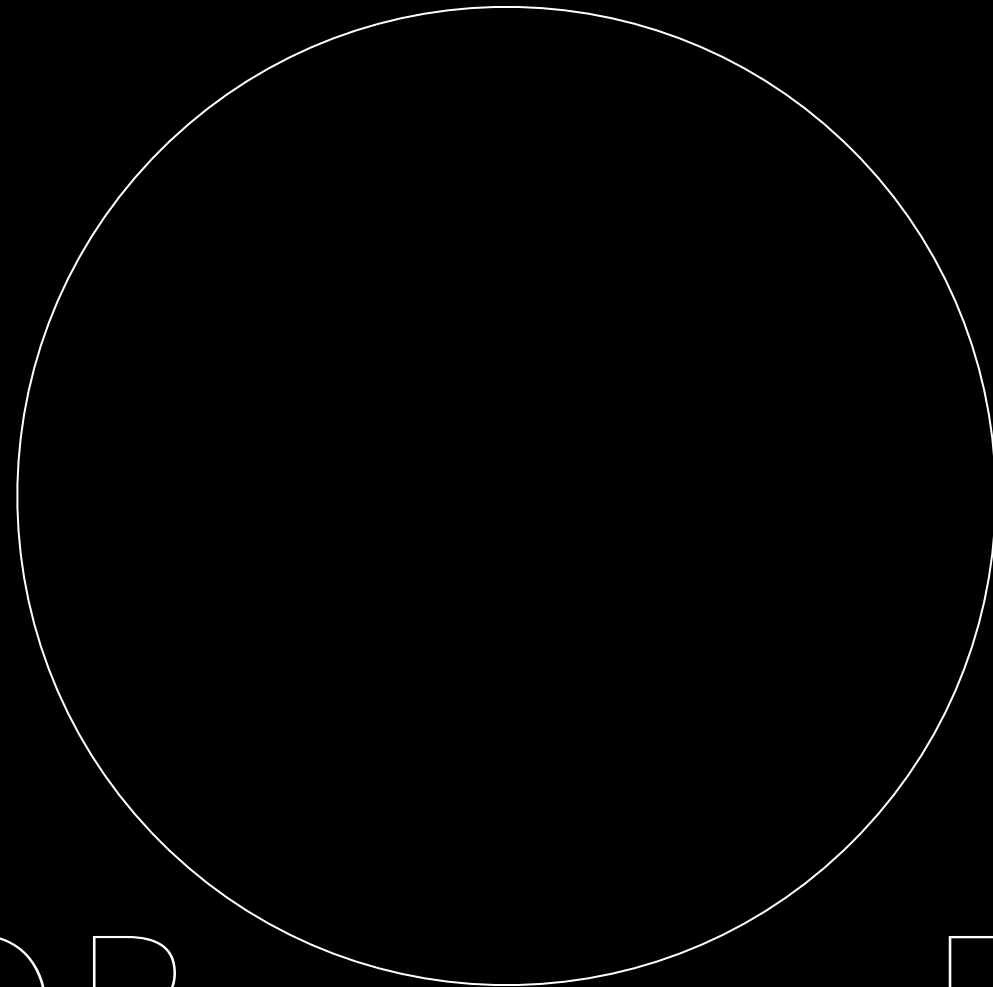


A Primer to Visual Design

Mike Yu, Summer 2015

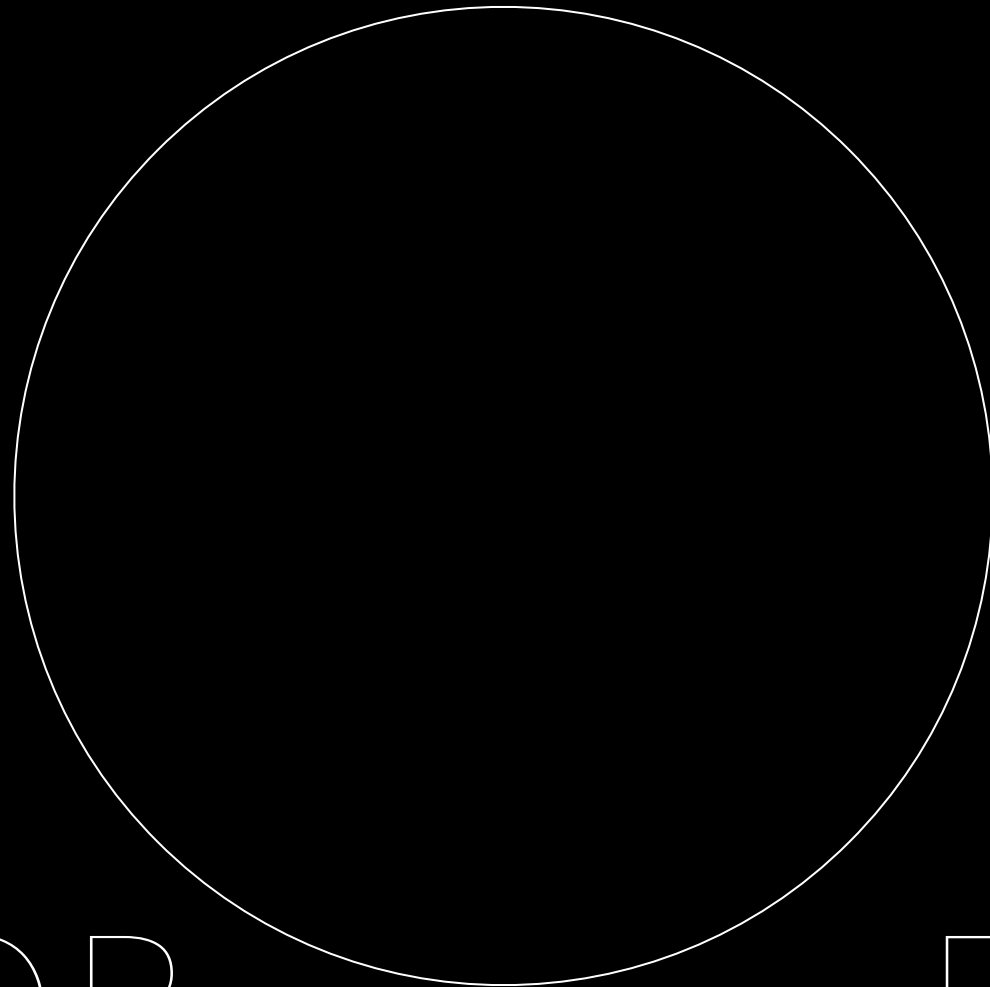
LAYOUT



COLOR

FONT

LAYOUT



COLOR

FONT

1. Line shit up.

BALANCEPASS

SERVICE SYSTEM FOR A HEALTHY COLLEGE LIFESTYLE

Aditya Choudhary
Marissa Benavente
Julian Meng
Kunni Phrasitaphorn
Pavilion Sun

Design + HCI
Carnegie Mellon University

ADDITIONAL MEMBERS:
Andrew and John
Andrew and John
Andrew and John
Andrew and John
Andrew and John



College is an infamous place for health problems ranging from mental stress to eating disorders. We chose to examine the lifestyles of female college students. We were intrigued by the tremendous pressure to keep up with academics and social life. It is also difficult to know exactly how well-balanced meals are. Combine this with the difficulty in remembering what one has eaten and it becomes clear that even a simple display of the nutritional balance of food could be enough to help some people find the right foods.

RESEARCH

We employed user-centered design methods within our research phase including contextual inquiry, user journals, and participatory design (collaging) sessions. Additionally we acquired insights from literature reviews of research papers and published articles, from interviews with nutritionists and personal health monitoring experts, and competitive product analyses.



CONTEXTUAL INQUIRY

Findings

- Food consumption happens at other locations such as on-campus food vendors and off-campus restaurants.
- The decision on where they eat always comes before what they eat.

JOURNALING

Findings

- A majority of their eating decisions were based on availability and distance to the eating place.

PARTICIPATORY DESIGN

Findings

- Many students have little sense of how to set and get to the goal, some students desire to look like perfect cover models but are without any clues about how to achieve it.

SERVICE DESIGN

From our findings, it was apparent that students could benefit from passive information at payment points. We have considered many options for a new payment system that can be built on top of existing technologies and infrastructures. The end result is Balance Pass, an easy way to pay and get advice on healthier options for college students.

STAKEHOLDER TYPOLOGY

Categorization of groups and individuals according to their influence on the service being designed.



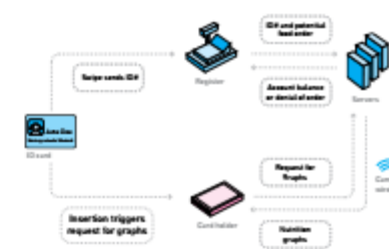
PROCESS FLOW ANALYSIS

College student food purchase model



SERVICE ARCHITECTURE

System diagram. The service is initiated by tapping the campus ID card.



USAGE SCENARIO

We feel it is important to not only design the service at the conceptual level, but to also look at the student experience with the service. At which points can information be accessed? What does a device look like? How does a student interact with it? In order to ground our service design, we have generated a user persona and scenario of how the entire system works together seamlessly.



It's lunchtime. Sarah just got out of her art history class and has 25 minutes before her next class. She decides to go grab lunch with her friends.

She digs out her Balance Pass to see the recommendation for today's quickest and healthiest meals.

Because she doesn't have much time, Sarah and her friends decide to go to the closest store.

While in the store she uses Balance Pass to find healthy options.

Balance Pass suggested meals which had moderate amounts of protein because Sarah hasn't had much of it lately. She decides to have a turkey sandwich and add tea.

She pays for the meal with her campus ID. Balance Pass updates its display when she puts the ID back inside.

The display shows that her overall nutrition balance is still good. She is rewarded five points for making a healthy choice.

Sarah eats her sandwich knowing that she will meet her goal of losing six pounds by the end of the semester.

INTERFACE DESIGN

Because the display device has to be mobile and able to be stored in a purse, the challenge is to design a simple yet informative visual interface. We went on to develop the information architecture, wireframes, and theme directions. The final design is the result of several rounds of iterations and testing.



DAILY NUTRITION VIEW

- Displays detailed nutrition history throughout the day
- Summaries of surpluses and deficits

WEEKLY NUTRITION TREND

- Displays nutrition trend and balance over a work week
- Top-right dot indicates overall nutrition balance where grey is well-balanced and red is less balanced.

MEAL ADVISOR

- Displayed once student selects a meal
- Meal suggestions based on current physical location
- Sortable by distance, price, or nutrition balance

Step 1: Empathize

Developing empathy is about **immersing** yourself in somebody else's experience by interviewing them. Remember to try and capture **specific stories** and incidents! Ask **"why"** questions to find truly important insights.

Watch the following video demonstration of an empathy interview about the morning experience.



Step 1: Empathize

Developing empathy is about **immersing** yourself in somebody else's experience by interviewing them. Remember to try and capture **specific stories** and incidents! Ask **"why"** questions to find truly important insights.

Watch the following video demonstration of an empathy interview about the morning experience.



2. Text is the back of your left hand.

“A prototype is a physical object designed to **learn as much as you can** about the user and test an idea. When building one, focus on creating an **overall experience**. The prototype is just a physical anchor for this experience; sharing a prototype involves a lot of imagination!”

“A prototype is a physical object designed to **learn as much as you can** about the user and test an idea. When building one, focus on creating an **overall experience**. The prototype is just a physical anchor for this experience; sharing a prototype involves a lot of imagination!”

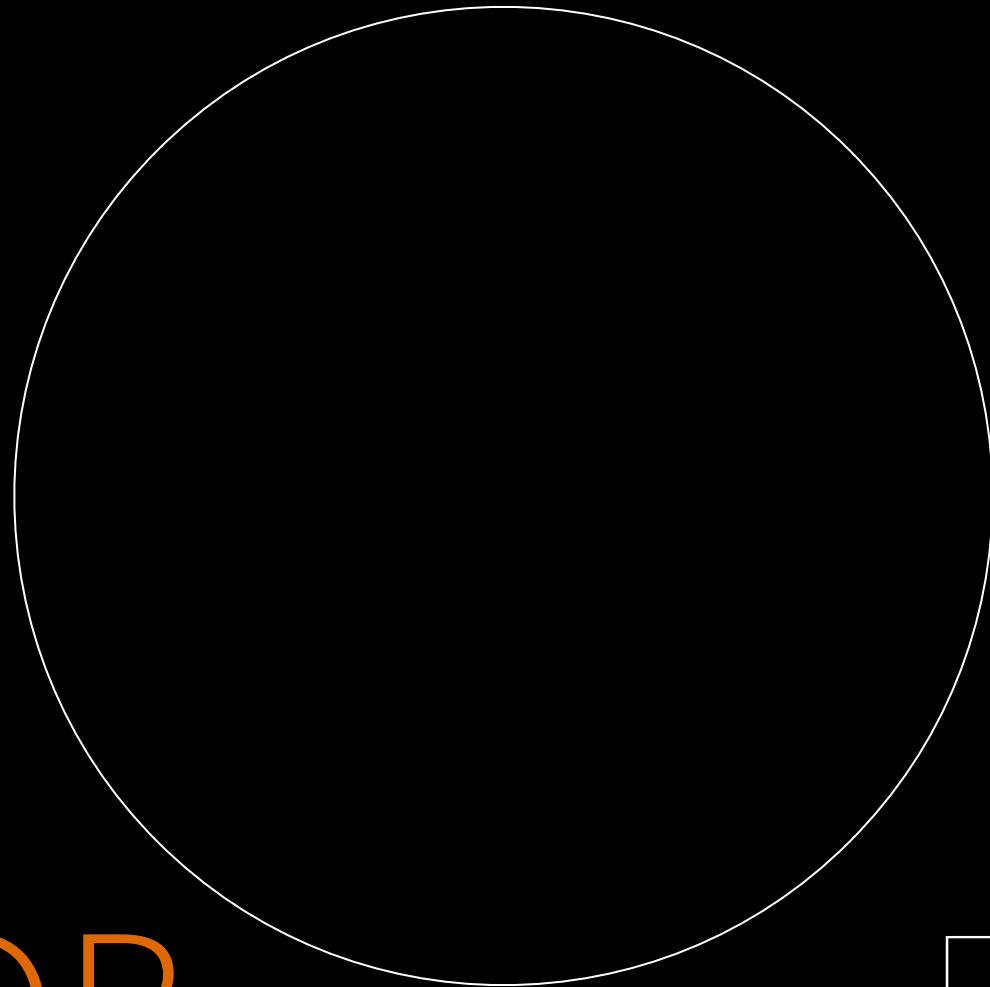
3. Leave whitespace.



On August 1, 2012, Knight Capital deployed untested software to a production environment which contained an obsolete function. The incident happened due to a technician forgetting to copy the new Retail Liquidity Program (RLP) code to one of the eight SMARS computer servers, which was Knight's automated routing system for equity orders.

RLP code repurposed a flag that was formerly used to activate the old function known as 'Power Peg'. Power Peg was designed to move stock prices higher and lower in order to verify the behavior of trading algorithms in a controlled environment.[12] Therefore, orders sent with the repurposed flag to the eighth server triggered the defective Power Peg code still present on that server.[13] When released into production, Knight's trading activities caused a major disruption in the prices of 148 companies listed at the New York Stock Exchange, thus, for example, shares of Wizzard Software Corporation went from \$3.50 to \$14.76. For the 212 incoming parent orders that were processed by the defective Power Peg code, Knight Capital sent millions of child orders, resulting in 4 million executions in 154 stocks for more than 397 million shares in approximately 45 minutes.[13] This caused Knight Capital's stock price to collapse. Knight Capital took a pre-tax loss of \$440 million sending shares lower by over 70% from before the announcement. The nature of the Knight Capital's unusual trading activity was described as a "technology breakdown".[14][15]

LAYOUT



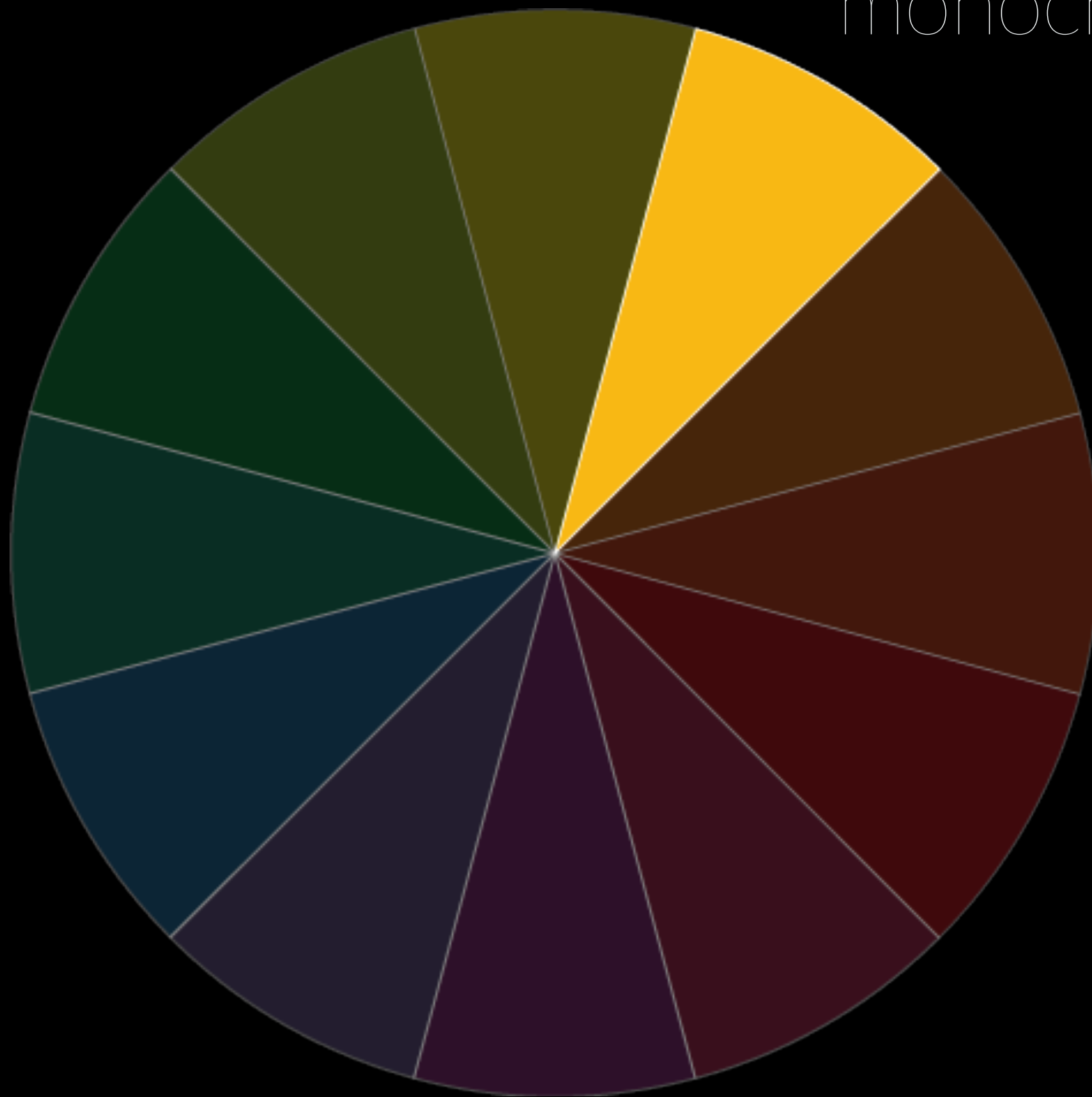
COLOR

FONT

4. Know the color wheel.

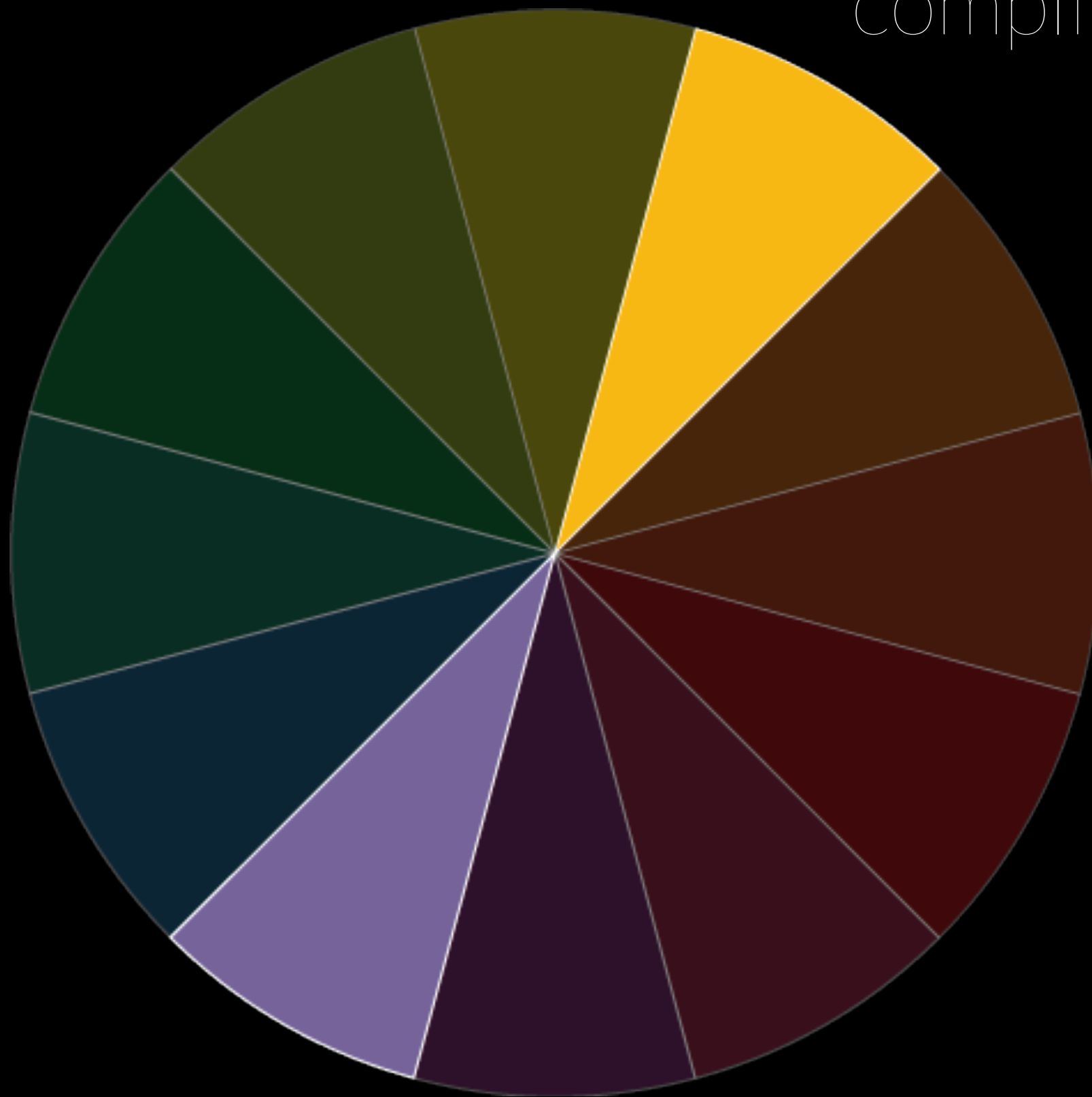


monochromatic



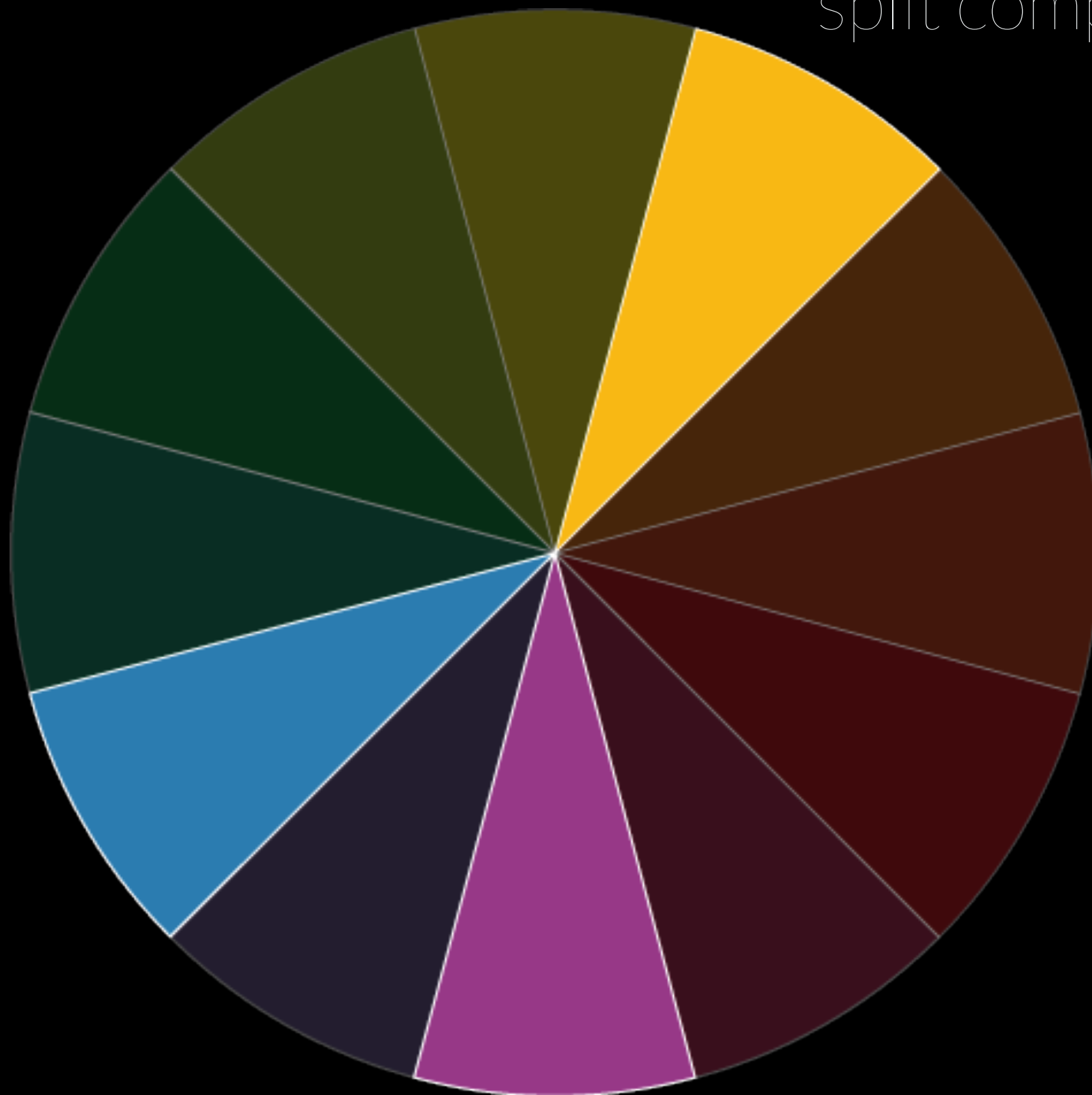


complimentary



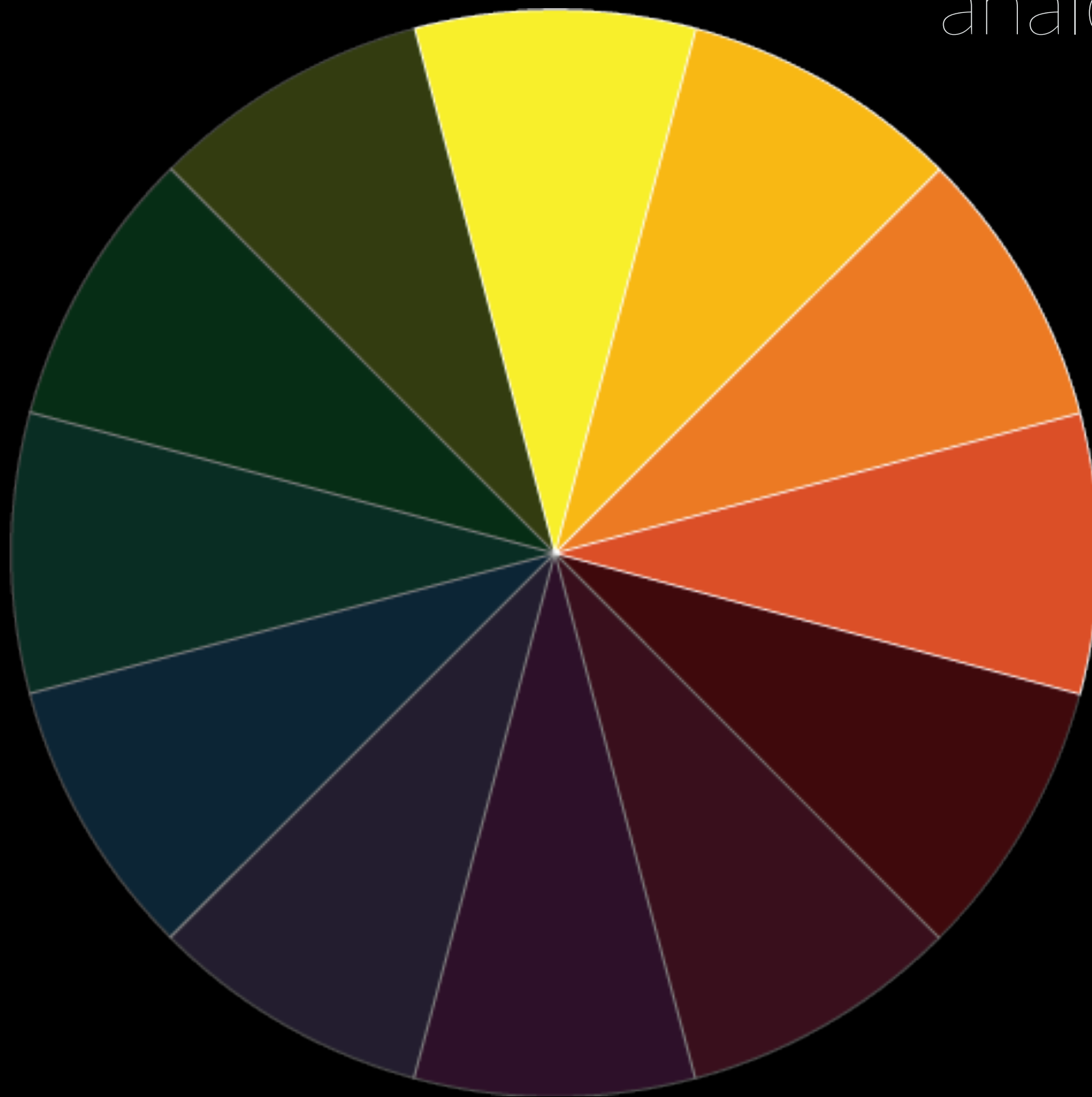


split complementary



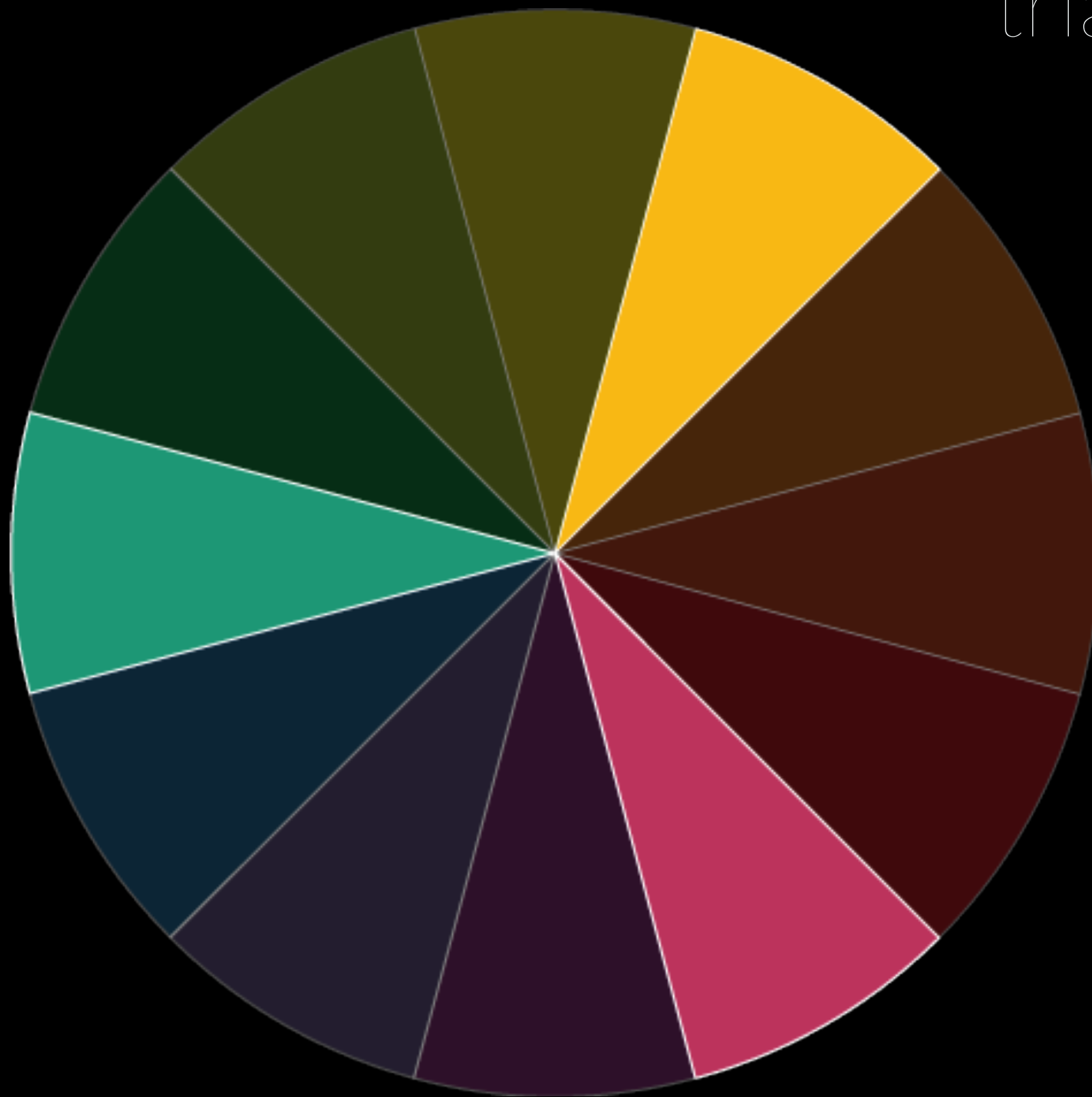


analogous





triad



5. Use color sparingly.

Obviously a paragraph that looks like this
is a really awful paragraph to have to read
and nobody wants to see a slide like this.



SNAPCHA!

motivate each other to discover the nooks and crannies of your neighborhoods

ELIZABETH CHA + DAVID GOLIGORSKY + ANTHONY SCHLOSS + PURIN PHANICHPHANT
E281 Media + Design / Spring 2010 / d.school / Stanford University

research & findings

IN THE TENDERLOIN, WE UNCOVERED BITS OF EVIDENCE

With every encounter, we wondered how these artifacts were connected to other things in the neighborhood.



A NEIGHBORHOOD IS A SOCIAL FABRIC — EVERYTHING IS INTERRELATED

How might we get others similarly inspired to discover new facets of their own surroundings?

A PHOTO INSPIRES DIFFERENT FEELINGS AND INTERPRETATIONS

It acts as a prompt that inspires people to look at the world around them and relate to it in a new way

prototyping

LEARNING BY PLAYING

We played different versions of our game by sending photos to one another via text message along with different cues, prompts and context

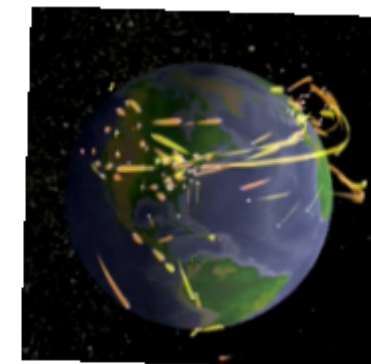
We also tried the game with different numbers of players, a range of time limits, different thematic constraints, and variations on player order

Each experience revealed new insights about how people understood our game and how players could introduce their own creativity to the game



NEIGHBORHOODS

Capture the hidden nooks and crannies of your neighborhood



CONNECTIONS

Contribute your photo to a global dialogue and see how far your string of photos has traveled around the world with the odometer



CREATIVITY

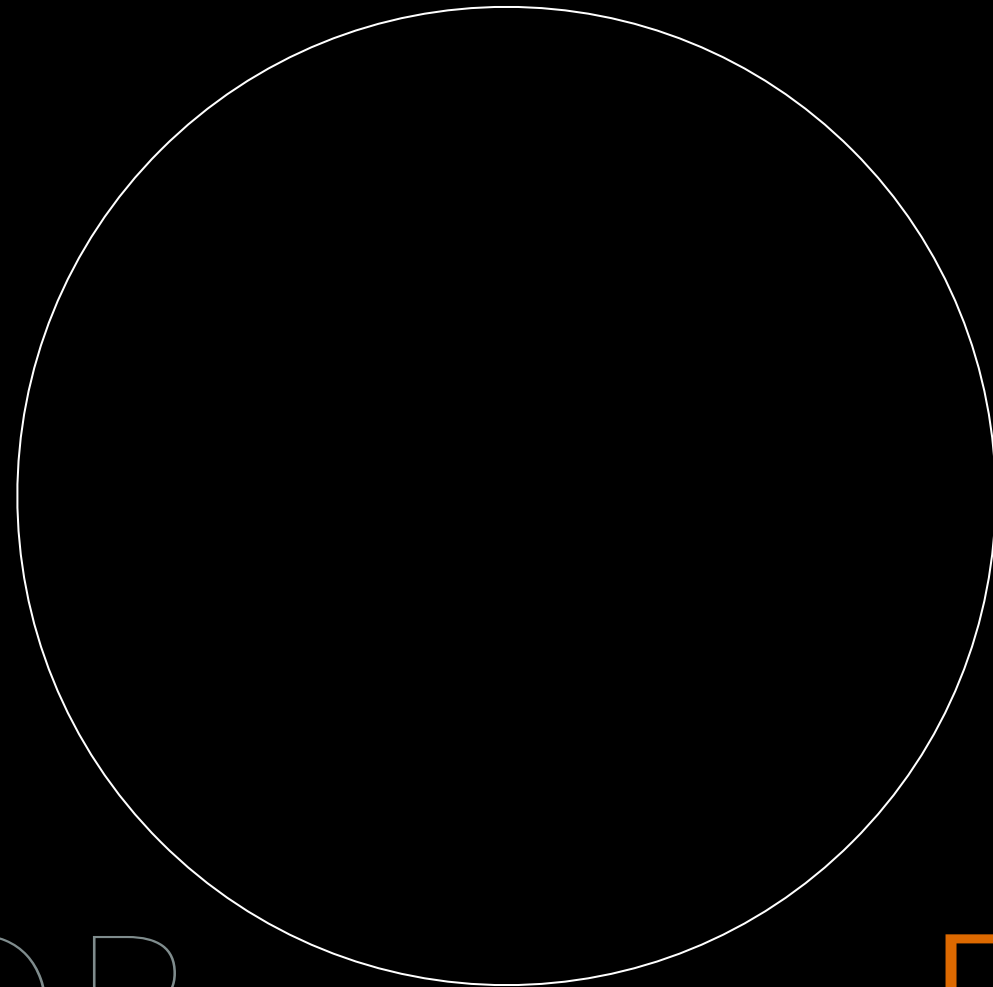
See how your image fits into a larger web of connections. Discover the visual poetics you've created with other players.



SNAPCHA! is a creative global dialogue of photos

Colors are perfect for making words **pop**. Don't use them frivolously. Most things can be done in monochrome.

LAYOUT



COLOR

FONT

6. Use beautiful fonts.

Here is some sample text. It's been set in **Lato**, a well-proportioned sans serif font produced by Google. The main strength of Lato is that it comes in many different weights. Here is some sample text. It's been set in Lato, a well-proportioned sans serif font produced by Google. **The main strength of Lato is that it comes in many different weights.**

Here is some sample text. It's been set in **Garamond**, a well-proportioned and classic serif font. Garamond is ideal for longer text documents. Here is some sample text. It's been set in Garamond, a well-proportioned and classic serif font. Garamond is ideal for longer text documents.

Here is some sample text. It's been set in **Klinik
Slab**, a bit of a hipster slab-serif font. Slab-serifs have chunkier serifs, creating a very readable and grid-like paragraph. Here is some sample text. It's been set in Klinik Slab, a bit of a hipster slab-serif font. Slab-serifs have chunkier serifs, creating a very readable and grid-like paragraph.

Here is some sample text. It's been set in
Comic Sans, a bit of a joke. **Please don't**
use Comic Sans. Here is some sample text.
It's been set in **Comic Sans**, a bit of a joke.
Please don't use Comic Sans.

7. Increase your leading.

Text with single leading is okay, but can be a bit difficult to read sometimes. This is especially true of longer paragraphs. Text with single leading is okay, but can be a bit difficult to read sometimes. This is especially true of longer paragraphs. Text with single leading is okay, but can be a bit difficult to read sometimes. This is especially true of longer paragraphs. Text with single leading is okay, but can be a bit difficult to read sometimes. This is especially true of longer paragraphs. Text with single leading is okay, but can be a bit difficult to read sometimes. This is especially true of longer paragraphs.

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Less than a year ago Y Combinator offered my friends and me the opportunity to pursue our startup by entering their program.

I wasn't required to leave college for good, I just had to take a single semester off. *But I knew myself.* I wouldn't be able to go back to the grind of classes after 8 months without them, regardless of the company's success. A temporary departure would really be permanent.

I discussed this decision with family, friends, and mentors. The verdict was split, so I sought advice online. After reading a number of articles, I noticed a distinct pattern in the results: millionaire and billionaire entrepreneurs espoused the virtues of spending your late-teens/early-twenties outside the classroom. "Founders don't need college," I heard again and again.

Conversely, every resource I encountered that urged me to stay in school had a different tone—a motherly one:

Thanks!