Interactive Mood Boards to Teach User Experience (UX) Principles as Part of an Agile Methodology

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Abstract

A consideration of interactive mood boards using multimedia elements such as visual, video, and audio to help students understand core concepts of the user experience (UX) across a variety of web-based and mobile applications within the context of an Agile development process. Students consider the interplay of font, color, text, image, and other aspects of rich media experiences while designing for an 'accessibility first' mindset in consideration of issues like low-sight and color blindness. Students conclude with in-class presentations that simulate the integration of UX within an Agile development environment emphasizing 'just in time' iterative design to facilitate rapid deployment.

1 Overview of Interactive Mood Boards

The incorporation of User Experience (UX) methodologies into a lean or Agile approach to software development is not a new concept. Shamp Winstel [1] and others typically focus on personas, wireframes, and prototypes as central artifacts to those processes. While this paper does not argue against any of those uses, a 'just in time' approach to UX would also suggest that development teams need specific artifacts and design standards to begin their work. Those artifacts, which may include logos, images, and font treatments (to name a few), are best exemplified through the use of media rich mood boards.

This paper contends that the most useful mood boards not only include those elements, but also begin the work of developing robust information for the overall user experience—often employed through the separate development of personas. While Getto and Flanagan [2] have effectively argued for the amplification of user agency, advocacy, and accountability through the use of personas, this paper argues that in a lean UX environment, thoughtfully constructed mood boards even further extend the notion of user agency to accommodate for additional user needs centered around accessibility and control starting from the beginning of the design and development process.

The word *interactive*, framed through a lens of accessibility, therefore, foregrounds issues associated with limited motor skills, sight, and other issues in designing accessible user experiences in a lean UX environment. More as a matter of practicality, this paper, and assignment, focused on low and varied experiences with sight to illustrate how accessibility issues may be incorporated into mood board design.

1.1 Learning Outcomes

Interactive mood boards that accommodate for accessibility issues are a multilayered, complex assignment for students because the assignment requires that students understand and can demonstrate:

- basic elements of a traditional mood board including fonts, images, and color.
- relationships between those elements in bringing together a cohesive, consistent user experience, rather than merely a collection of design artifacts and concepts.
- development of a mood or theme, consistent with a brand and user experience.
- appropriate and consistent development of that experience for individuals with as varied experiences and abilities (as evidenced through attention to accessibility) as reasonably practical.
- negotiation skills in providing, and accepting, feedback to other members of their design teams.
- communication skills necessary to convey those design decisions and recommendations to the development team and other key stakeholders.

1.2 The Assignment

The core assignment for interactive mood boards starts deceptively simple in the requirement to:

1) Create a mood board based on a song lyric, poem, or selection from another creative piece of your choosing.

This assignment is designed intentionally to ask students do something different from what they are accustomed to in most software analysis and design classes: there is no client or simulated business case in the prompt. The goal is to also simplify at least some aspects of this assignment by allowing students to start with something of interest to them, rather than a piece of software, a brand, or other business problem that may only add un-necessarily to the complexity of the task at hand.

Figure 1 provides an example of a solution that meets the first requirement of the assignment and includes all of the elements one might expect of a typical mood board: font families, sizes, text treatment, imagery, and color palettes (for example).

Figure 1: Sample Mood Board

The second part of the assignment:

2) Your mood board should consider accessibility best practices and also include at least one aspect or approach you believe is unique, but useful, to your mood board.

In past teaching experience, a combination of Sharp, Preece, and Rogers [3], and Rosenfeld, Morville, and Arango [4] provide more than sufficient background in helping students learn the basics of mood board creation. However, as is often the case, while textbook examples are useful in teaching basic principles, they are by nature poorly suited to specific application in the real-world. The two-fold design of the assignment is intentional in ensuring that students first understand the basic structure and use for a mood board in setting a design direction for the development team before secondarily understanding how to adapt it situationally to specific user needs—whether through general accessibility principles, incorporation of multimedia elements or other atypical requirements.
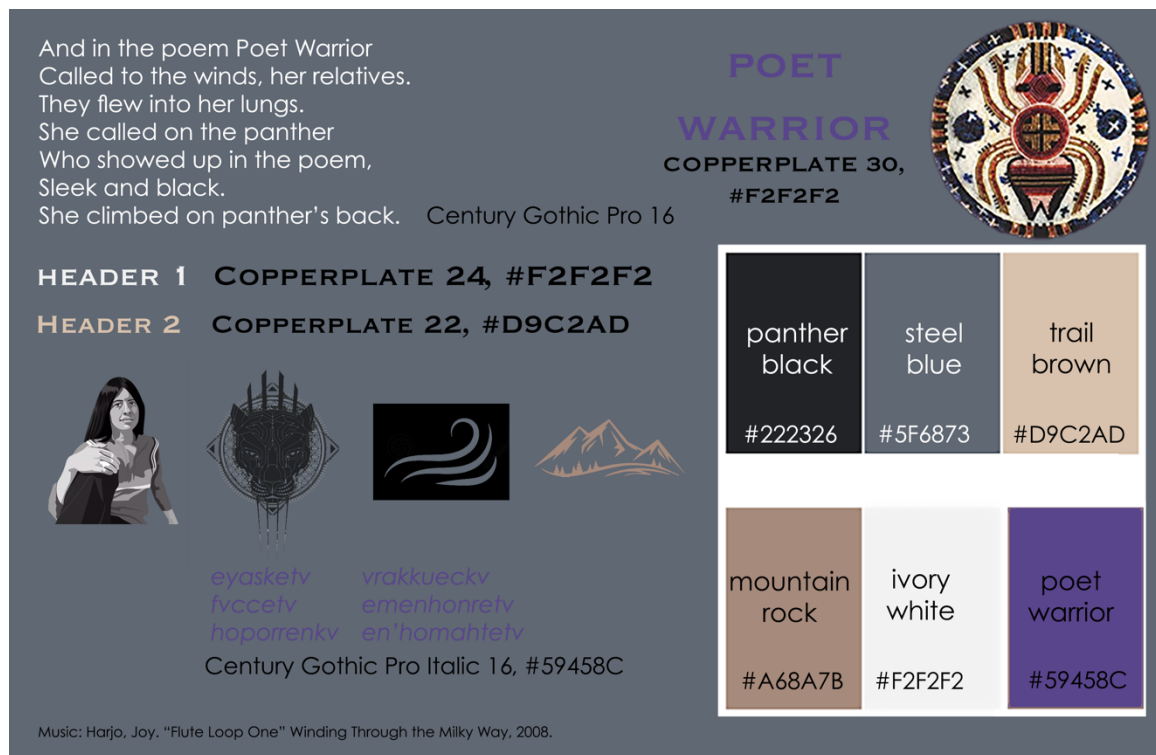

Figure 2: Interactive Mood Board – Base Design

It is difficult to represent some of the multimedia and interactive elements of a mood board in a print paper, however, Figure 2 includes a foot note acknowledging that it includes a song from Joyce Harjo's "Flute Loop One" that auto-plays when the mood board is opened. The piece is essential to the essence of the mood board because, in Harjo's own autobiographical words, "musicians here what can't be heard" (p. 145) [5] and is cornerstone to understanding her self-described work as poet, storyteller, and musician.

While students found ways to stretch the boundaries of the artifacts one might include in mood boards beyond iconography, images, color palettes, and logos to music and video, the project also encouraged them to use the mood boards as an early space to plan for accessibility. Grayson [6] and others have advocated for an "Accessibility-First" approach; however, those recommendations often suggest early usability testing as the solution.

While usability should not be overlooked, it is also a time-consuming and expensive process that may also not be appropriate in the early stages of a project.

By contrast to usability testing, the mood board offers an even early opportunity for students and designers to begin thinking about how their design choices impact accessibility in advance of more formalized testing methodologies. Figure 3 offers just one example of testing for deuteranopic colorblindness on the elements from a mood board in advance of more formalized user testing. It is not intended to serve as the only possibility for early design work in accessible design and testing, but to illustrate the potential. It was also selected because of the relative ease of testing: many common design software applications and third-party web sites facilitate testing for a variety of ways in which color blindness might manifest itself. In considering Figure 3, early testing points to potentil issues with muted colors and lower contrast with some of the color choices in the mood board. The test and the mood board don't themselves, evaluate or solve those issues but offer the design and development teams early insight into design challenges they will need to consider as they move their work forward.

And in the poem Poet Warrior
Called to the winds, her relatives.
They flew into her lungs.
She called on the panther
Who showed up in the poem,
Sleek and black.
She climbed on panther's back.   Century Gothic Pro 16

POET WARRIOR
COPPERPLATE 30,
#F2F2F2

HEADER 1 COPPERPLATE 24, #F2F2F2
HEADER 2 COPPERPLATE 22, #D9C2AD

eyasketv   vrakkueckv
fvccetv   emenhonretv
hoporrenkv en'homahtetv
Century Gothic Pro Italic 16, #59458C

Music: Harjo, Joy. "Flute Loop One" Winding Through the Milky Way, 2008.

panther black	steel blue	trail brown
#222326	#5F6873	#D9C2AD

mountain rock	ivory white	poet warrior
#A68A7B	#F2F2F2	#59458C

Figure 3. Interactive Mood Board – Deuteranopia Perspective

In this assignment, students additionally focused their mood boards on other aspects of design not typically considered in mood boards that included:

1) representation of non-Western language alongside English language.
2) video.
3) virtual reality interfaces.
4) advanced media players; and
5) atypical design through experimentation with color and negative space.

Figure 4 illustrates one mood board that employed a variety of experiments with color, typography and use of white space that violated many of the established norms for UX design. This is not an insignificant point: asking students to be creative with their mood boards in this manner requires an additional level of explanation, through an oral presentation and written retrospective. Both are opportunities for the student to express intentionality in their work that extends beyond a mere desire to "break the rules". Both are also an essential reason for including oral presentations, one-on-one meetings with the instructor and a final retrospective as part of the design process. Additionally, the grading heuristic also balances the requirements for demonstrating a base level of competency with an understanding of the broader contexts in which UX functions in the development process.

Figure 4. Alternative Control Structures, Design Spaces, and Use of Design

1.3 Oral Presentations

A vital aspect of UX design is the presentation of one's work in a variety of institutional settings, and that often starts with one's peers and immediate supervisor. Prior to the oral presentations, students were given the opportunity to practice providing each other with feedback using an online discussion forum in Canvas, our online learning management system (LMS). The discussion was less formal, and lower stakes (from a grading perspective) than the final oral presentation.

Oral presentations of the mood boards for this assignment were short, five-to-seven-minute opportunities for students to present their work in class and construct an oral argument in support of their choices. The presentations were required to include multiple sources, justifying their design decisions, and involved a brief period for questions and feedback from their peers and the instructor.

It is worth noting that students were given the opportunity to then revise their mood boards, based on this presentation and peer review, before turning them in for final grades. The last time this assignment was used in a UX course, roughly half of the students revised their work before final submission.

1.4 Grading Heuristic and Design Retrospectives

The final grading heuristic for the mood boards (not the final presentation) is offered in the Appendix. It includes grading standards for a variety of aspects of this assignment including:

1) Demonstrating an understanding and corresponding implementation of basic mood board components (Fonts, Images and Other Supporting Elements). 60% of grade
2) Providing active and substantive peer review on each other's work (Discussion Posting and Discussion Response), and in an informal one-on-one feedback session with the instructor. 20% of grade
3) Explaining, in writing, the research and rationale they employed across the entire design process employed in their mood boards (Overall Synthesis and Design Rationale). 16% of grade
4) Innovating in at least one aspect of their mood board design (Unique Approach). 4% of grade

It is worth noting that the student's explanation of their research and rationale (item 3, above) accounted for 16% of their final grade, emphasizing the importance of the student-designer's ability to explain the reasoning behind their work. Every student completed this work to varying degrees of success.

Additionally, 4% of the final grade was available based on the student's attempt (item 4, above) at innovating, with 2% awarded for the attempt, and the remaining 2% for relative success. All but one student at least attempted something unique and innovative with their mood board.

1.4 Broader Considerations and Next Steps

The combination of structured feedback from peers and the instructor helped to establish a level of trust that facilitated a space for students to simultaneously demonstrate the basic competencies required in creating a mood board as part of a broader UX design process, while also experimenting with more interactive and multi-media-oriented aspects of those mood boards. It also introduced students to the notion that it is not only possible, but desirable, to begin the design process with a consideration of accessibility issues—as opposed to leaving them to the end of the process.

Future assignments might consider:

1) Additional accessibility topics beyond researching aspects of color blindness, and low vision in UX design; and
2) The application of principles in a business, rather than a more purely creative, setting as they might apply to issues of brand and image.
3) Integration of mood boards into a more complete, Agile UX design process.

Nevertheless, students demonstrated competency in using a mood board to simultaneously deliver key artifacts (logos, fonts, color palettes) in an efficient manner that would allow Agile development teams to begin early development efforts while also using those same mood boards as an opportunity to creatively explore those same design elements from a variety of other perspectives and technologies (multiple languages, multimedia, and through the lens of accessibility).

References

[1] Bonnie J. Shamp Winstel. 2014. "UX for Lean Startups: Faster, Smarter, User Experience Research and Design." *Technical Communication*, *61(2)*, page 134.

[2] Guiseppe Getto and Suzan Flanagan. Nov. 2022. "Localizing UX Advocacy and Accountability: Using Personas to Amplify User Agency." *Technical Communication, 69 (4)*, pages 97-113.

[3] Helen Sharp, Jennifer Preece, and Yvonne Rogers. 2019. *Interaction Design: Beyond Human Computer Interaction*. (5th Ed). New York: Wiley.

[4] Louis Rosenfeld, Peter Morville, and Jorge Arango. 2015. *Information Architecture for the World Wide Web*. (4th Ed.). Sebastopol: O'Reilly.

[5] Joy Harjo. 2021. *Poet Warrior: A Memoir*. New York: WW Norton.

[6] Kathryn Grayson Nan. Jan. 2022. "Rethinking Tech Design with an Accessibility-First Approach." *eWEEK*.

Appendix 1: Grading Heuristic

Criteria	Ratings		
Discussion Posting	5 pts – Full Marks Contributed discussion post that included both the item for your mood board, and reason for selecting it	3 pts – Meets Missing reason for selecting or not enough detail on the item selected	0 pts – No Marks Did not complete, or did not complete on time.
Discussion Response	5 pts – Full Marks Contributed a response that offered feedback or suggestions that were actionable and thoughtful.	3 pts – Meets Contributed a response, but with little meaningful or actionable contribution.	0 pts – No Marks Did not complete, or did not complete on time.
Fonts	10 pts – Full Marks Font treatment, as appropriate, provided examples for body, headings, links and other elements, including meta-data (font family, size, weight, color, etc.). If an element is not included, mention why in your design rationale.	5 pts – Meets Fonts may be missing meta-data font family, etc.) or may not support overall approach.	0 pts – No Marks Fonts missing with no rationale.
Images	10 pts – Full Marks Images, illustration, and textures, as appropriate, and consistent with the overall mood or theme of your board. If this	5 pts – Meets Visual elements may be missing or inconsistently support your mood board.	0 pts – No Marks Images missing with no rationale.

	element is not included mention why in your design rationale.		
Sample Text and Other Supporting Elements	10 pts – Full Marks Sample text should be supportive and evocative of your mood board. If an element is not included mention why in your design rationale.	5 pts – Meets Sample text and/or other supporting elements may be missing or inconsistently support your mood board.	0 pts – No Marks Sample text and support elements are missing.
Overall Synthesis and Design Rationale	8 pts – Full Marks All elements of your mood board cohesively, and thoroughly support the piece of creative work that you selected.	4 pts – Meets Elements may work fine as stand-alone elements, but may not fully come together as a mood board.	0 pts – No Marks Either missing mood boards, or mood boards that appear to be collages rather than an effort at a cohesive piece.
Unique Approach	2 pts – Full Marks Your mood board contains at least one element not seen elsewhere in another mood board.	1 pts – Meets You found an element at least rarely employed in another mood board.	0 pts – No Marks Not attempted.