Day 4: Code

SLOs:

- **Code** a basic mobile app that employs user interface blocks, control blocks, and function blocks in App Lab.
- **Use** UI control blocks to show text, images, buttons, and other app interface features on the screen.
- **Collect and save** data from App Lab apps.
- **Control** the flow of their programming using control blocks, which can create loops.
- **Draw** in an App Lab Canvas and experiment with App Lab Canvas functions.

Eventually...

- **Create** at least one functioning app that utilizes 4 screens. All apps should be functional, user-friendly, and have the capability to go back and return to a home screen.

Breakdown:

1. Talk about the basics:
    a. Apps are PROGRAMS that run on mobile devices.
    b. CODE is instructions that tell computers what to do.
    c. I want to talk briefly about conditionals. To get started with code today, a lot of our first lines of code will be conditionals. **(Flocabulary video)**
2. Get out computers
3. Work through fundamental tutorial(s)
    a. Have students open up a new project in App Lab and do their best to follow along with the video tutorial
4. Teacher Demo
    a. Spend 5-10 minutes using App Lab in front of the class. Work together to build one app idea.
    b. Work through the process of identifying a problem, brainstorming, talk briefly about design (add screens and buttons at the suggestions of the class), and start coding in front of the class.
    c. Introduce how to Remix an app, how to save/rename a project, etc.
5. Start coding in App Lab/Remixing existing projects
6. Work with classmates on any struggles or problems
7. (With extra time?) Work on an unplugged computational thinking lesson to learn problem solving tactics

Explore remixing options and tutorials! Because everyone's app is different, there are different tutorials that will be useful for everyone. I also encourage you to get up, walk around, and see what others are working on.

***Remember, before you ask one of the adults a question, try asking at least two others in the class. Let's practice collaboration! We are learning alongside you, so we'll do our best to work through problems *together*.

Goal: Everyone finished with 4 screen designs, everyone starts with basic code

Next time: we will continue to code, and we'll spend some time looking at each other apps, talking about our users, and making changes so that our apps are *User Friendly*.

Worksheets for added problem solving:

Do.Go.- Use to help students consider how users will move through the app. Break down each screen and task. What do I do? Where do I go next?

Map What Happens- Where do I move next?