Name(s)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  | **Project Guide - Make a Game** |  |
| --- | --- | --- |

## Overview

Building a larger piece of software like a game can quickly get complex. Starting with a plan can help you stay organized and identify issues ahead of time. A lot of the work you do here will make it much easier to keep track of what you need to do once you begin writing your actual code.

## Program Goal and Design

Start by thinking about what your game actually does. How will the user interact with it? How does it communicate information to the player? What will make it fun, interesting, or relevant to the player?

## Describe Your Program

In a couple of sentences describe the program you are going to build and how it will work.

## Draw Your Screen(s)

Draw a quick sketch of the screen(s) you’ll need. What design elements will you use? What should their IDs be?

## Circuit Playground

Which components of the Circuit Playground does this program use? Make sure that you are using at least one input (eg buttons and sensors) and one output (eg LED or buzzer).

| **Board Component** | **What it is Used For** |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Events and Functions

Using the description of your program above, figure out what events you’ll need to respond to and which functions

## Events

In the table below list information about all of the events that your program will use, and what will happen when they are triggered.

| **Name or ID** | **Event Type**  (eg “click”) | **Description**  (What happens when this event occurs?) |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Functions

Your events shouldn’t have a lot of complex code. Instead, break your program up into the major steps you’ll need for it to work. The different behaviors you described in your events should help you decide what these steps should be.

| **Function name** | **Parameters**  (Inputs to the function) | **What does it do?** |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Additional Notes

Use this area to take any extra notes that you might need to complete the program. This could include any variables that you might need, hardware setup for the board, or resources that you’ll need to find (like images, sounds, etc), or ideas for more features that you want to explore.