Concepts
Admin

- Data Models due tonight at 11pm
- Concept Design is last assignment
- Second part of course: Final Project
Concept

Characterizes an App

- Word
- Twitter
- Facebook

- Paragraph, Format, Style
- Tweet, Hashtag, Following
- Posts, Tags, Friends, Followers
## Purpose

What the concept fulfills

<table>
<thead>
<tr>
<th>Style</th>
<th>Ease consistent formatting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hashtag</td>
<td>Allow tweets to be grouped organically</td>
</tr>
<tr>
<td>Follower</td>
<td>Control content appearing in Newsfeed</td>
</tr>
</tbody>
</table>
**Operational Principle**

What the design is trying to achieve, and how

**If ....**

- you follow a person
- you change a style’s format

**Then ....**

- the person’s public posts will appear on your Newsfeed even if you aren’t friends
- all paragraphs of that style will change
Retweet

Operational Principle:

Purpose:
Retweet

Operational Principle:

If a user retweets a post, then the same post’s content shows up under the user’s own tweets with the original author’s name.

Purpose:
Retweet

Operational Principle:

If a user retweets a post, then the same post’s content shows up under the user’s own tweets with the original author’s name.

Purpose:

Share ideas while attributing the original creator.
Concepts to Data Models

- 1 concept != 1 entity
- Concepts help determine the state
- Many ways to store the data
  - reduce redundancy
  - identify tradeoffs
Concepts to Data Models: Retweet
Intro: Gmail vs. Inbox

- New version of mail
- New concepts
  - Snooze
  - Pin
  - Bundles
Inbox: Snooze

Operational Principle:

Purpose:
Inbox: Snooze

Operational Principle:

If you snooze an email until a particular time, then the email is not visible in the Inbox until the set time.

Purpose:
Inbox: Snooze

Operational Principle:

If you snooze an email until a particular time, then the email is not visible in the Inbox until the set time.

Purpose:

Allow users to treat each email as an action item with a deadline.
Inbox: Pins

Operational Principle:

If you press a pin on the email, then the email stays in the Inbox and can be found easily by toggling a switch in the toolbar.

Purpose:

Mark and find important emails easily.
**Inbox: Pins**

**Operational Principle:**

If you press a pin on the email, then the email stays in the Inbox and remains visible when the pin toggle is on.

**Purpose:**

Mark and find important emails easily. Keep emails in the Inbox?
**Gmail**

**Purpose: Organize related emails**

**Concept: Labels**
- CSAIL (768)
- Jobs List (1,063)
- MIT (3,141)

**Concept: Tabs**
- Promotions
Inbox: Bundles

Purpose: Organize related emails

Concept: Bundles

- Jobs List
- Purchases
- Finance
- Social
Purpose-Concept Mapping

Organize related emails → Bundles

Treat each email as an action item → Snooze

Find important emails easily → Pin
In the next assignment, you’ll think more concepts:

1. What apps do you frequently use?
2. Identify some concepts.
   What makes you use this app?
3. Write a purpose and operational principle
   What problems does it solve?
   How do you use it?
Group Exercise: Come up with a concept!

We want to let users share *parts* of a YouTube video.
Group Exercise

Draw a data model of your app.

How could you implement the concepts?

What entities are involved?
- start time of interval must be before end time