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| Name: | **Remix 1 Project Planning Guide** |
| **Remix Step 1: Review your code from Mission 1, 2 and 3** | |
| Mission 1: Welcome to Lift Off Peripherals!  What programming concepts did you learn and use? |  |
| Mission 2: Lift Off!  What does this program do? What programming concepts did you learn and use? |  |
| Mission 3: Conserve Energy!  What does this program do? What programming concepts did you learn and use? |  |
| **Remix Step 2: Remix Project Concept** | |
| Look over the remix suggestions. Discuss with a partner. Then decide what you want to do for your remix project. Describe your remix project: |  |
| **Remix Step 3: Plan your code.** Answer the questions below to help you plan and design the remix project before you start to write code. | |
| What peripherals will you use, and what is their purpose: | |  |  | | --- | --- | | Peripheral: | Used for: | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |
| What variables and constants will you need? Give their name and value or assignment. | |  |  | | --- | --- | | Variable / Constant | Value or assignment | |  |  | |  |  | |  |  | |  |  | |  |  | |
| Write an algorithm for your code. What are the steps for completing the task? |  |
| **Remix Step 4: Write your code** | |
| Start a new file. Use the sandbox  when you write the code. Write just a few lines at a time and test often. | |
| **Remix Step 5: Commenting and feedback** | |
| Documentation | * Make sure your code is readable by adding blank lines * Add comments to explain sections of code |
| **Peer feedback:** Get feedback from two (or more) people. You can be one of the peer reviewers. | |
| **Peer Review #1 Name:** |  |
| Go through the checklist. Are all requirements met? If not, list any missing criteria. |  |
| What do you like about the program – be specific! |  |
| Give at least one suggestion. Begin with “what if” or “maybe you could” |  |
| **Peer Review #2 Name:** |  |
| Go through the checklist. Are all requirements met? If not, list any missing criteria |  |
| What do you like about the program – be specific! |  |
| Give at least one suggestion. Begin with “what if” or “maybe you could” |  |
| Review the comments. Then take time to improve or add to your project. | |
| **Post-Mission Reflection** | |
| What did you change in your project after reading the feedback? |  |
| What did you learn about programming from completing this project? |  |

**Remix 1 Project Rubric Checklist:**

* New file is used and filename is descriptive
* At least one LED is used, with appropriate constants and function
* At least one additional peripheral is used, with appropriate constants and functions
  + Button
  + Switch
  + Potentiometer
  + Motion sensor
* Uses at least one new programming concept
  + Multiple inputs (like needing a button AND a switch)
  + Using ticks to keep track of elapsed time
  + Blinking LEDs
* Includes something extra (sound, additional peripherals, screen display, etc.)
* Includes comments and whitespace for readability
* Code runs with no errors