talk about why this is a problem another day)
- So it makes sense that we can use visual design to help users understand the data
- What types of things can we do? What tools do we have in our toolbox for doing this?

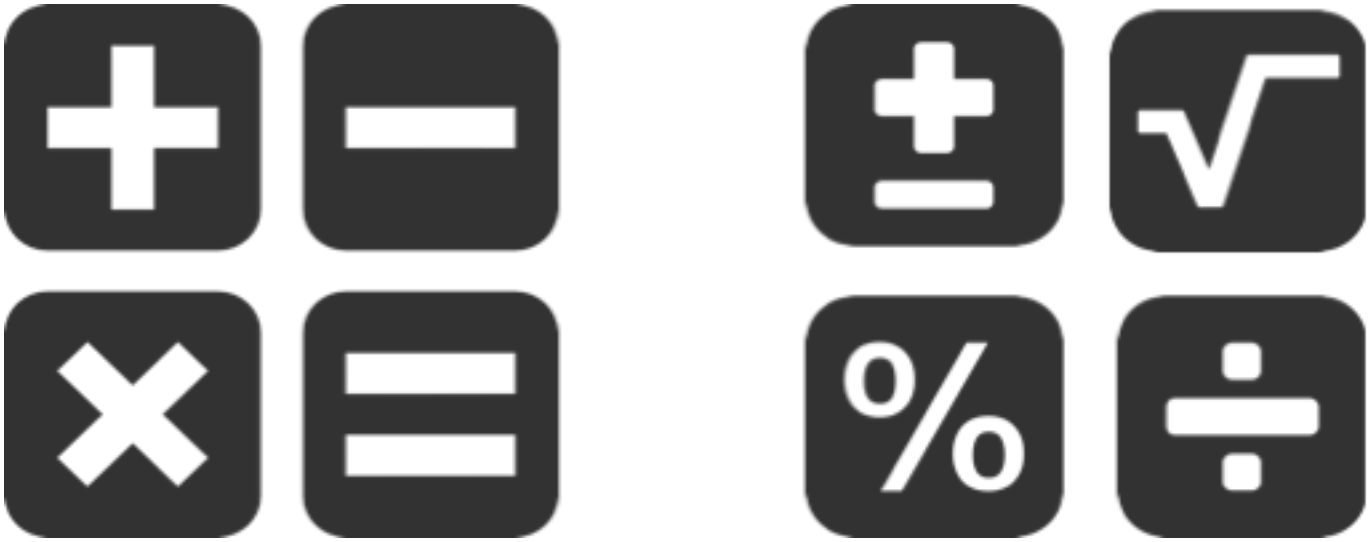
Basic Building Blocks of Visual Design

- Which of these things doesn't belong?



Basic Building Blocks of Visual Design

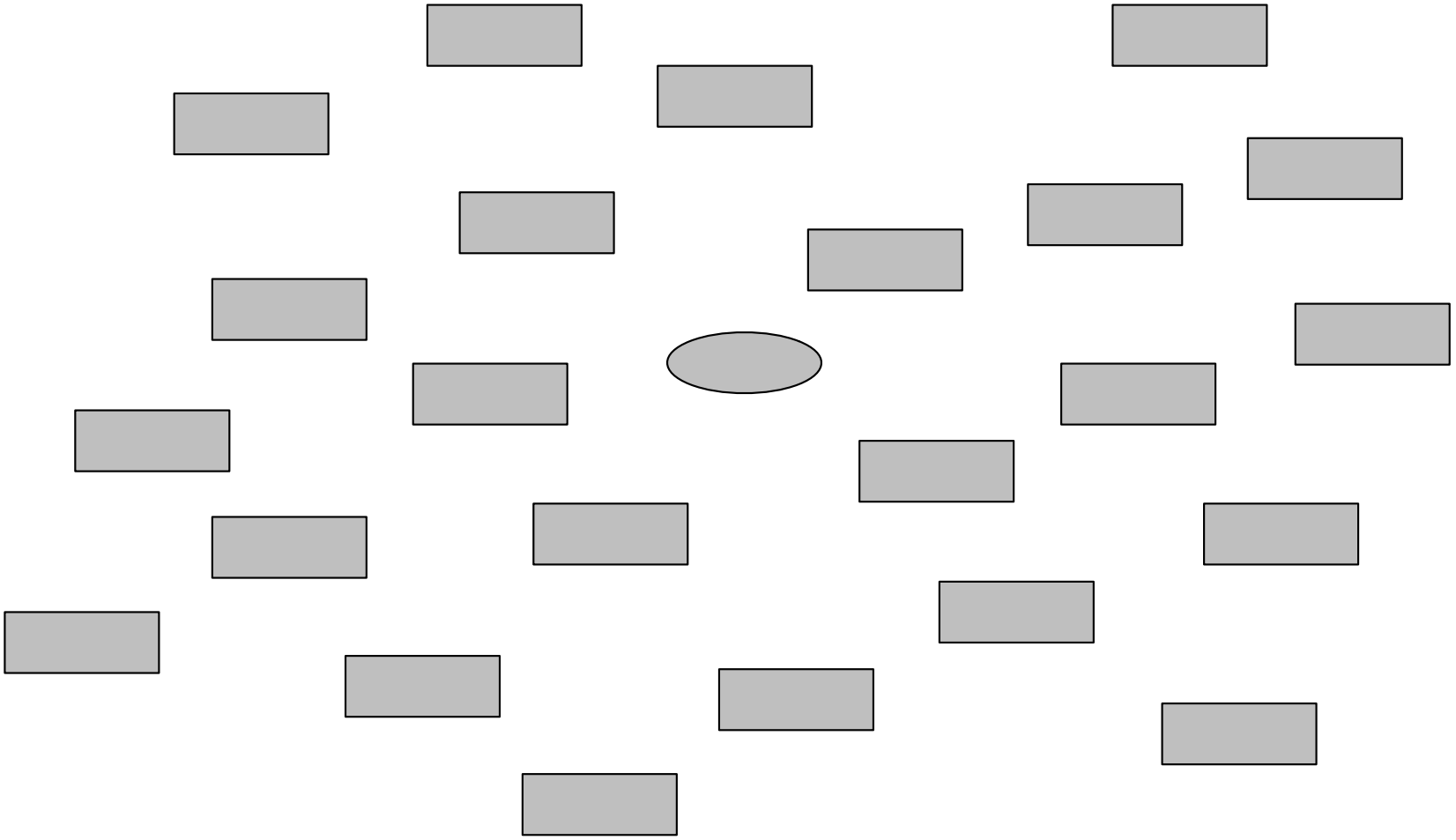
- Which buttons belong together?



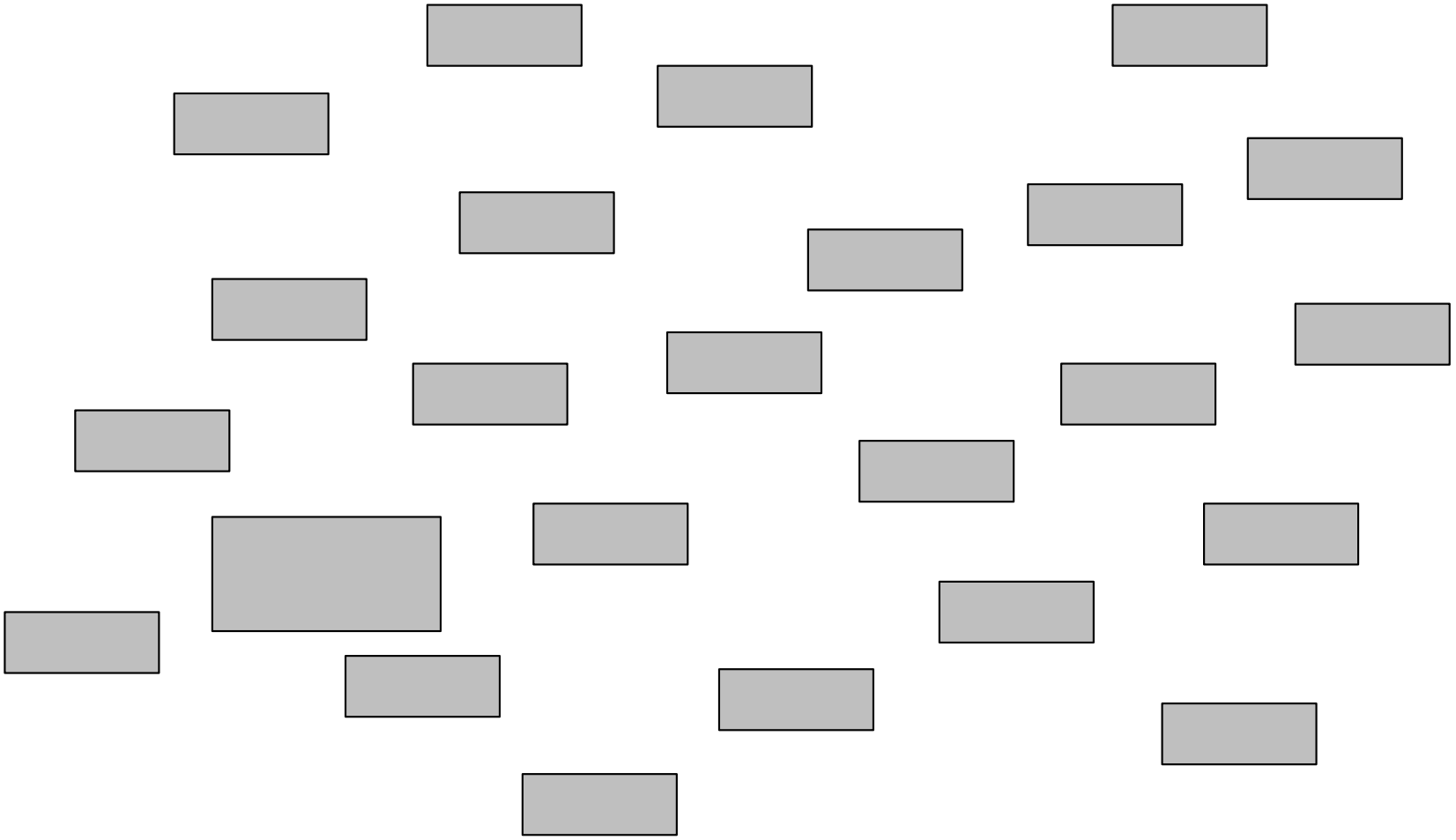
Standing out from the crowd …

- When things naturally group together, it is our perception/cognition that is trying drawing together things as a whole before looking at the individual parts – we use *gestalts* to make sense
- Good structure in any design often exploits gestalts of different types to draw together pieces of designs
- As a result – we can often make things salient by breaking designs in different ways – our cognition kind of goes “Wha?”

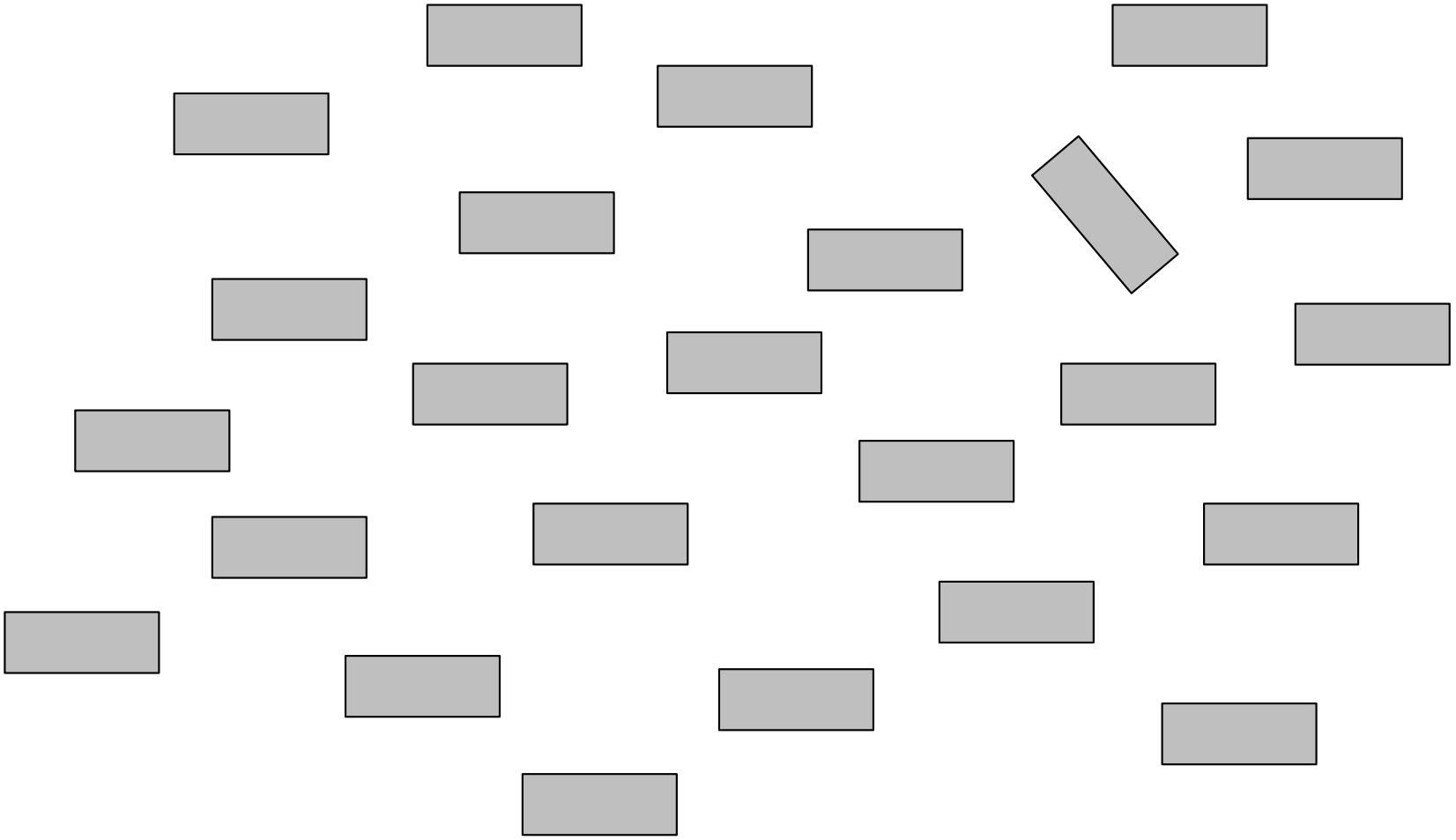
Shape



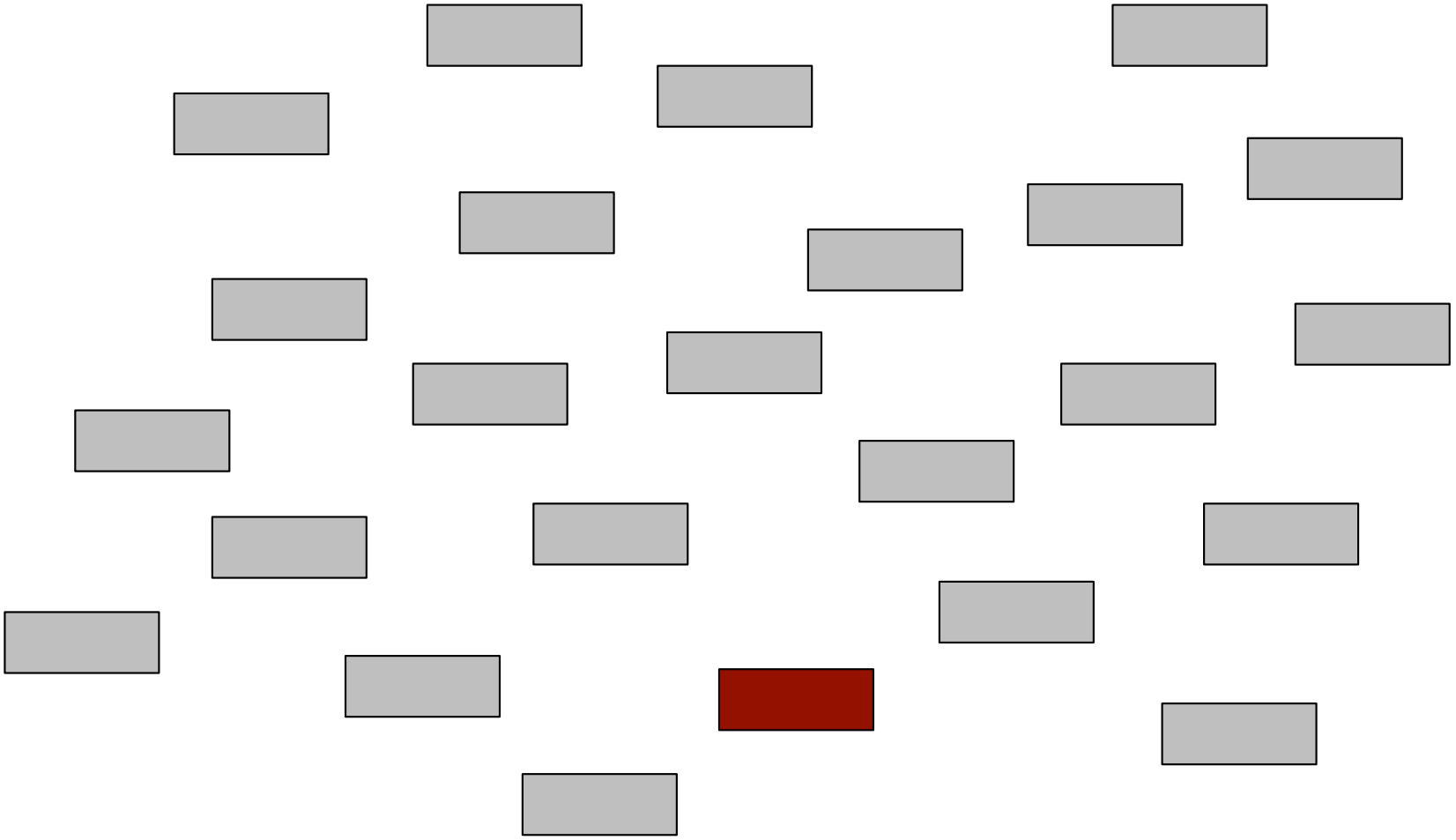
Size



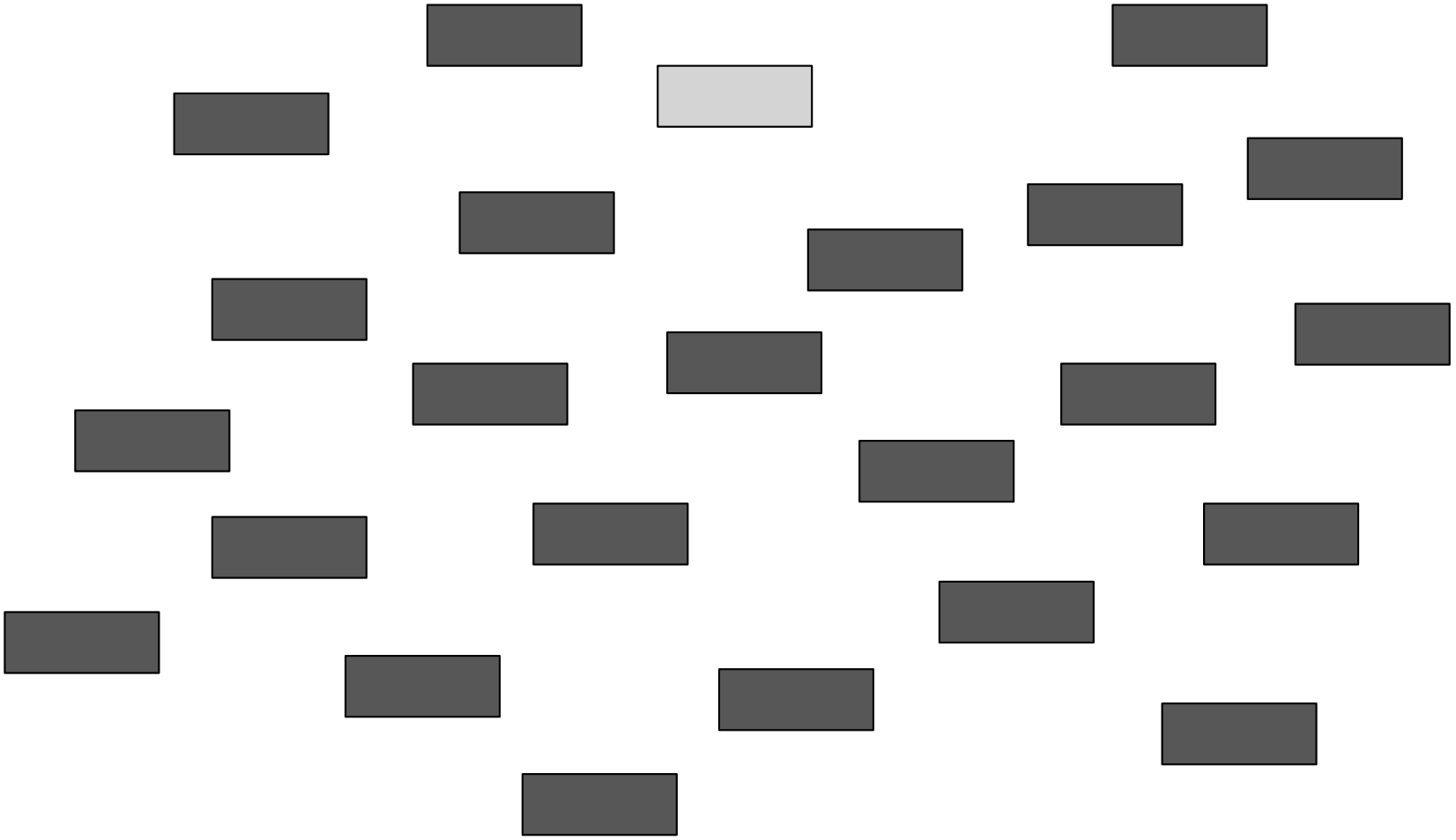
Orientation



Hue



Contrast



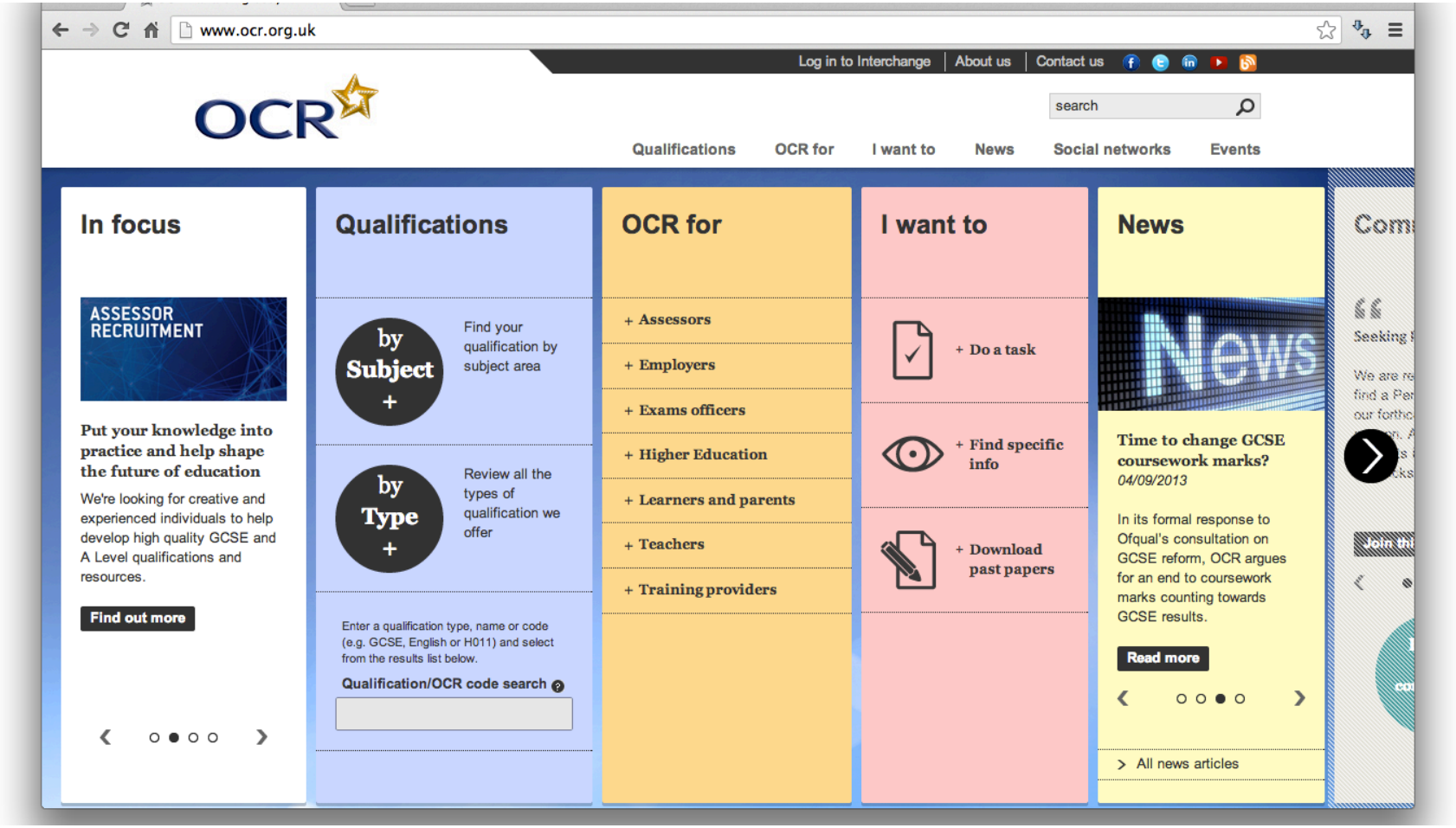
Doing Visual Design

- Sometimes seems like ‘intuition’ or ‘natural talent’
  - Like anything some practice helps
- We need to use our design artefacts to help us with visual design
  - Goals that we know the users will undertake help prioritize proportioning of the interface
  - Scenarios that we have written about how users work help work out ordering and grouping
- You cannot just dive into design without these sorts of artefacts

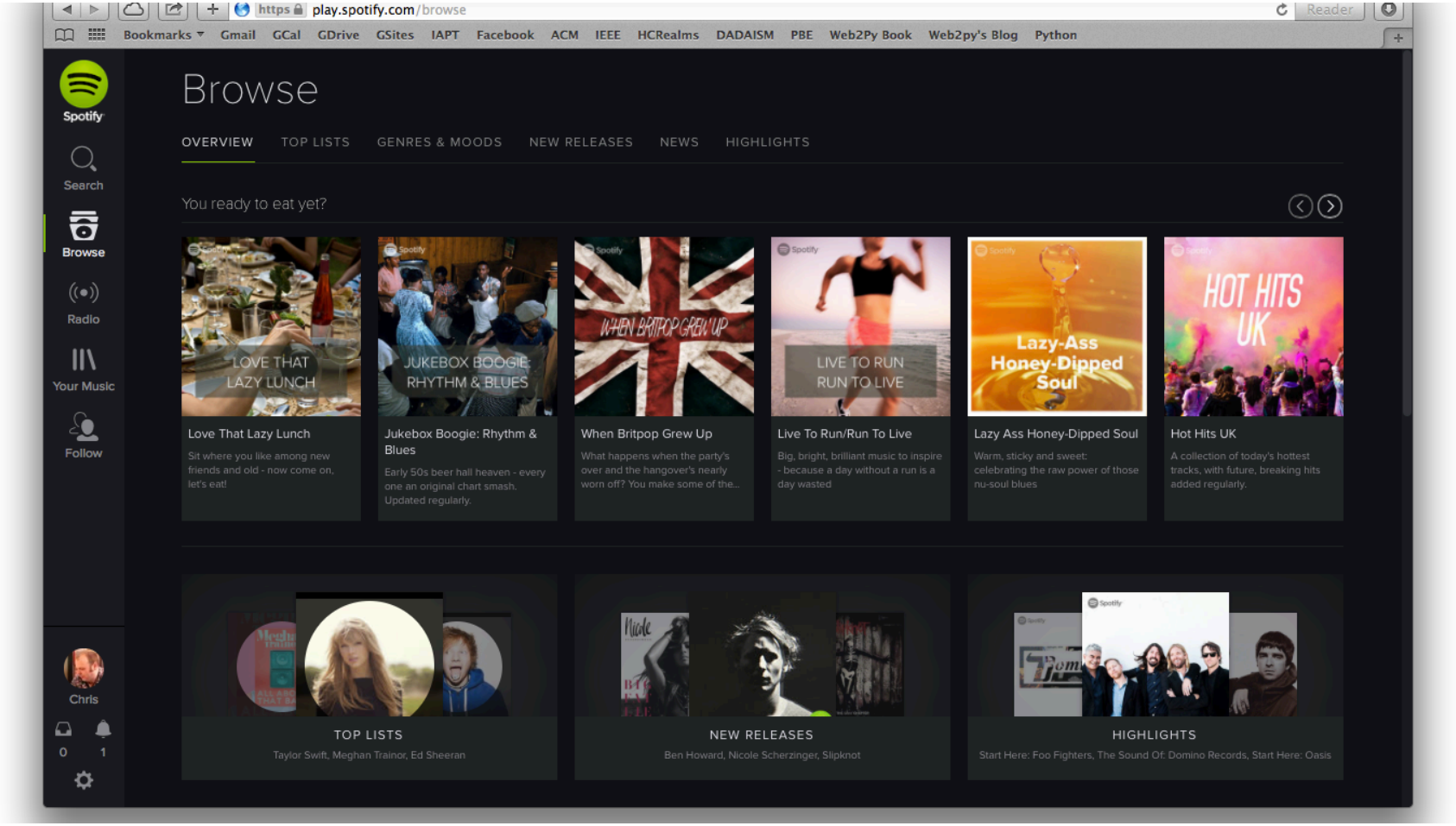
Creating Visual Hierarchies

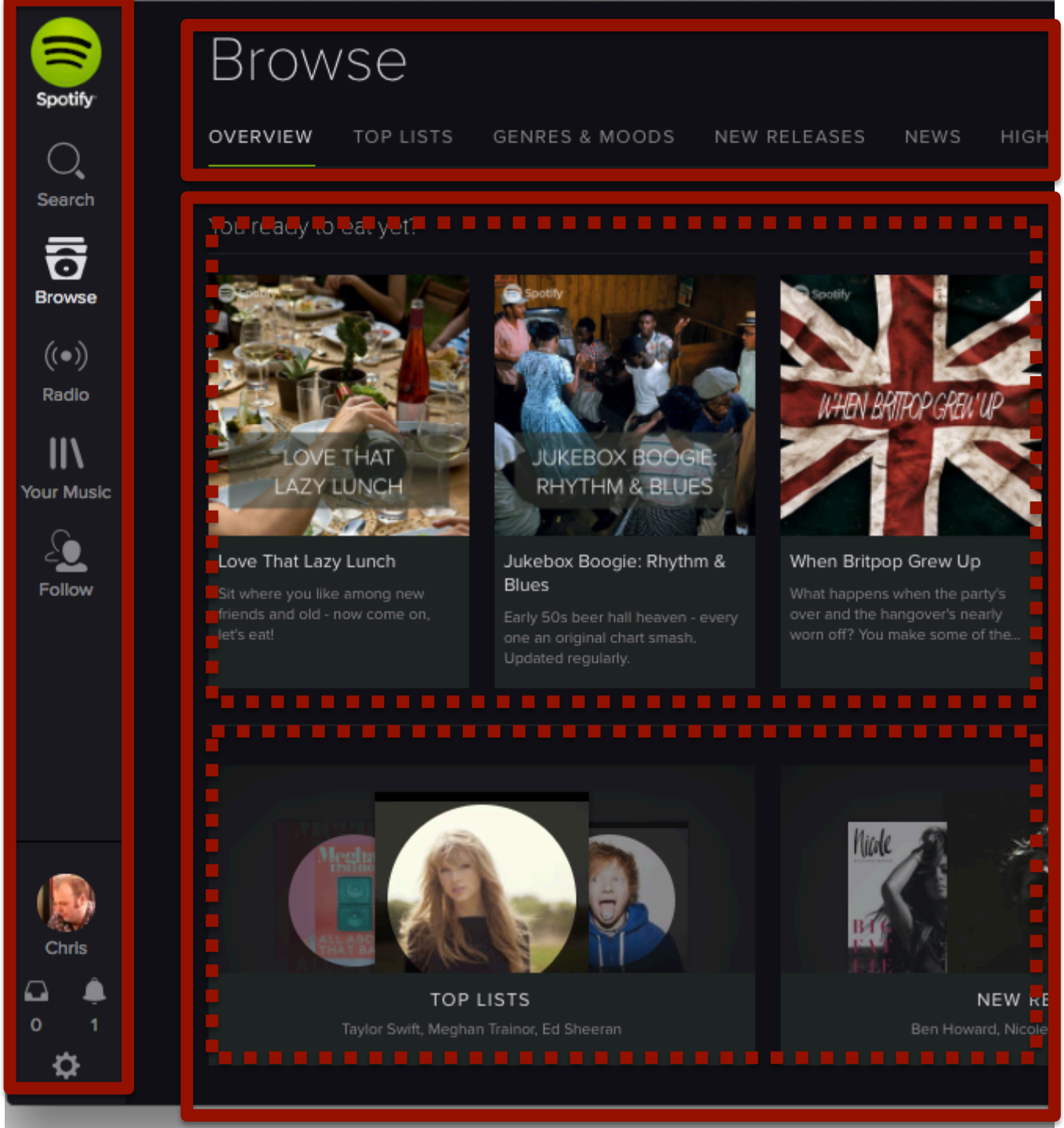
- From your scenarios, identify those tasks that are most important to have most often – these should dominate the interface
- Identify what information users need to perform those tasks, and then make that information prevalent in the interface
- Simple changes to the above items can help impose order on chaos in your interfaces.

Poor Visual Hierarchy Example



Good Visual Hierarchy Example




Spotify
Search
Browse
Radio
Your Music
Follow
Chris
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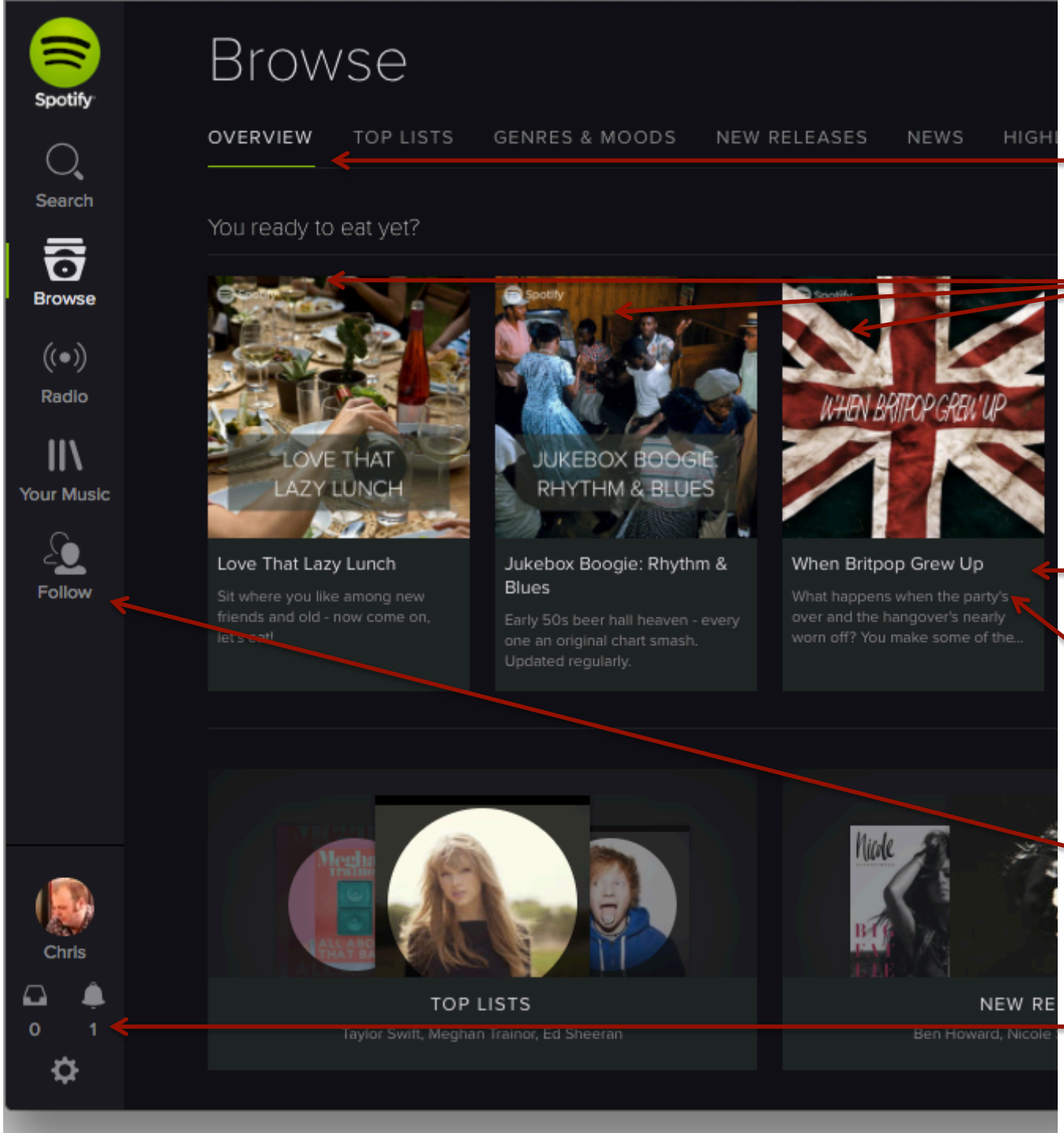
1
Browse
OVERVIEW
TOP LISTS
GENRES & MOODS
NEW RELEASES
NEWS
HIGH
You ready to eat yet?
LOVE THAT LAZY LUNCH
Love That Lazy Lunch
Sit where you like among new friends and old - now come on, let's eat!
JUKEBOX BOOGIE: RHYTHM & BLUES
Jukebox Boogie: Rhythm & Blues
Early 50s beer hall heaven - every one an original chart smash. Updated regularly.
WHEN BRITPOP GREW UP
When Britpop Grew Up
What happens when the party's over and the hangover's nearly worn off? You make some of the...
TOP LISTS
Taylor Swift, Meghan Trainor, Ed Sheeran
Nicole
Ben Howard, Nicole



Hue

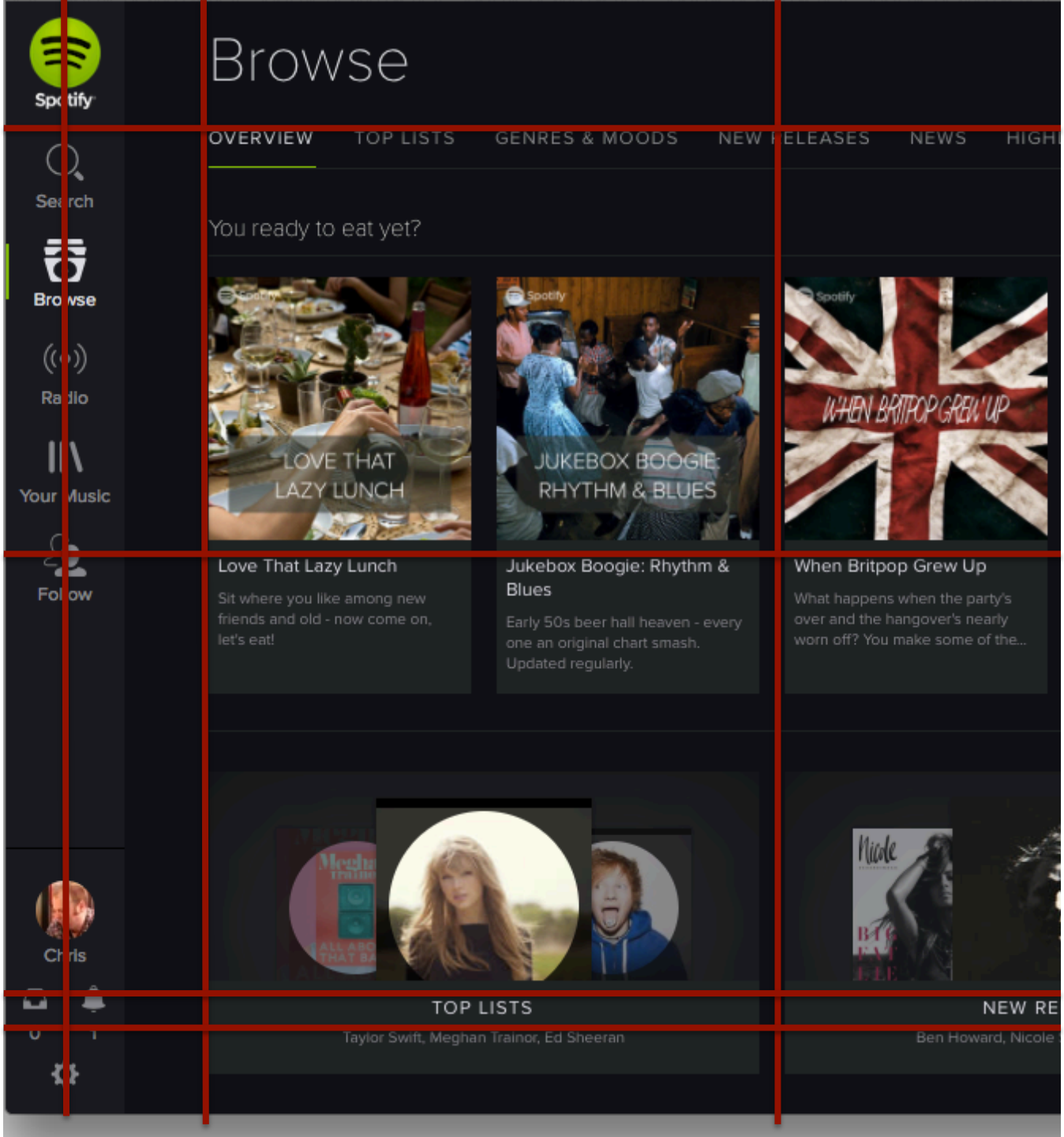
Position

Contrast

Typography

Images

Size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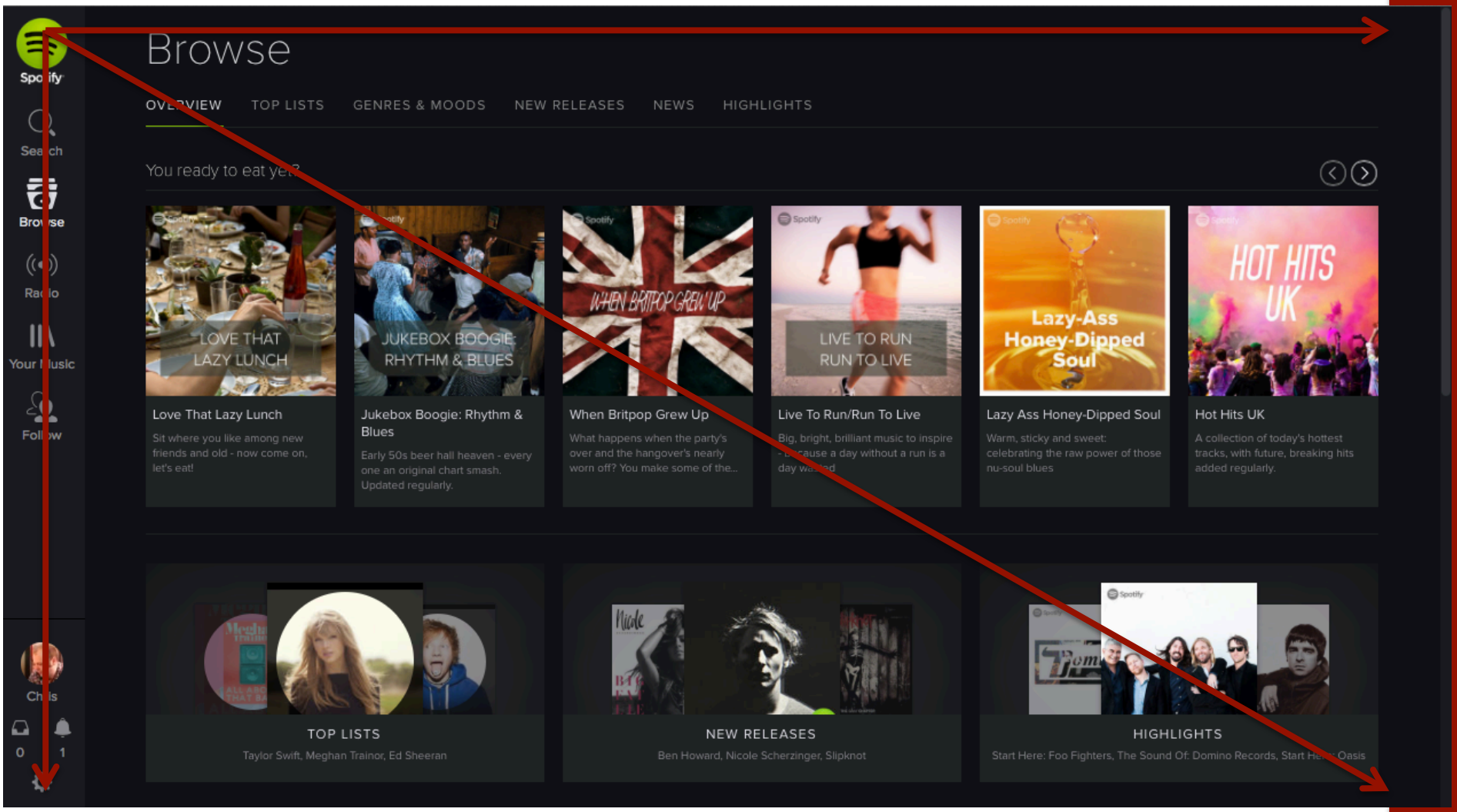
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LIVE TO RUN RUN TO LIVE
Live To Run/Run To Live
Big, bright, brilliant music to inspire - because a day without a run is a day wa
Lazy-Ass Honey-Dipped Soul
Lazy Ass Honey-Dipped Soul
Warm, sticky and sweet: celebrating the raw power of those nu-soul blues
HOT HITS UK
Hot Hits UK
A collection of today's hottest tracks, with future, breaking hits added regularly.
TOP LISTS
Taylor Swift, Meghan Trainor, Ed Sheeran
NEW RELEASES
Ben Howard, Nicole Scherzinger, Slipknot
HIGHLIGHTS
Start Here: Foo Fighters, The Sound Of: Domino Records, Start Here: Oasis

Summary

- Hierarchies – use size and position to indicate structure on page
  - Alignment of elements – edges of boxes, left/right margins of text
- Grouping – through similarity and proximity – how closely are things put together
- Relationships - Symbols and colour of controls
- Good visual structure helps users make sense of what they can do and where to find stuff
- We achieve good visual structure in programming through layout and constraint specifications

Readings

- Visual Design
  - About Face 3 – Chapter 14
  - Visual Design Methods in Interactive Applications
    - Jean Vanderdonckt (on website)