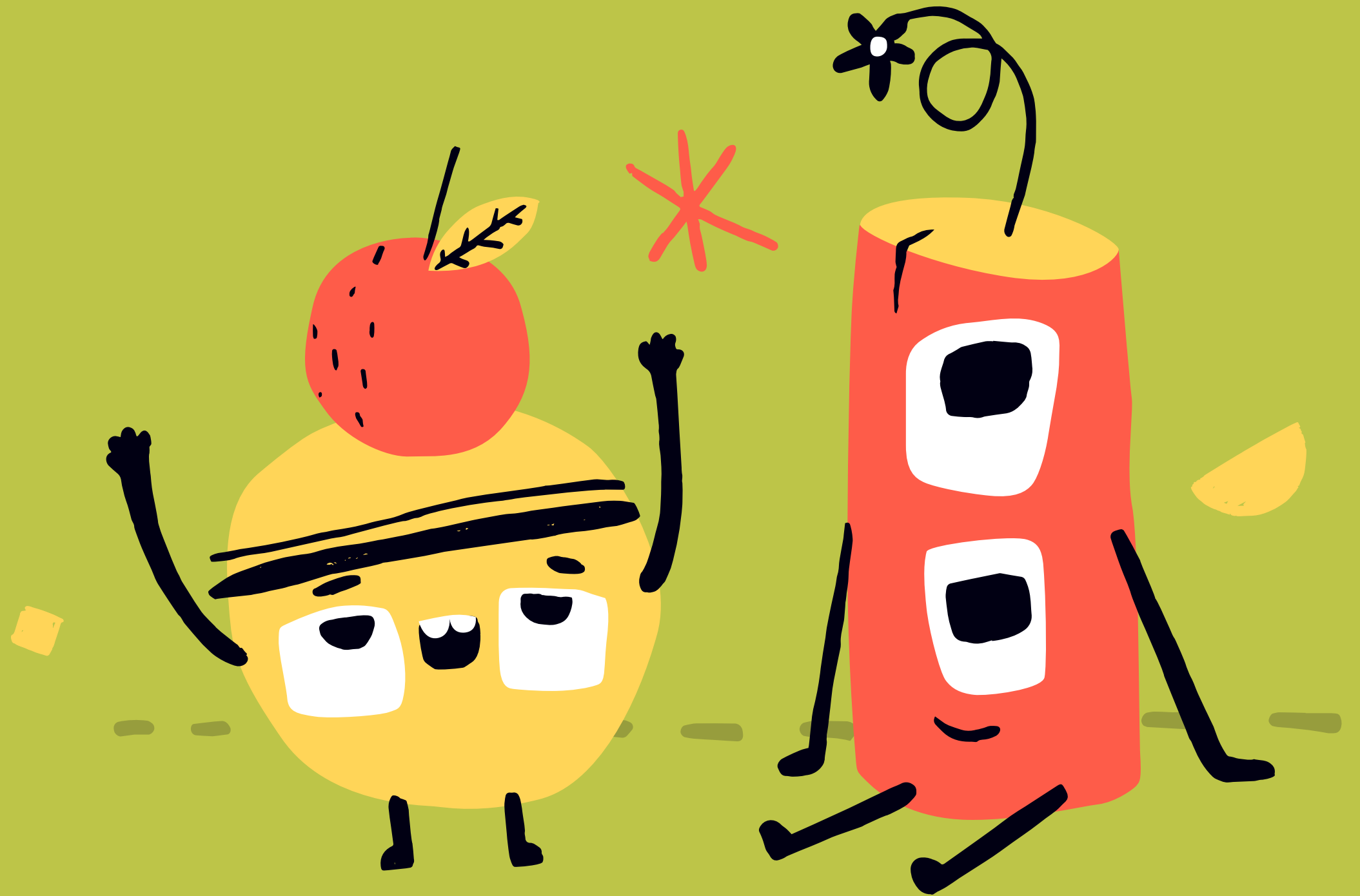


DAVIS PUZZLE

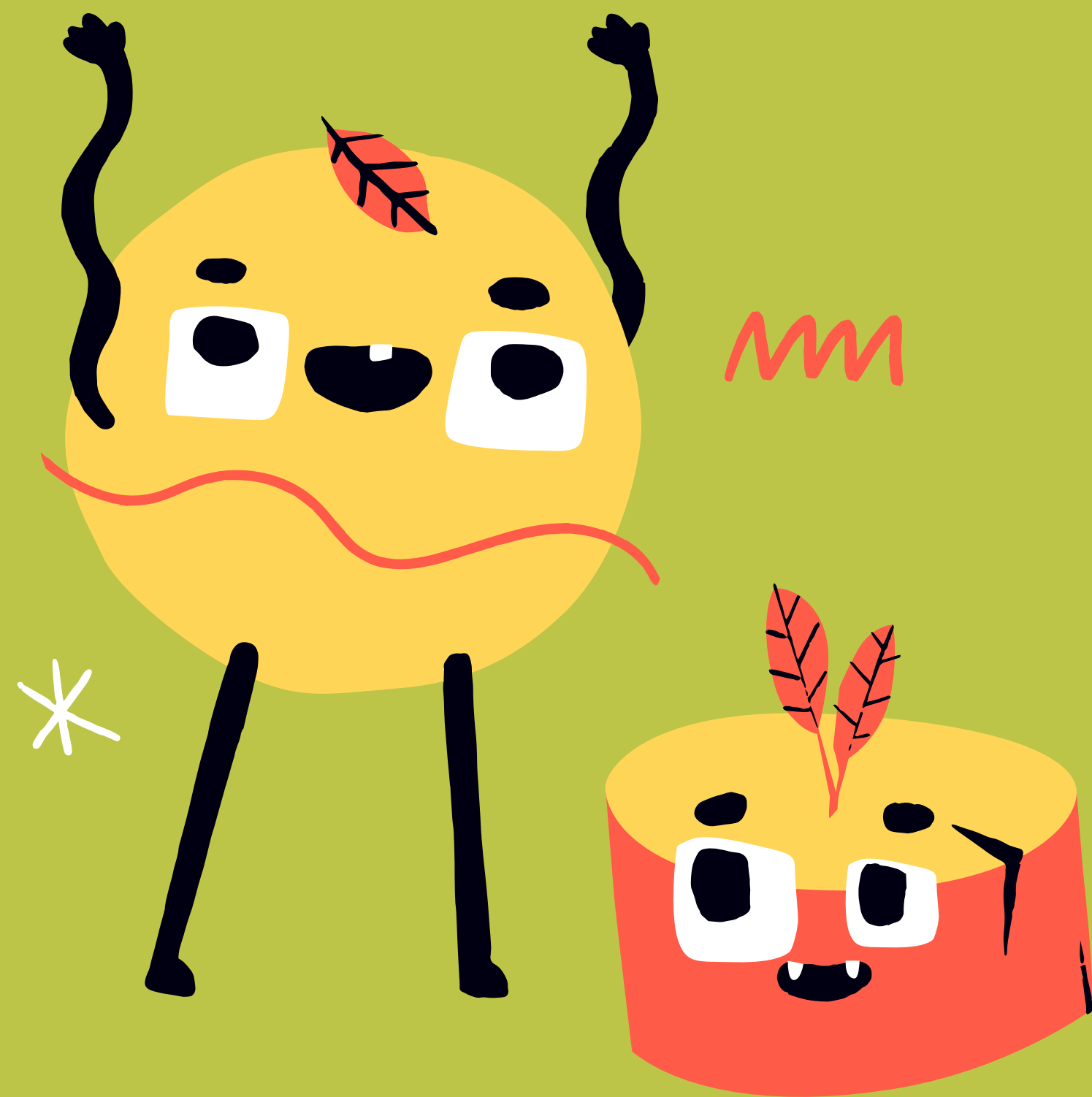
des157b | hannah lei





design challenge

**How can we provide an engaging, memorable platform
for a younger audience to learn about Davis history and
the Centennial Seal?**

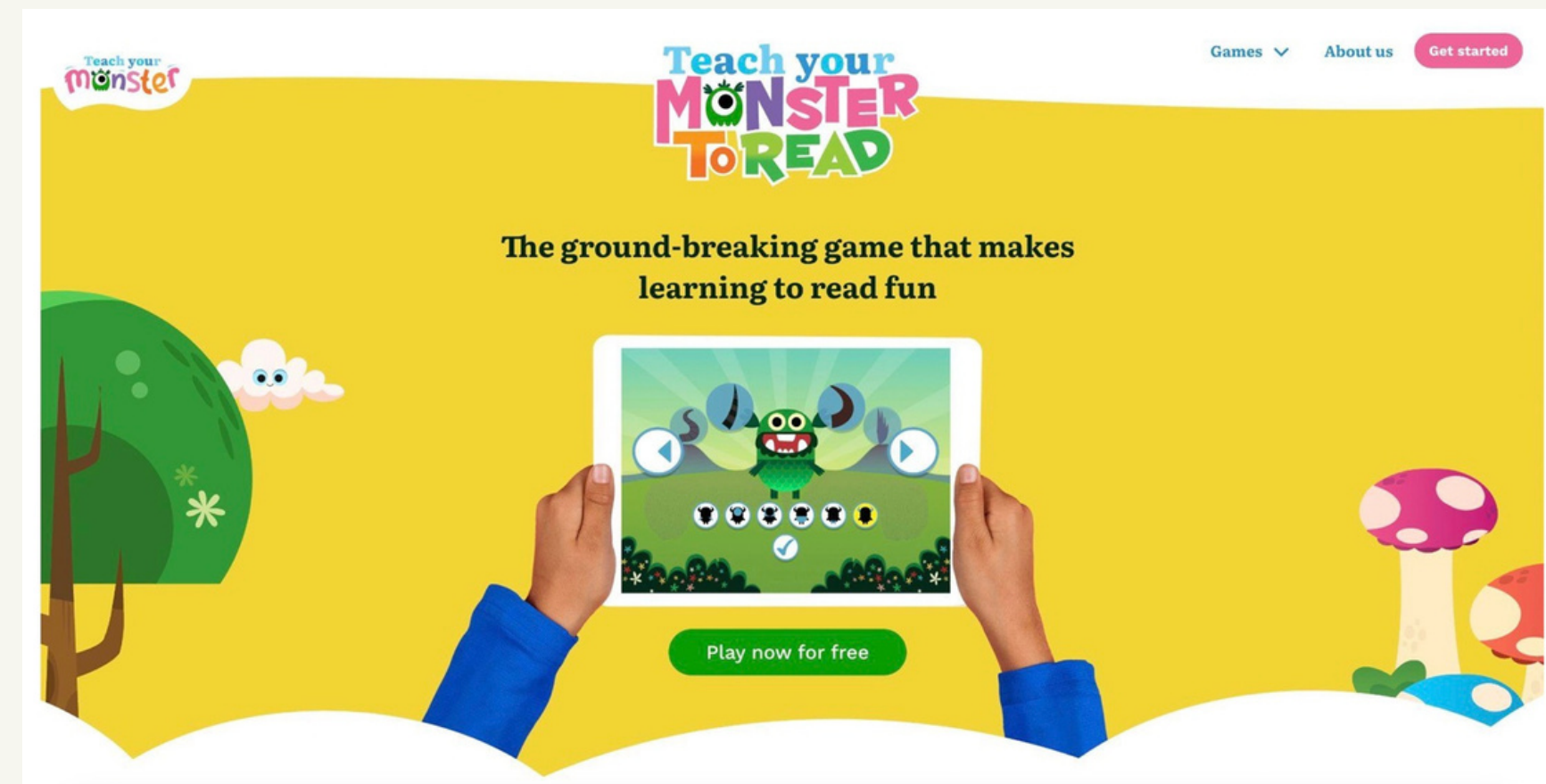
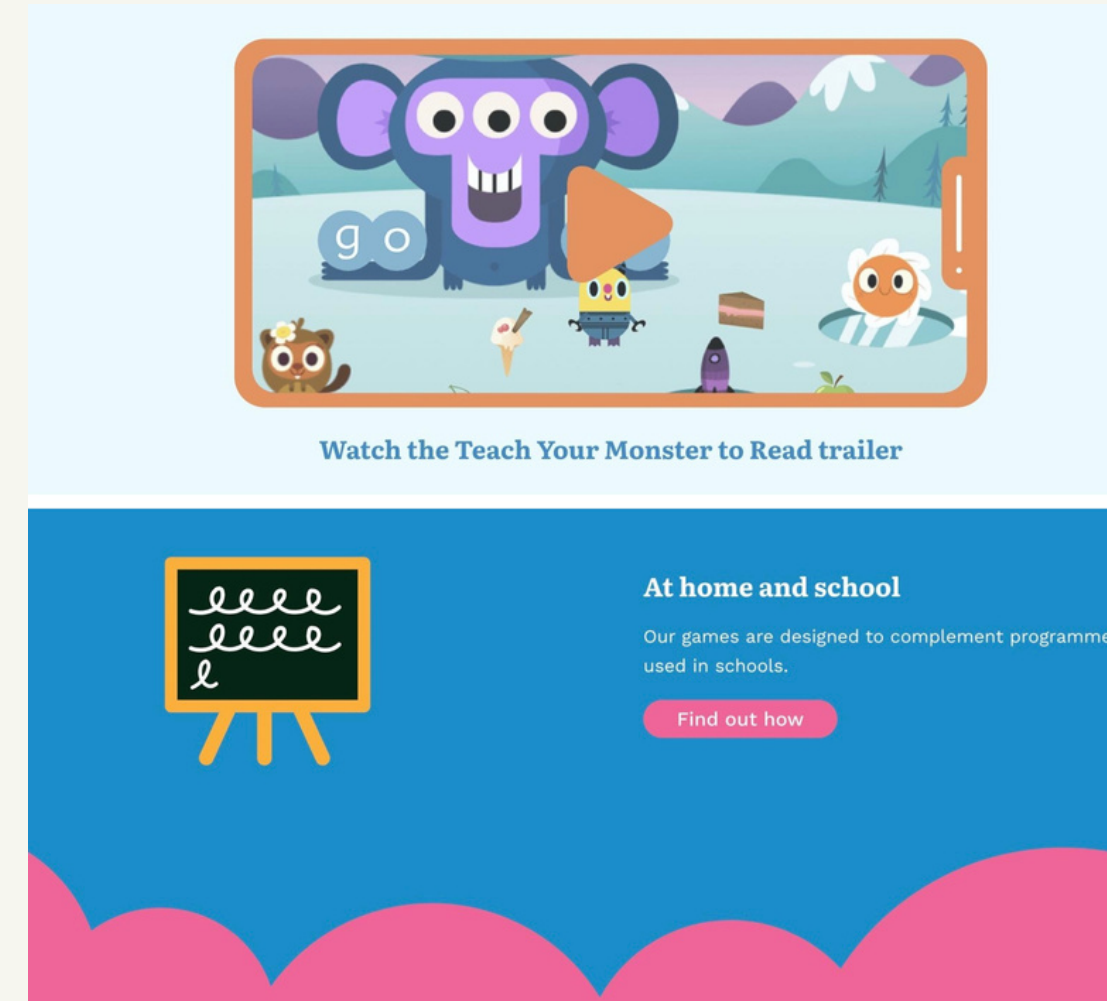


RESEARCH

background research

COMPARATIVE ANALYSIS

- Visual commonalities: lots of bright colors, bubbly icons and characters
- Cute bouncing and celebratory animations to click and reward kids
- Simple game concepts, with quick rewards
- Very visual learning. Short and concise writing and directions





Annotated Bibliography: Capstone Project

Capstone Project

Hannah Lei | DES157B



1. **Exploratorium.edu.** Exploratorium, (<https://www.exploratorium.edu/>): This website is an interactive science museum that provides online exhibits and activities. The website has a section on local history, which includes information on the history of San Francisco, where the museum is located. The website's content is informative, engaging, and interactive. It provides a benchmark for my website's content and presentation.

2. **Cityofdavis.org.** City of Davis, (<https://www.cityofdavis.org/>): This website is the official website of the city of Davis, California. The website has a section on the city's history, which includes information on the Centennial Seal. The website's content is informative and well-organized. It provides a benchmark for my website's content.

3. **History.com.** A&E Television Networks, (<https://www.history.com/>): This website is a history channel that provides information on various historical events and figures. The website's content is comprehensive and engaging, with articles, videos, and interactive features. It provides a benchmark for my website's content and presentation.

4. **Brainpop.com.** BrainPOP, (<https://www.brainpop.com/>): This website is an educational platform that provides short animated videos on various topics, including history. The website's content is engaging and tailored to elementary school children. It provides a benchmark for my website's presentation and engagement with elementary school children.

5. **Smithsonianmag.com.** Smithsonian Magazine, (<https://www.smithsonianmag.com/>): This website is the online version of the Smithsonian Magazine, which covers various topics, including history. The website's content is informative and engaging, with articles, videos, and interactive features. It provides a benchmark for my website's content and presentation.

6. **Nationalgeographic.com.** National Geographic Society, (<https://www.nationalgeographic.com/>): This website is the online version of National Geographic, which covers various topics, including history. The website's content is comprehensive and engaging, with articles, videos, and interactive features. It provides a benchmark for my website's content and presentation.

7. **Kids.nationalgeographic.com.** National Geographic Society, (<https://kids.nationalgeographic.com/>): This website is a section of the National Geographic website that provides educational content for kids. The website's content is engaging and tailored to elementary school children, with articles, videos, and interactive features. It provides a benchmark for my website's engagement with elementary school children.

background research

ANNOTATED BIBLIOGRAPHY

Incorporate interactive elements: Use interactive features such as puzzles, games, or quizzes, to actively engage children and enhance their learning experience

Utilize multimedia content: Include variety of multimedia elements like videos, animations, and interactive graphics to make learning more visually appealing and informative

Provide clear and organized information: Ensure that content is presented in a structured, easy-to-understand manner, allowing children to navigate through material effortlessly and absorb key concepts effectively

user research

USER PERSONAS

ETHAN

Age: 8

Grade: 3rd

Favorite Subjects: PE, Art

Hobbies: Soccer, drawing, playing tag with friends

Learning Style: Hands-on activities

Personality Traits: Outgoing, energetic, creative

Favorite Games: Sports games, drawing apps, racing games

Tech Skills: Moderate - uses tablet for games and schoolwork

Challenges: Struggles with sitting still for long periods, gets bored easily with plain texts

BELLA

Age: 9

Grade: 4th

Favorite Subjects: Reading, History

Hobbies: Reading, writing stories, playing with her cat

Learning Style: Verbal (written/spoken)

Personality Traits: Quiet, imaginative, curious

Favorite Games: Word games, trivia, animal-themes

Tech Skills: High - likes ebooks and learning apps

Challenges: Fast-paced or competitive games, prefers relaxed learning environment

MIA

Age: 10

Grade: 4th

Favorite Subjects: Math, Science

Hobbies: Building legos, solving puzzles

Learning Style: Logical (likes reasoning, systems)

Personality Traits: Logical, competitive, focused

Favorite Games: Puzzles, strategy, learning games

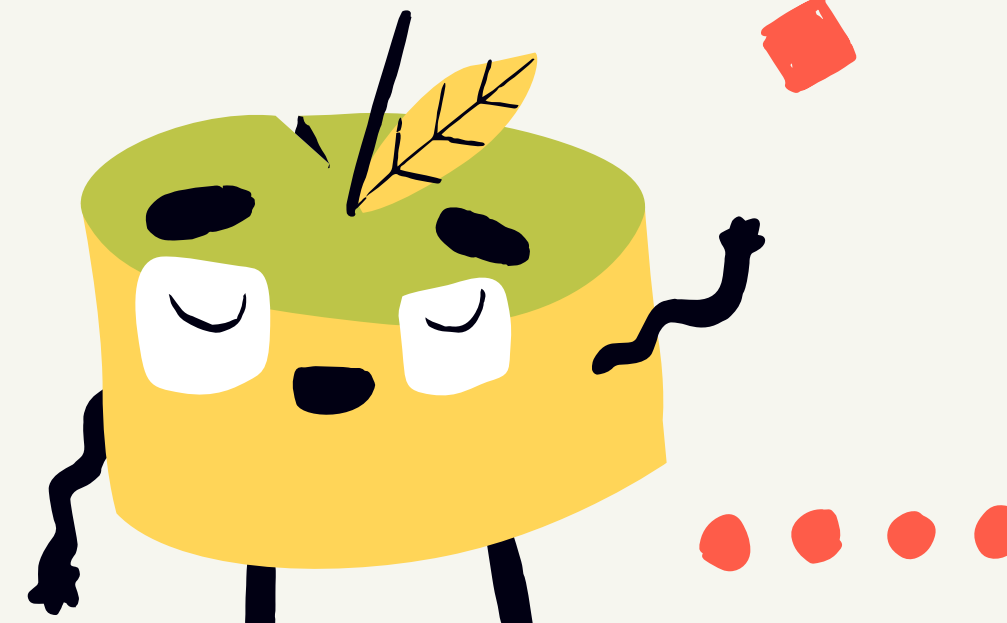
Tech Skills: Moderate - likes interactive learning tools

Challenges: Can become frustrated if the learning content is unclear in structure or goals

USER INTERVIEWS

- Prefer dynamic interactive games like challenges/missions. They want to make decisions and see the impact.
- Described earning something new and interesting in the games. Education about Davis should be integrated in a way that is fun and interesting, not overtly academic.
- Reward systems and achievements are a MUST. All were super excited and motivated by these.

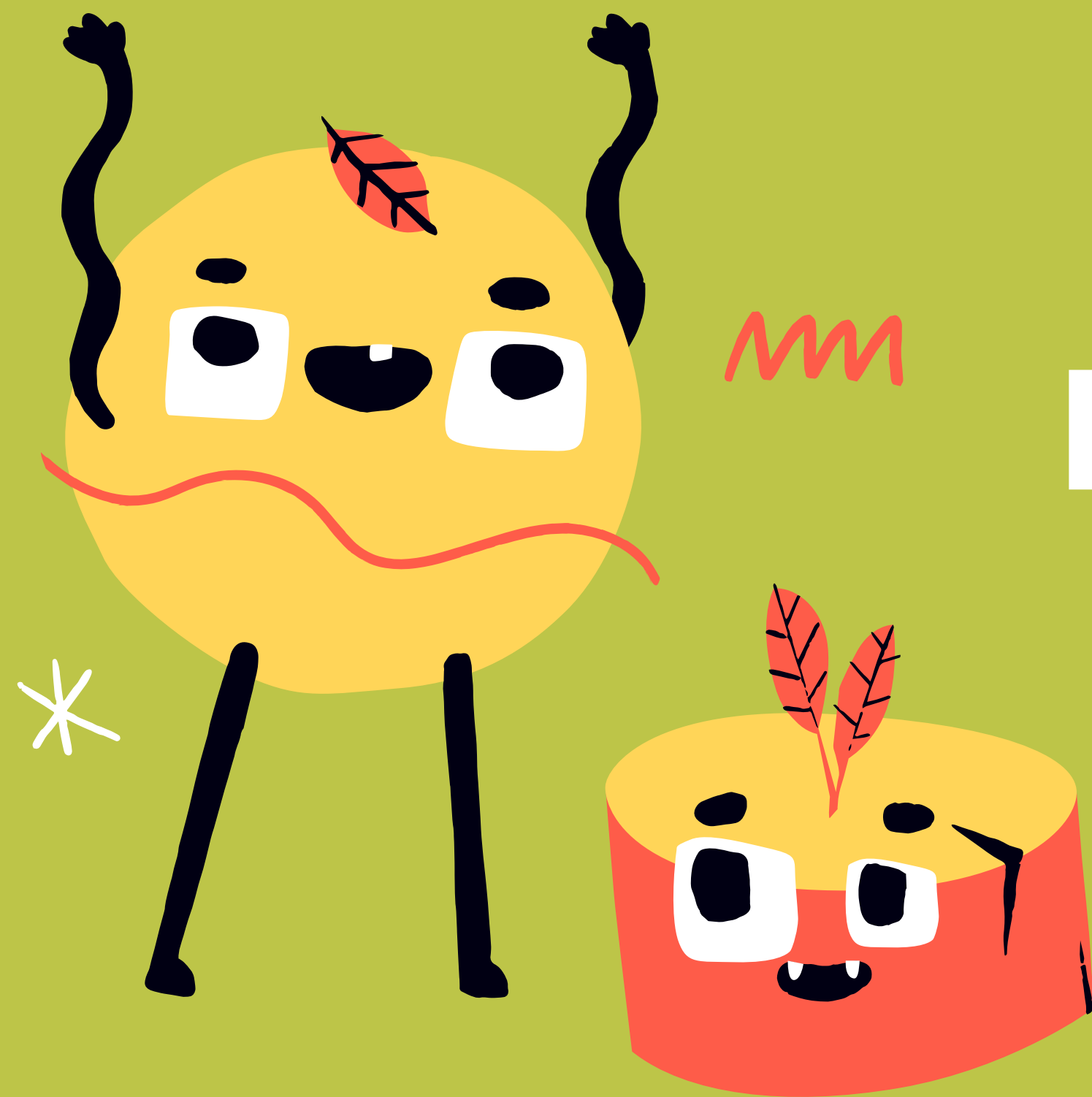
- They liked seeing elements of their own town in the game - incorporate recognizable landmarks of Davis.
- Simplicity and ease of use is important - complex controls and confusing instructions could lead to frustration and disengagement.





visual research

MOODBOARD



DEVELOPMENT



proposal

Design and develop a drag and drop puzzle game along with a questionnaire, all related to the Davis Centennial Seal and in colorful, simple illustrations. Use a drag and drop library, animations, and sounds.

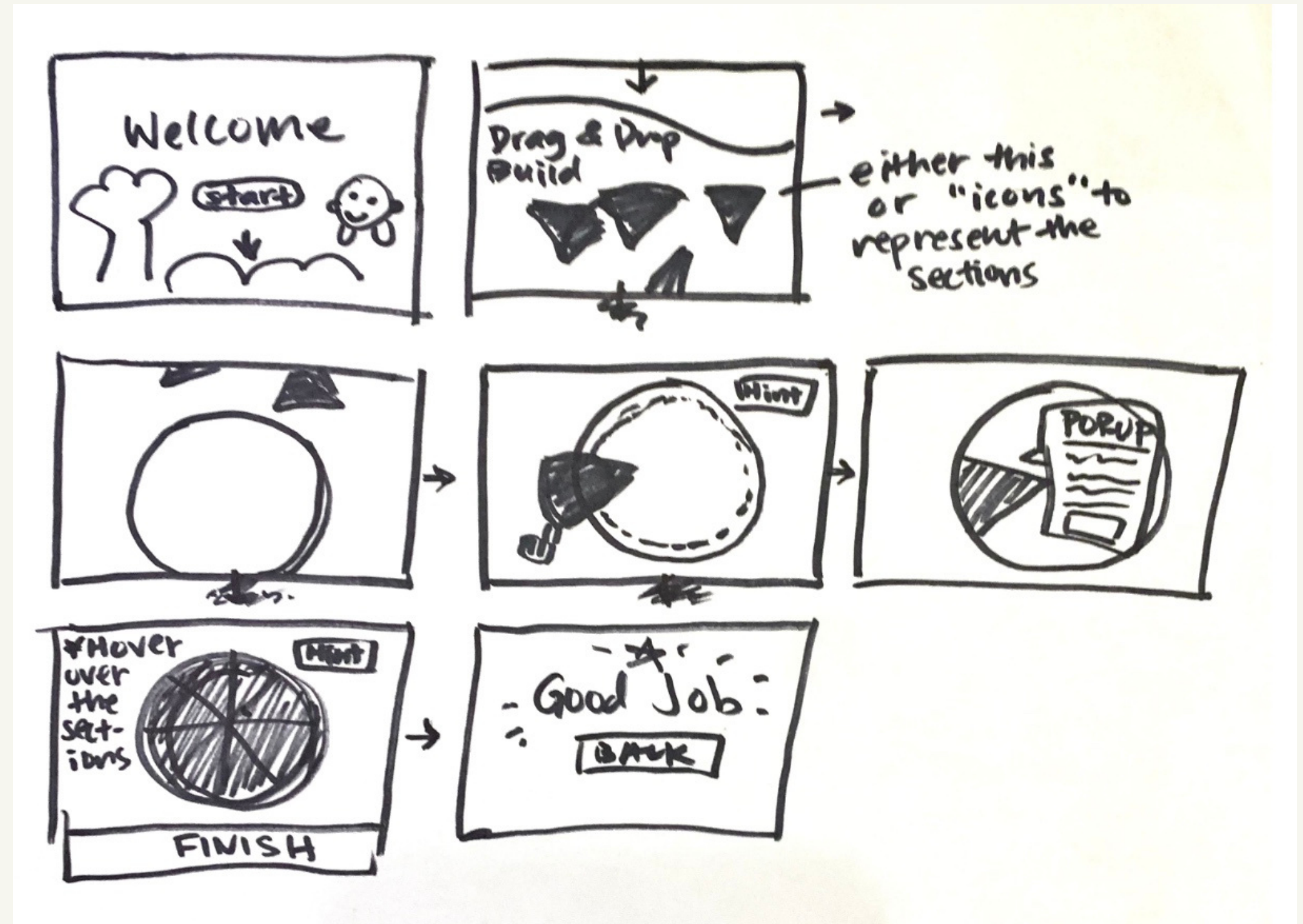
USER JOURNEY

A rough compilation of the user journey to get to the game and to playing it in real life



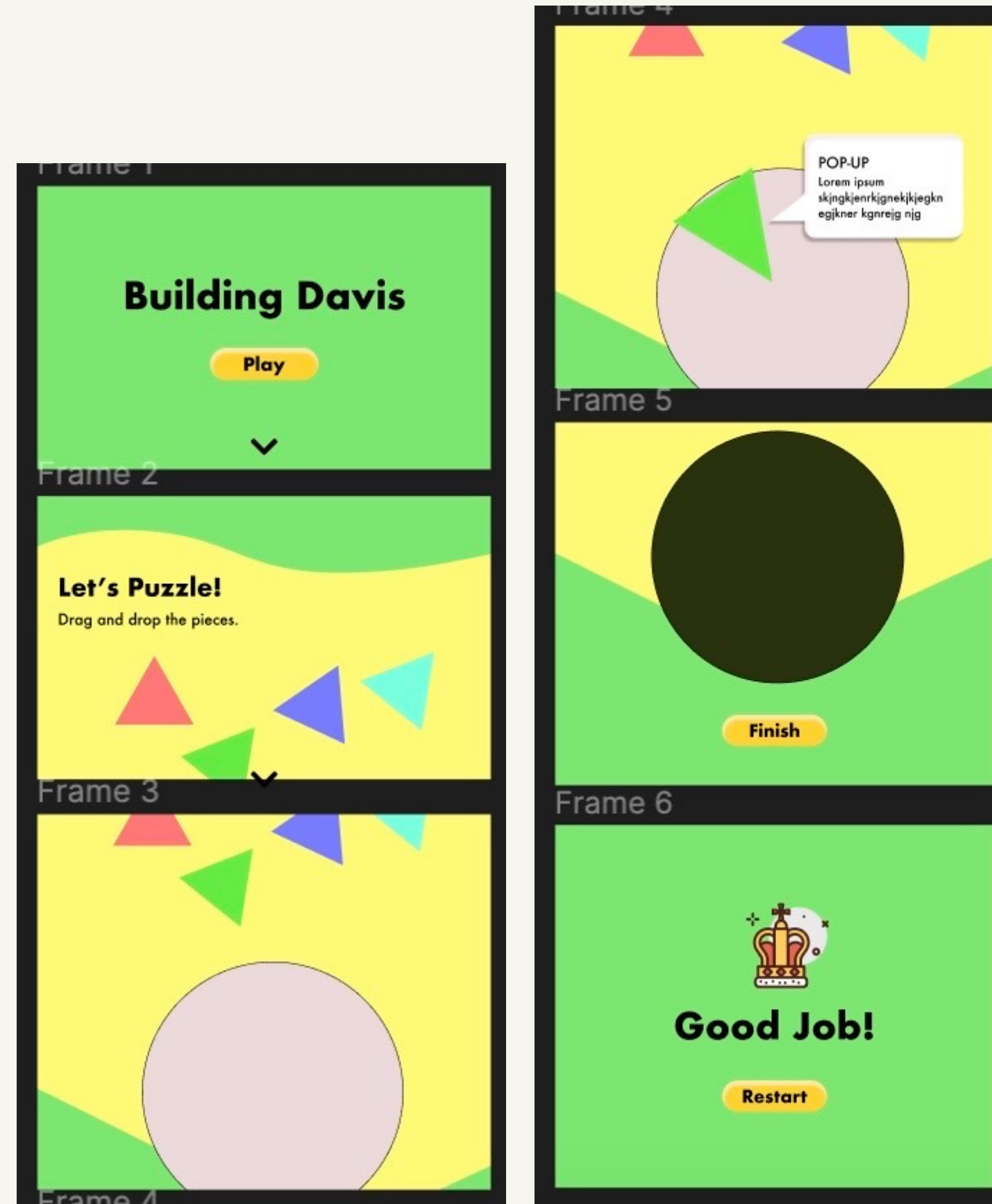
STORYBOARD

A quick sketch visualization of what the screens themselves will look like with each key task.



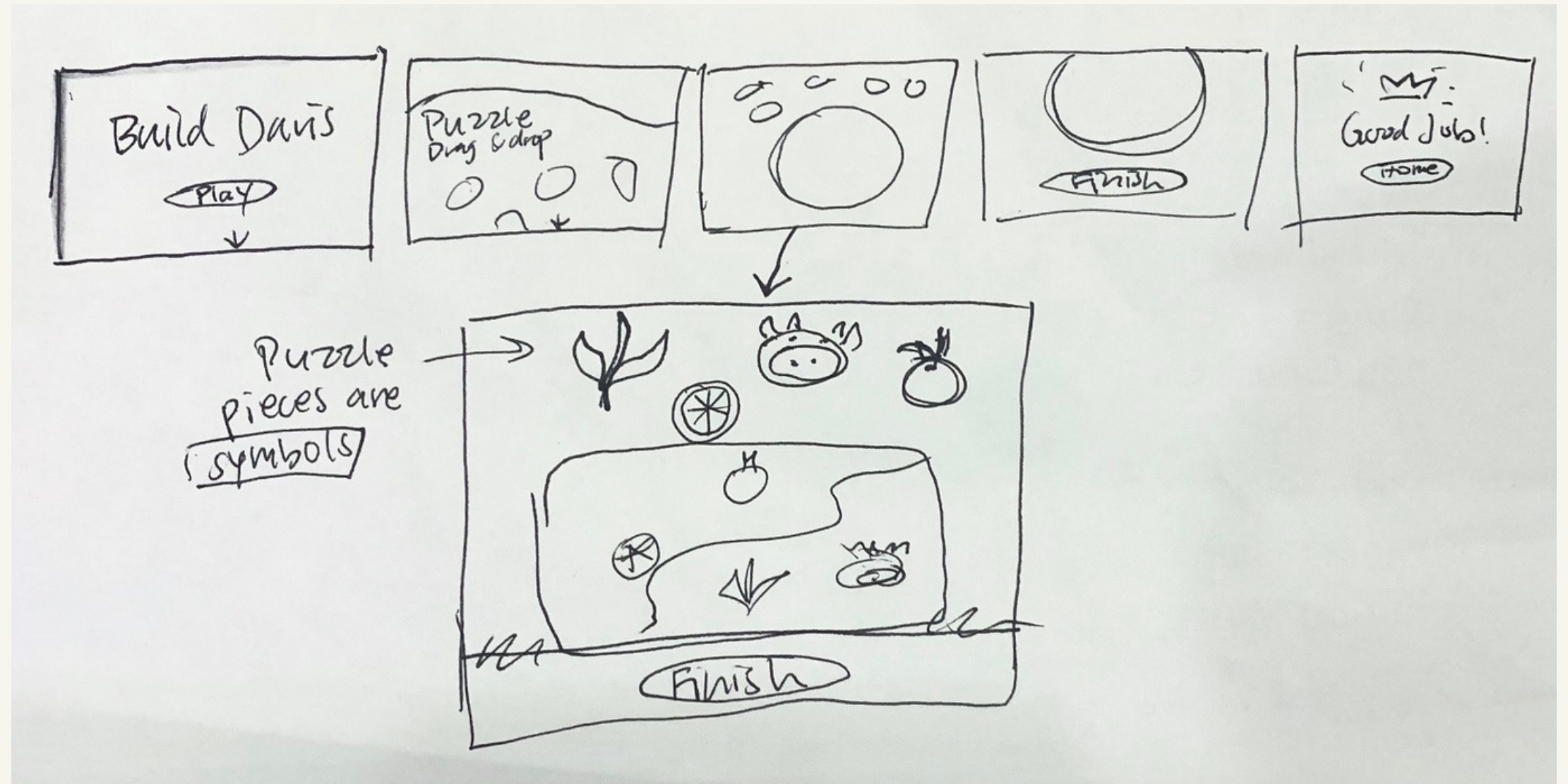
FLOWS

A lo-to-mid-fi visualization/prototype of the screens that will exist.



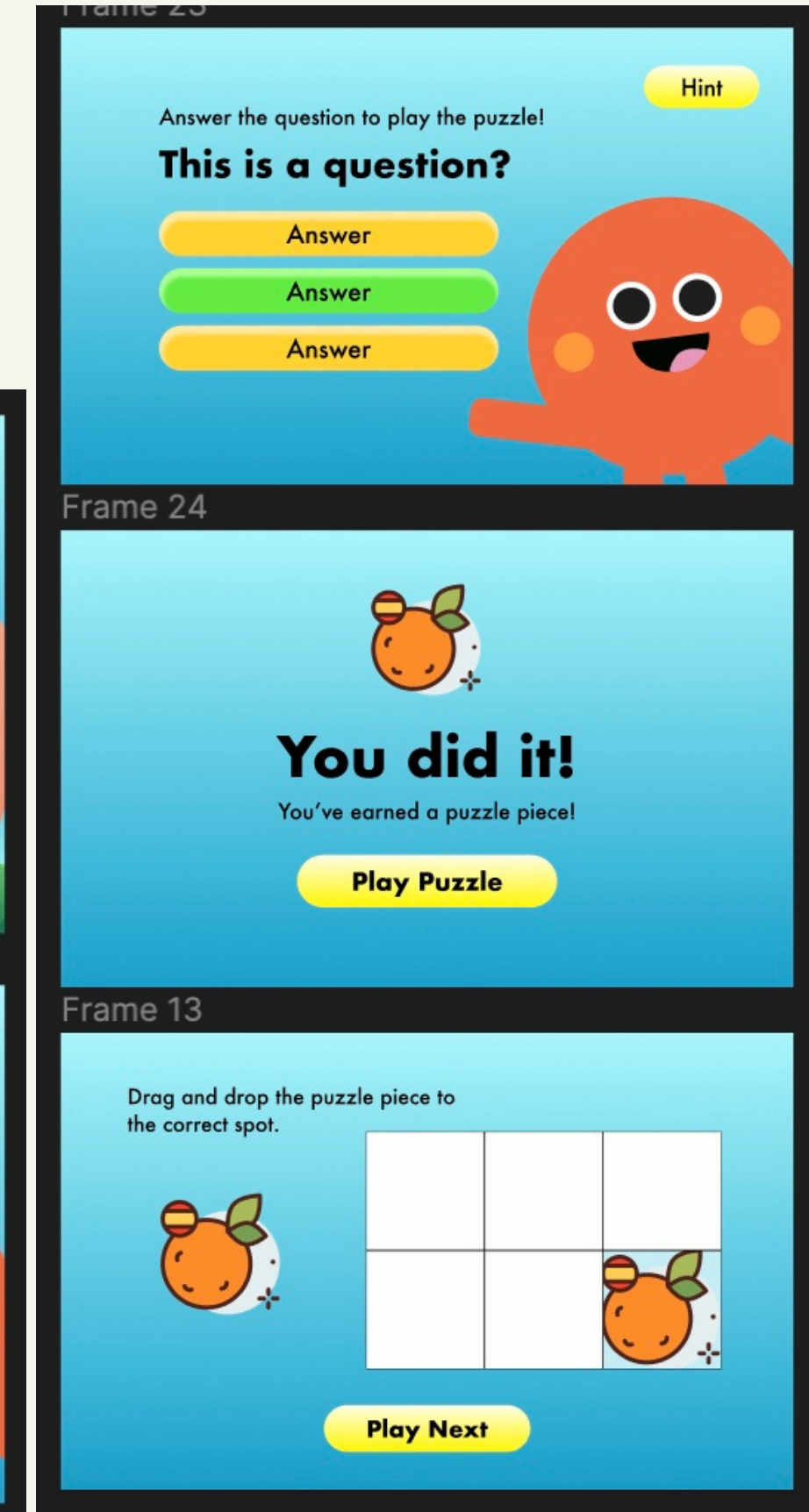
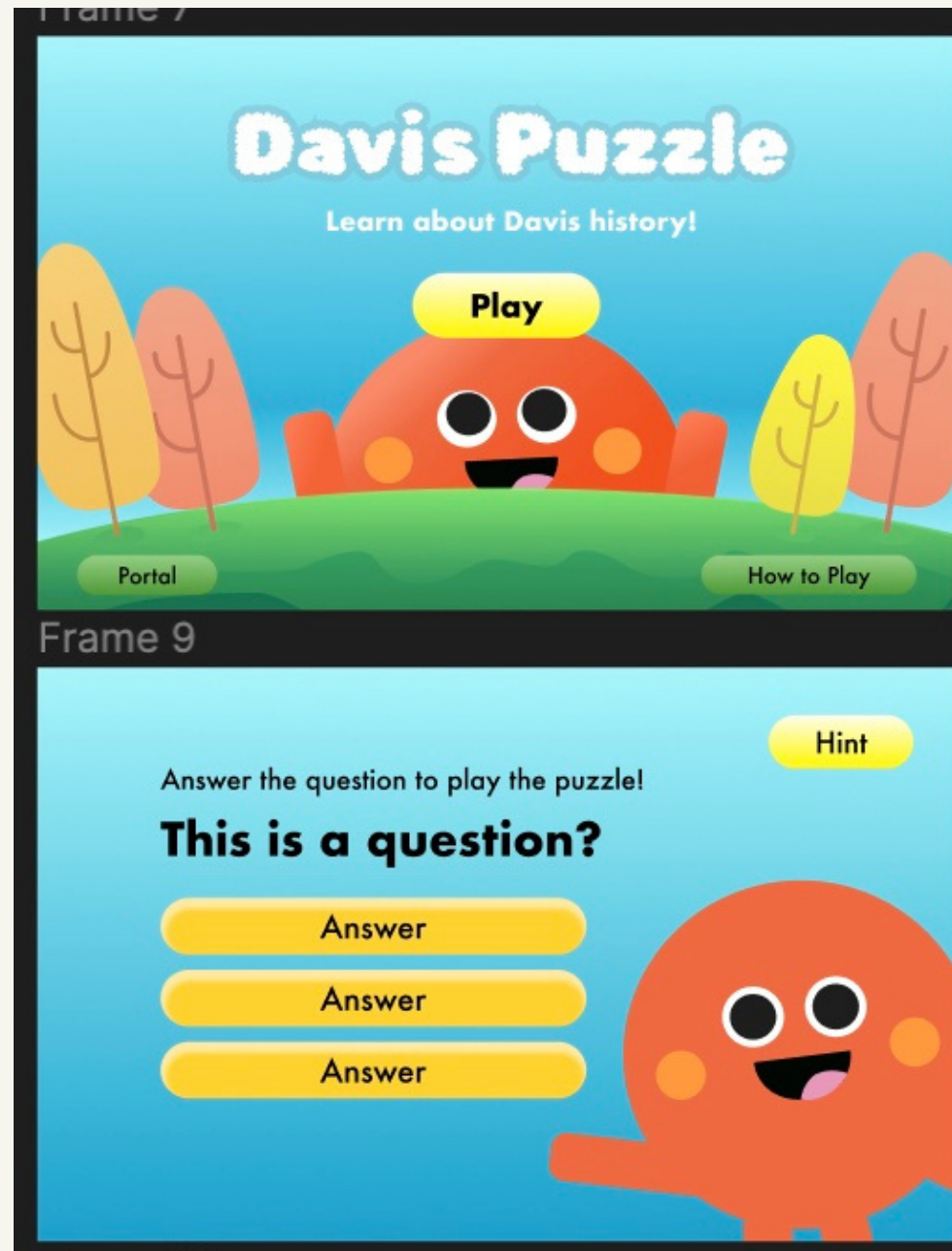
SKETCHES

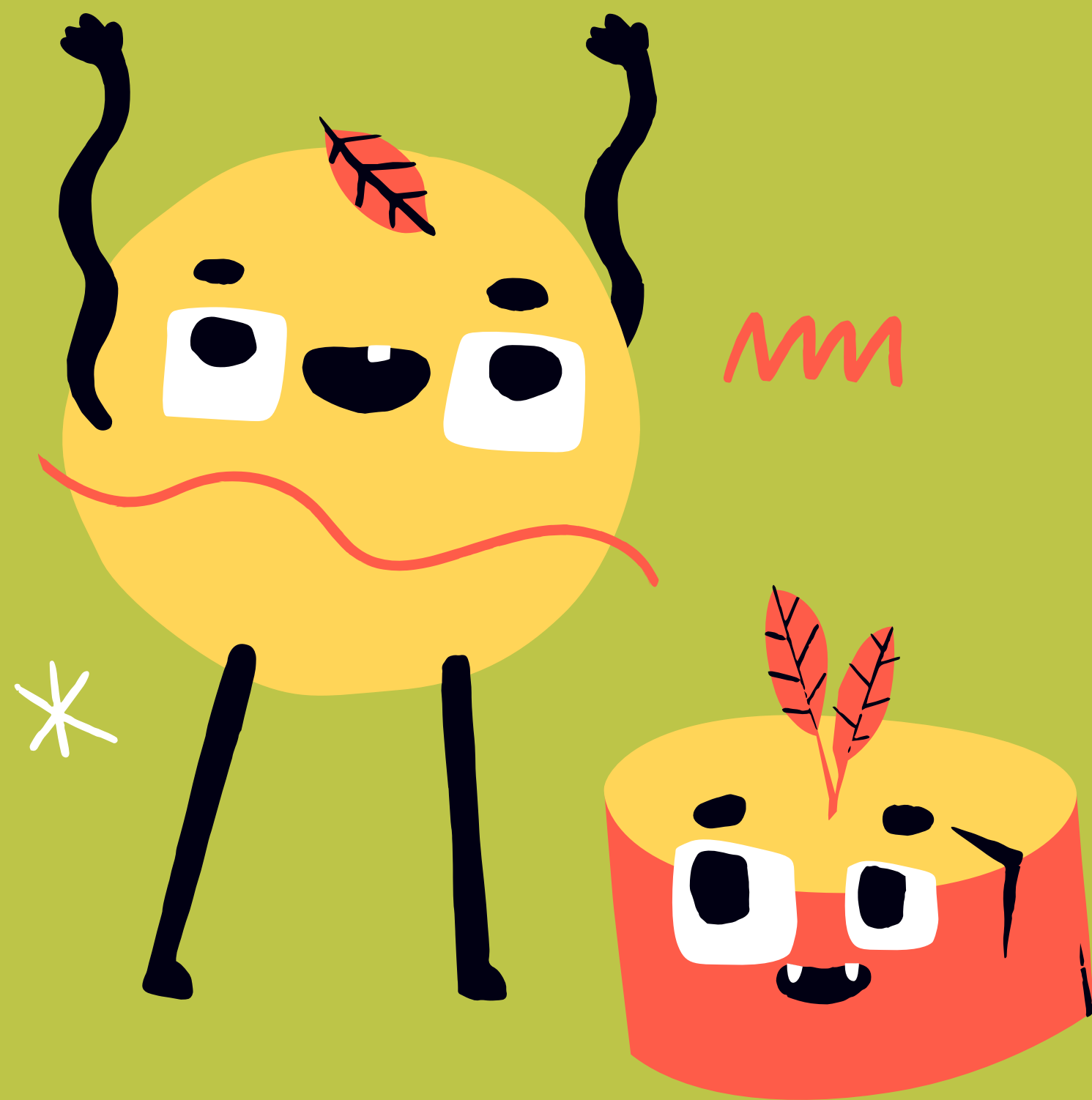
A sketch imagination of what the prototype might look like when exploring different game ideas and layouts - for example a drag and drop matching game similar to a treasure hunt.



DESIGN COMP

What the final screens will look like,
which I will base the code off of.



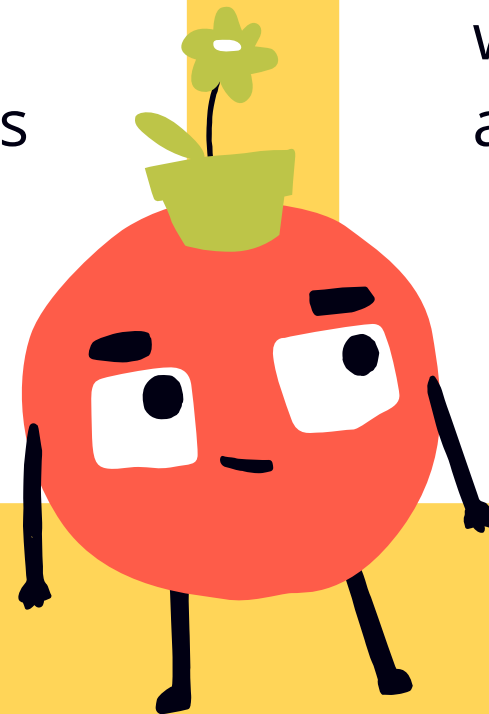


TESTING

KEY TAKEAWAYS

Improvement 1

Have the pieces start out scrambled. Make it a matching puzzle game, and in the icons include landmarks of Davis.



Improvement 2

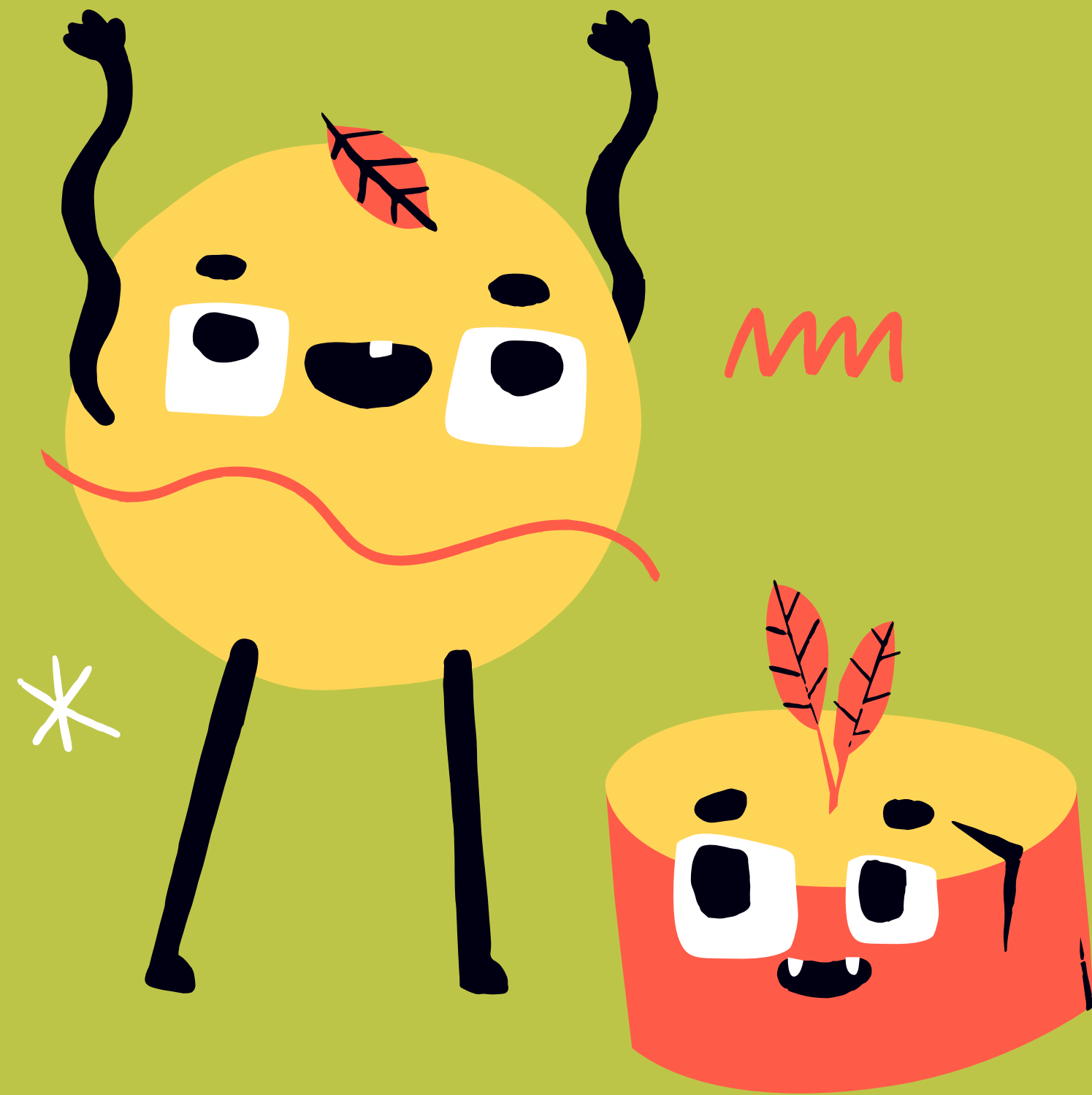
Attach links to connect users to the Davis website and learn about the Seal.



Improvement 3

Include a button to open a picture of the Davis Seal for reference during questions.





**FINAL
PRODUCT**

Davis Puzzle

Learn about Davis history!

Play

Davis Seal

How to Play





You did it!

Play Puzzle



**THANK
YOU!**