

Creating an Oral History Exploration App Variation of [Intro to App Lab](#) from Code.org

Overview

This lesson is designed to quickly introduce the App Lab programming environment as a powerful tool for building and sharing apps. The tutorial itself teaches students to create and control buttons, text, images, sounds, and screens in JavaScript using either blocks or text. At the end of the tutorial, students can use the skills they gained to create an app to help users find oral histories that interest them from the Queer Newark Oral History Project.

Grade Level

9-12

Time

55 minutes (25 minutes Intro to App Lab activity, 30 minutes Queer Newark app activity)

Objectives

Students will be able to:

- Build and share their own apps in App Lab using features like buttons, text, images, sound, and screens.
- Create an app that will help users find Queer Newark oral history interviews that interest them.

New Jersey Computer Science and Design Thinking Content Standards

8.1.12.AP.4: Design and iteratively develop computational artifacts for practical intent, personal expression, or to address a societal issue.

8.1.12.AP.8: Evaluate and refine computational artifacts to make them more usable and accessible.

8.1.12.AP.9: Collaboratively document and present design decisions in the development of complex programs.

N.J.S.A. 18A:35-4.36a: Diversity and inclusion instruction

Common Core Standards

CCSS.ELA-LITERACY.RST.11-12.3: Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

CCSS.ELA-LITERACY.RST.11-12.7: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CCSS.ELA-LITERACY.WHST.11-12.6: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

CCSS.ELA-LITERACY.WHST.11-12.7: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Resources Needed

- Student computers with internet access and headphones
- Student phones with internet access
- Instructor device with internet access and projector connection

Recommended Preparation

- Review the [Hour of Code Educator Guide](#) and [Best Practices from Successful Educators](#).
- Review and complete the online [Intro to AppLab tutorial](#).

Warm Up

Explain to students that they will be learning to use a new tool that will help them quickly make apps they can send to themselves to use. Play the introductory video that will explain the first activity, then debrief afterwards to answer questions.

Intro to App Lab Activity

Provide students the link to the [Intro to AppLab tutorial](#). If you'd like students to send you their completed apps for evaluation, they'll need to create Code.org accounts before starting the tutorial. Allow students to work their way through levels 2-13 of the tutorial independently. If students need help, here are a few general tips:

- This tutorial will not tell students whether they completed the level correctly. Encourage students to use the target images and directions provided in every level to know if they are on the right track. If students want to move on past a particularly tricky level they can simply click "Finish" and continue on.
- Collaborate with Neighbors: Encourage students to check in with a neighbor when they're getting stuck. Since this tutorial includes videos and students may be wearing headphones it can get easy to "go into a bubble." Help break those barriers by actively pairing students if they seem like they need help.
- Read the Instructions: The instructions usually provide helpful tips on how to complete the level. Before completing a level for a student ensure they've actually looked closely at the target image and read all the text there.
- Stuck? Click here: Each level includes a GIF showing exactly how to complete the level. If students want help they can and should use these GIFs. If they only want to use them as a hint, just have them close the GIF once they've seen the first part.
- Move On and Come Back: Sometimes students will benefit more from coming back to a tricky level. Except for the "Design Mode" sequence, all levels are independent of one another, though they do rely to some degree on previously introduced concepts.

Additionally, there are a few tips for specific levels:

Levels 2-4: Setting Properties

- When to use Double Quotes: The setProperty block automatically changes the final dropdown when you select what properties you want to change, including whether they use double quotes. When in doubt, students should first change the first two dropdowns, then use the last one as a model for what values work there. The most common error is failing to use double quotes around a color name.

- Hover to Read IDs: By hovering over an element in your app you can read its ID. This will help students when they're trying to change multiple elements on their screen.

Levels 5-7: Make It Interactive

- onEvents Don't Go Inside One Another: Students just starting out may try to put one block inside of the others. This is never the intended behavior for this tutorial. Even though this is mentioned in the videos, a quick reminder might help get kids unstuck.
- Check Your IDs: You need to change the "id" property in onEvent so that it detects events with the correct element.
- You Can Use Multiple Blocks in an onEvent: If you want multiple things to happen when you click the same button, just add more blocks to the same onEvent. You should never have a program that has two onEvent blocks for the combination of element (e.g. "button1") and event type (e.g. "click").

Levels 8-9: Images and Sounds

- Images Use setProperty: To add an image to a screen element students can use the "image" property. There is no new block.
- Link to Images: Students can copy the URL of images they find directly into the setProperty block in order to add them to their apps. There's no need to download them to their computers and upload them to App Lab if they don't wish to.

Levels 10-13: Design Mode

- Using Good IDs: An important part of programming in App Lab is giving your elements good IDs. Up to this section students have had their IDs created for them, so they haven't had a chance to practice this skill. This is a useful reminder for the teacher to reinforce during this section.

Queer Newark App Activity

Have students independently watch the Level 14 tutorial video. Let them know that in Level 15, they'll be working on an app using the Queer Newark Oral History Project interviews.

Provide students with the four quotes from the Queer Newark Oral History Project (Appendix 1) and ask them to create an app that will help a user find an interview that interests them based on a factor they choose (potential factors include theme, time period, and identity of interviewee). The web pages with the interviewees' biographies are also linked and may provide information that students will find useful.

Allow them to work independently on the app. If you'd like to evaluate their work, they can share it with the "share" button at the top of the screen.

Appendix 1: Queer Newark Oral History Project Quotes

John: The thing is during the McCarthy era, my family, the grownups in my family, the older people in my family were really very strongly anti-McCarthy. Both my oldest brother and his wife worked at Fort Monmouth, which is that was when McCarthy, the signal corps. McCarthy went after the signal corps in Fort Monmouth. My brother and his wife knew a lot of the people that he was going after. The dentist—I can't remember his name right now, but there was a dentist that was singled out that McCarthy went after. They knew him. I don't know. I don't know what other families were talking about, but what my family was talking about was very negative about McCarthy. But you're right. I think in general there was a feeling that anything other was communistic.

Miriam: I came out for sure in 1974, and I knew I was lesbian before that for a long, long time. But not in Newark. I had no idea there was such a thing. I had no idea. So I can't really say that that's anything to do with my... I wasn't in the life. At all! I was in the life I was having, and probably in high school in Maplewood I probably started gettin' the news. Actually it was Girl Scout camp. It was Girl Scout camp that did it for me.

Patreece: They're still not accepting two men walking down the street either. And that's where lesbians and gay men have a lot in common. It's that we're both, as an LGBT community, guess what? This woman married her woman, she married her, she is not walking down the street holding her wife's hand and saying, "This is my wife." She's scared. So okay, so what? Y'all done got passed gay marriage. That was a big thing when we had, uh-- Gay marriage this, gay marriage that. I don't believe in institutions. And I was sitting there like how can you fight for gay marriage when all these years, over decades of gay men says we want to use that, it's like the head picture on every news line when something happens to a gay man. Never a lesbian.

Alicia: It was important for us to create a space that the community could talk about the injustices that we were experiencing from, again, the murder of Sakia to the way that police responded to us in our community, the issue of homelessness. All of those things, it was important for us to create that space for us to have those kinds of conversations and safe for us. I happened to be, at that time, I was part of the church and so it was the natural—we're social justice. Unity Fellowship Church movement is a social justice movement. It came out of the response to HIV and AIDS as it related to black and Latin men in the early 80s because there was no— first of all there was no room in the black church for someone living with HIV. In fact, they were shunned. The thing was, this is a direct response to God's dislike to homosexuality. There was no place.