# Daisy App Development Badge

**Pillar:** STEM
**Outcomes:** Challenge Seeking and Community Problem Solving

Now that you've completed the Daisy Coding Basics and Digital Game Design Badges, get ready to explore how computer scientists develop apps. You will learn to break a larger problem into smaller parts, design a screen for an app that solves the problem, and share your app idea for feedback. Please make sure you've finished your Daisy Coding Basics badge and your Daisy Digital Game Design badge *before* you work on this badge!

**Daisies will earn their badge by:**

1.  Decompose a task or problem into smaller steps
    a.  When you **decompose** a task, like making a PB&J sandwich or washing your hands, you're breaking it down into written-out, detailed steps that someone (or a computer) could follow! Now, practice **decomposing** something you do every day that you're very good at! Write out the best you can, or get an adult's help, every step for something you can make in the kitchen, how to play a game, how to clean your room, or whatever else you're awesome at!
    b.  With a grownup, come up with a list of some problems in your life or your community you'd like to help solve.
    c.  Choose one of the problems on your list, and **decompose** it by creating a list together of 5-10 steps you could take to help solve the problem.

2.  Brainstorm an idea for an app that solves a problem
    a.  Pick out a few apps on an adult's phone, or device at home, that help with problems in their life, or make something they do every day easier. Have a discussion about them. Why are they successful, or are they not successful?
    b.  Now that you've seen what some apps can do to help people, begin to design an app that solves one of the problems from Step 1.

3.  Share and improve your app
    a.  Design an **app icon** (the picture on the home screen) for your app that lets people know the app's name and gives people an idea of what it does.
    b.  Check out our Community Partners at Code Ninjas and Girl Coders to find out opportunities to learn more about app design and programming! https://www.codeninjas.com/ and https://girlcoders.net/

**When you're finished:** Congratulations, you have earned your badge! You can purchase by emailing shopdept@gsksmo.org or at https://www.girlscoutshop.com/daisy-app-development-badge

No shipping charges apply at this time.