

# *Elemental*

A new way to look at the world, through the lens of photography



# *Overview*

**Elemental** is an interactive photography app that engages users in a photographic scavenger hunt. The goal of the scavenger hunt is for users to find **Elements of Art** (line, shape, value, color, texture, form, space), **Principles of Design** (pattern, contrast, emphasis, balance, rhythm, movement, unity, variety, proportion), **Lighting** (natural light, practical light, soft light, hard light), and **Compositional Strategies** (leading lines, rule of thirds, framing, point of view, symmetry, layering, depth of field) in their natural environment. Users then compose shots with the assistance of an augmented reality (AR) coach and wireframe overlays. The user can then submit photos to different threads (line, pattern, symmetry, etc.) where they receive comments via carefully curated phrases that encourage constructive feedback (e.g. “I like your composition,” “Super inventive use of line,” etc.). Other users can “upvote” the images and comments, allowing the user to accumulate comments and votes. In addition to accruing comments and votes, the reward for the user is to advance in levels by developing a complete portfolio in each category (see next slide).

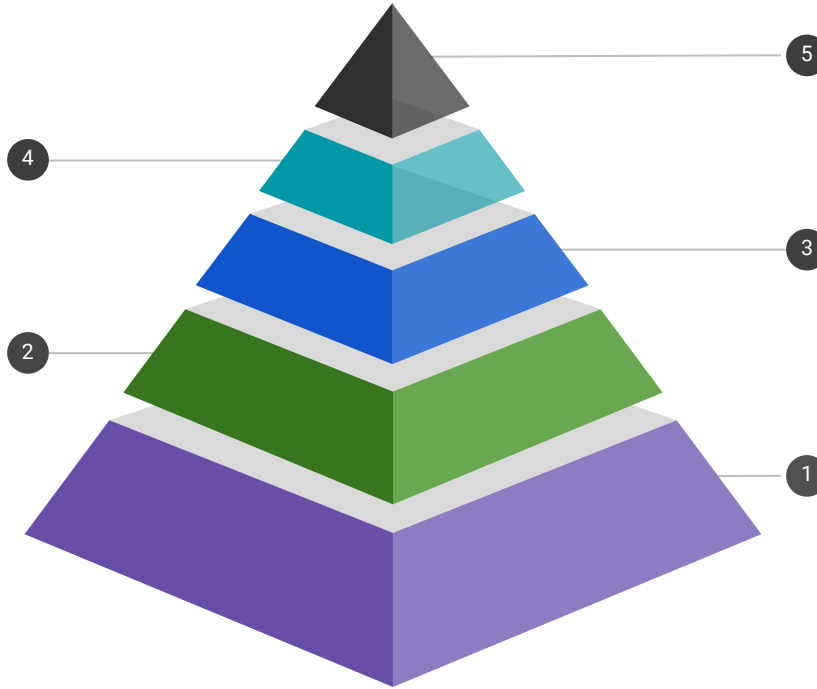
# *Hierarchy of the Game*

## **Lighting**

Natural Light, practical light, soft light, hard light

## **Compositional Strategies**

leading lines, rule of thirds, framing, point of view, symmetry, layering, depth of field



## **Story / Message**

Communicating a story or message with one image

## **Principles of Design**

Pattern, contrast, emphasis, balance, rhythm, movement, unity, variety

## **Elements of Art**

Line, shape, color, form, texture, value, space

*Examples*

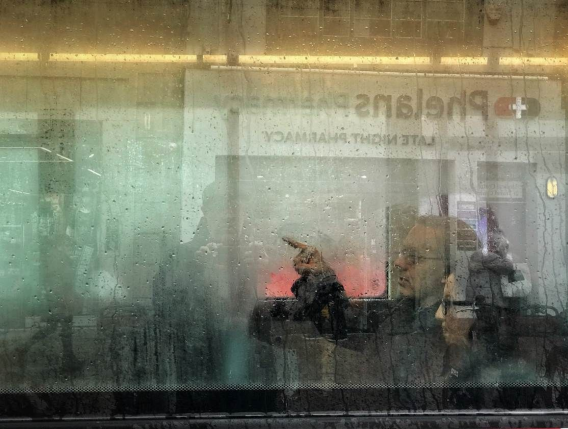
# Elements of Art

Line / Shape / Color / Form / Texture / Space / Value



# *Compositional Strategies*

Leading Lines / Rule of Thirds / Framing / Depth of Field / Symmetry / Layering / Point of View



# *Principles of Design*

Pattern / Contrast / Emphasis / Balance / Rhythm /  
Movement / Unity / Variety / Proportion



# *Lighting*

Hard Light / Soft Light / Natural Light / Practical Light





# Story / Message

Is it possible for an image to use the aforementioned elements, principles, and strategies to “tell a story”? Success or failure would be very subjective, and would rely upon the user community’s votes.

This image by William Eggleston makes me think of many stories: the loss of childhood, dinnertime on a summer night, looking at the world from the point of view of a child, the dream of suburbia.

The image uses the Rule of Thirds (the lawns create a horizon line between the top two thirds and lower third of the image), Depth of Field, Proportion, and Soft/Natural Light, and each has an affect on the viewer.



## *Can you tell a story in one image?*

In film school, students are often given an introductory assignment called “story to frame.” Provided with a tagline such as, “A story about the break up of a marriage,” the students must create a single composition that tells that story. They use the arrangement of people and objects within the frame, the color palette, the wardrobe, the lighting, the position of the camera, elements such as line and form, and point of view to communicate a message.

As you can see in the image on the right, a man and woman hold hands, bonded together, yet laying on what appears to be very thin ice - a metaphor for the impending break up of their relationship. Through compositional elements and choices in visual design, an artist can communicate a story with one image.

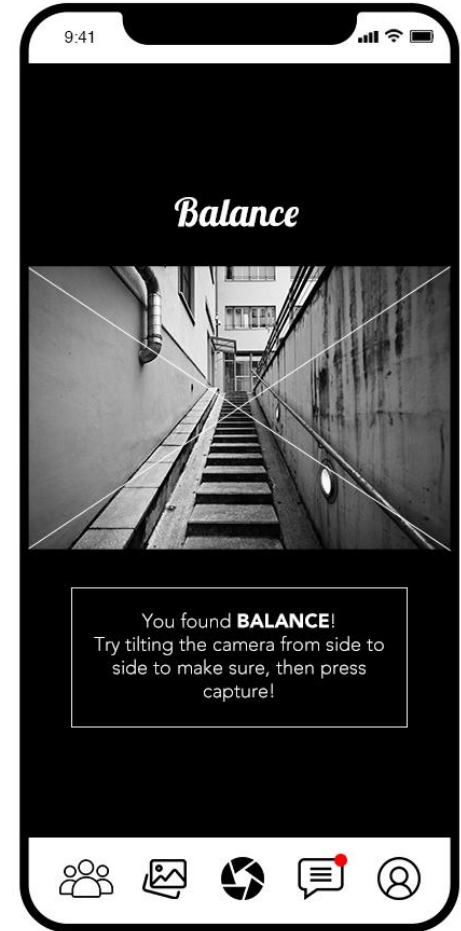
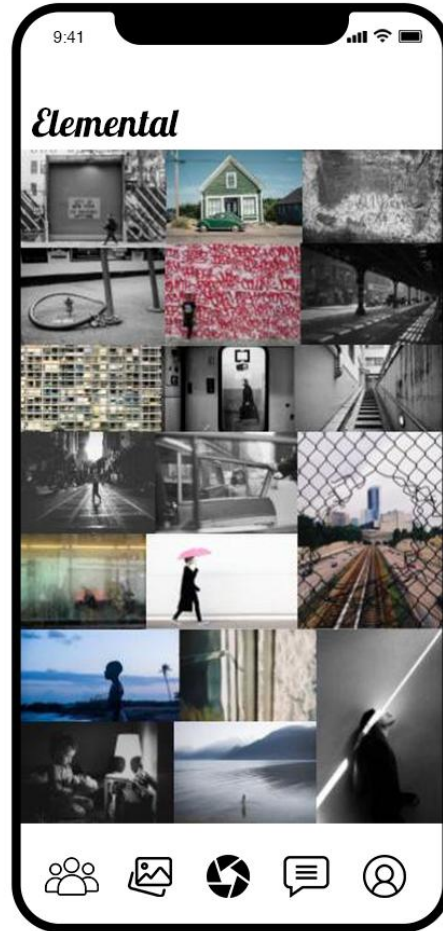


A dark, rainy night scene viewed through a window. The window is covered in raindrops and has a reflection of a person's face. In the background, a fire is burning brightly, casting a red glow. The text "Step 1: Composing the Shot" is overlaid in white, italicized font. The background also shows a sign that says "LATE NIGHT PHARMACY" and a sign that says "Pharmacy".

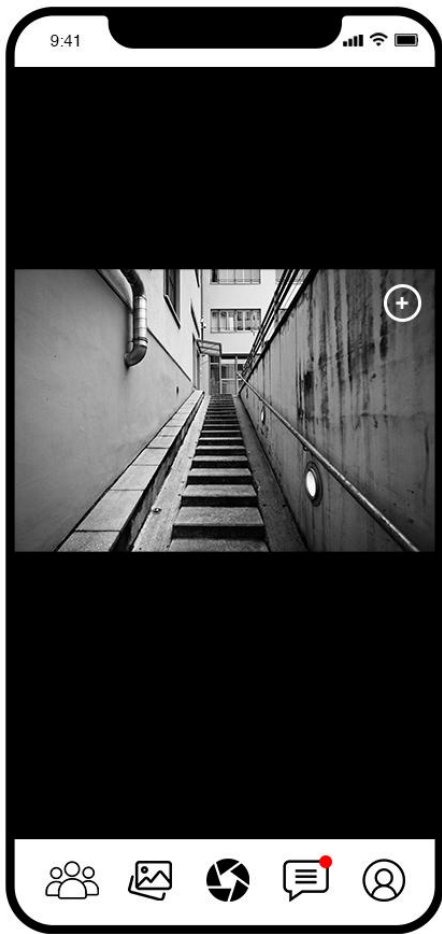
*Step 1: Composing the Shot*

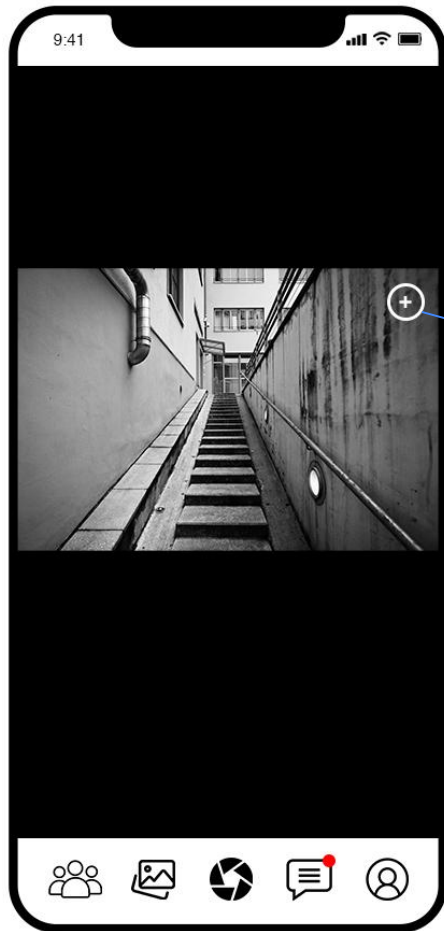
# Augmented Reality >> Wireframe Overlays

Through a visual scavenger hunt, the user finds an element in the world (balance, contrast, line, pattern, etc.) and frames their shot. They are then guided by an AR coach to help them find “balance,” “contrast,” “leading lines,” and so forth...



# Step 2: Uploading to a Thread



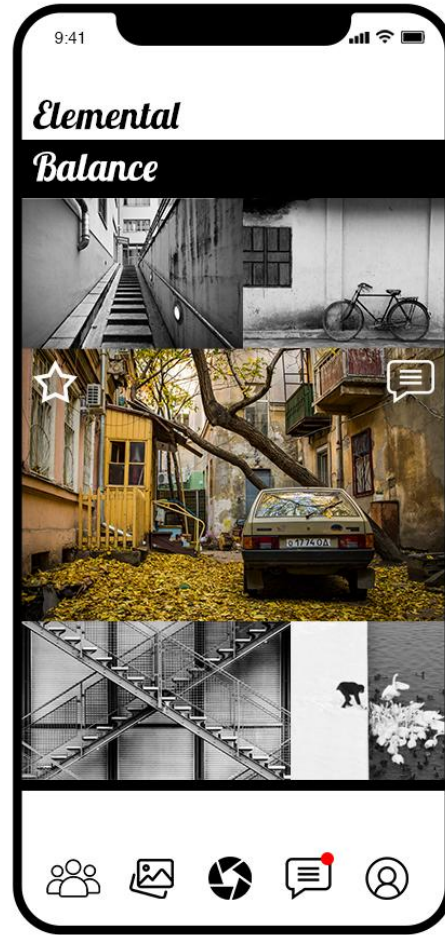


One tap on the image reveals the (+) symbol for adding the image to a thread

Depending on the element, strategy, or principle (e.g. Balance) the photo will be added to a page of recent uploads



# *Step 3: Engaging with the Community*



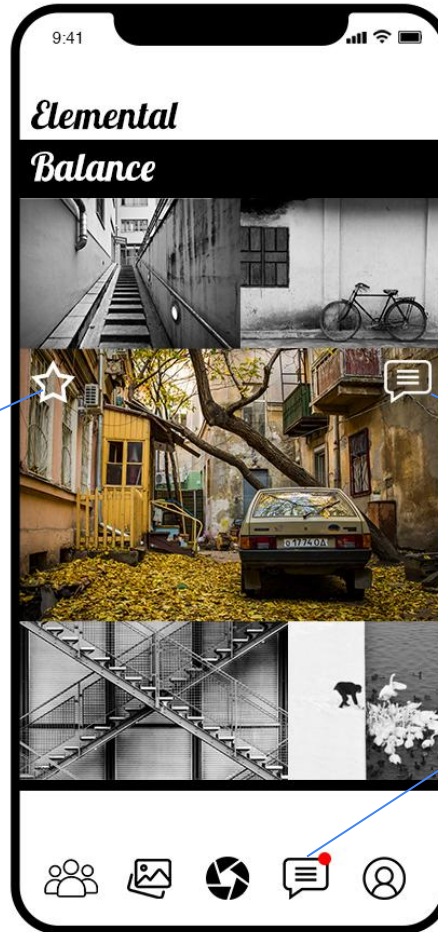
# User Engagement

## VOTES

Users can upvote photos by clicking on a star icon. Users can also upvote or agree with comments.

The goal is for the community to determine what is a **successful** use of the elements of art, principles of design, compositional strategies, lighting, or storytelling.

Comments and votes are one way that the user is rewarded for participation.



## COMMENTS

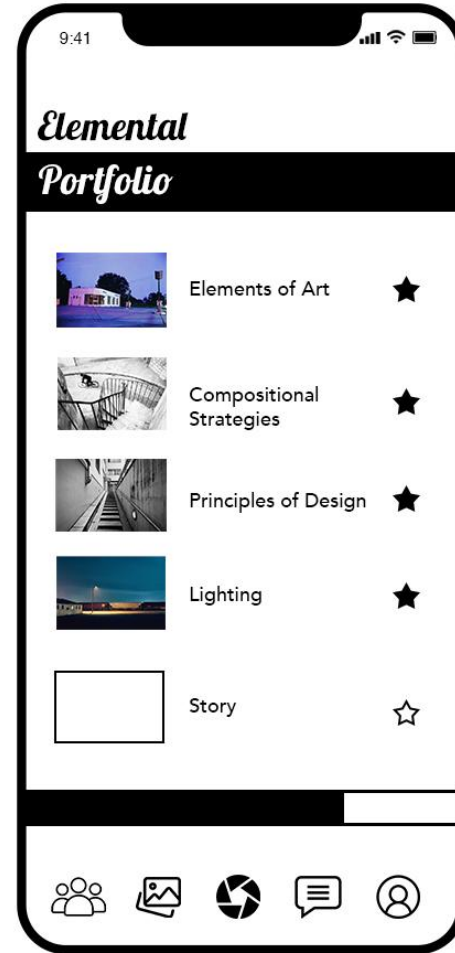
Users will be able to comment on each other's images, but only by using a curated list of options that encourage constructive feedback: *This is an inventive use of color, I like how the lines guide my eye, I feel a sense of balance...*

The rationale for this is that evidence has shown that harassment is all too common in social media, AR/VR, and multi-user games through discussion forums, chats, and comments.<sup>1</sup>

<sup>1</sup>Pew Research Center:  
[The State of Online Harassment](#)



# Step 4: Advancing in Levels

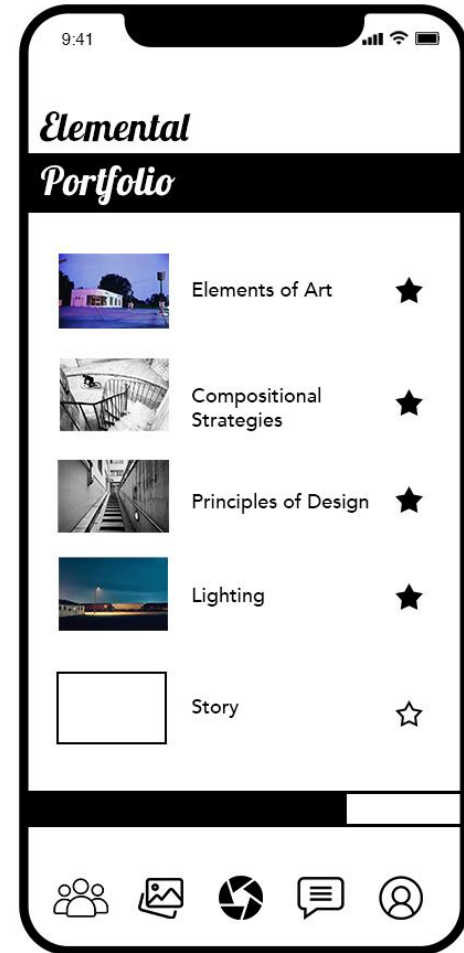


As noted earlier in the “Hierarchy of the Game” slide, a user can advance in levels through portfolio completion at each stage: **elements of art, compositional strategies, principles of design, lighting,** and finally, **story**.

The biggest hurdle in the design of this game/app:  
Who decides what counts as a good use of line or color or any of the elements, principles, or strategies?

While AI could determine if an image is using line, balance, color, etc., whether or not the user has used it *well* is up to the community. A user could advance in levels upon portfolio completion at each level, but in order to get “votes” and “comments” they ideally need to take strong photos. Finally, how will they know if they’ve communicated a story? In the final level, it is up to the community to decide, and an image *needs* to receive votes to qualify for the “Story” section of the portfolio.

A progress bar at the bottom of their portfolio page would show them how far they’ve come, and how much further they need to go.



# *Need for Project*

This app is informed by game design, social media, and AR/VR but is ultimately a learning experience in visual design through photography. It is what Instagram could have been. The goal of **Elemental** is for users to learn artistic techniques and strategies by taking photographs of the world around them. Through the “scavenger hunt” structure, users will “find” elements of art and principles of design in their everyday lives, therefore training their eye and cultivating an ability to look closely at their surroundings. Through the AR “coach” feature, users will be able to see patterns, balance, contrast, and more where they may have previously overlooked. The incentive is to level up through the portfolios, and receive votes and comments from the community as a reward. The community practices prosocial behavior by providing constructive feedback through curated comment options.

**An emphasis on composition, light, and story.** Studies have shown that beauty and fitness images on Instagram significantly impact a user’s perceived attractiveness, which correlates with anxiety, depression, low self-esteem, and body dissatisfaction (Sherlock & Wagstaff, 2019). **Elemental** shifts the emphasis from beauty *in* the image to the beauty *of* the image.

**An emphasis on interactivity, learning, and portfolio development.** New studies are indicating that basic behaviors on Instagram such as browsing and posting can also contribute to a depressed mood (Frison & Eggermont, 2017). The difference in **Elemental** is the interaction and intention of the user. This app is more about seeking out compositions in the real world, interacting with the community, and progressing through the stages. If you aren’t using visual communication effectively, you aren’t “playing the game.”

## *Theoretical Framework*

*Elemental* is a visual literacy tool. Scaffolding the elements of art, compositional strategies, principles of design, and lighting helps the learner develop a visual storytelling toolkit. Attending to the visual aspects of visual storytelling encourages learners to slow down, observe, and construct images with intention. Through exercises such as those outlined in *Elemental*, “students can learn to look closely (Berger, 1973) and draw on the metalanguage of design” (Williams, 2019).

## *Learning Standards*

From 1st-grade through high school, the National Core Standards in Media Arts suggest that students should be able to structure and arrange various content and components to convey purpose and meaning in different media arts productions, applying sets of associated principles, such as balance and contrast, point of view, emphasis, and so on. See [National Core Media Arts Standards, Creating, Anchor Standard 3](#).

*Target Audience* Aspiring, intermediate, or advanced photographers and students.

# *Reflection*

I struggle with game design, so I spoke with some Master's students from the Game Center about how to structure a game without points, that would be intrinsically motivating for the user. I wanted it to be a learning experience, but I didn't want to reduce the art of photography to a point system. They suggested that the community interaction could be the motivation, but that I needed to develop a way to "govern" the interactions so that they didn't descend into chaos or harassment. We came up with the idea of curated comments as a way to manage user interactions. I then thought of the hierarchy and portfolios as a way to structure the game. It is scaffolding in photography turned into "levels" in a game. I also have difficulty with new game design, AR/VR, and UX/UI software, so I ended up designing these mockups in Photoshop because I am more comfortable with it and have been using it for multiple decades.

# *References*

Frison, E., & Eggermont, S. (2017). Browsing, posting, and liking on Instagram: The reciprocal relationships between different types of Instagram use and adolescents' depressed mood. *Cyberpsychology, Behavior, and Social Networking*, 20(10), 603-609.

Sherlock, M., & Wagstaff, D. L. (2019). Exploring the relationship between frequency of Instagram use, exposure to idealized images, and psychological well-being in women. *Psychology of Popular Media Culture*, 8(4), 482-490

Williams, W. R. (2019). Attending to the visual aspects of visual storytelling: using art and design concepts to interpret and compose narratives with images. *Journal of Visual Literacy*, 38(1-2), 66-82.

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