

Name:	<b>Unit 3 Remix Project Planning Guide</b>
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**Remix Step 1: Review your code from Mission 7, 8 and 9.**

Mission 7: Line Sensor What does this program do? What programming concepts did you learn and use in each mission?	
Mission 8: Boundary Patrol What does this program do? What programming concepts did you learn and use in each mission?	
Mission 9: Line Follower What does this program do? What programming concepts did you learn and use in each mission?	


**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:	
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**Remix Step 3: Plan your code. What variables will you use in the project?**  
 Fill out the charts below. Use another piece of paper to design your program with an algorithm.

What global variables and constants will you use in the project? Fill in the chart. You do not need to fill in every line, or you can add more.	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 50%;">Variable Name</th> <th style="width: 50%;">What it will be used for:</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Variable Name	What it will be used for:								
Variable Name	What it will be used for:										

What list or dictionary will you use? Describe it in the space provided:	
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<p>What buttons will you use, and what will happen when pressed?</p>	<table border="1"> <thead> <tr> <th data-bbox="675 184 859 243">Button</th> <th data-bbox="859 184 1463 243">What will happen:</th> </tr> </thead> <tbody> <tr> <td data-bbox="675 243 859 308"></td> <td data-bbox="859 243 1463 308"></td> </tr> <tr> <td data-bbox="675 308 859 373"></td> <td data-bbox="859 308 1463 373"></td> </tr> </tbody> </table>	Button	What will happen:				
Button	What will happen:						
<p>What functions will you write? Describe each one.</p>	<table border="1"> <thead> <tr> <th data-bbox="675 478 956 537">Function name</th> <th data-bbox="956 478 1463 537">What it will do</th> </tr> </thead> <tbody> <tr> <td data-bbox="675 537 956 602"></td> <td data-bbox="956 537 1463 602"></td> </tr> <tr> <td data-bbox="675 602 956 667"></td> <td data-bbox="956 602 1463 667"></td> </tr> </tbody> </table>	Function name	What it will do				
Function name	What it will do						
<p>Extras: What else will you need for your program? (sound, LEDs, etc.) Describe extra code you will use in the space provided:</p>							
<p><b>Remix Step 4: Write your code</b></p>							
<p>Start a new file. Use the sandbox  when you write the code. Write just a few lines at a time and test often. You can choose which 3D environment you want for the remix project.</p>							
<p><b>Remix Step 5: Commenting and feedback</b></p>							
<p>Documentation</p>	<ul style="list-style-type: none"> <li>• Make sure your code is readable by adding blank lines</li> <li>• Add comments to explain sections of code</li> </ul>						
<p><b>Peer feedback:</b> Get feedback from two (or more) people. You can be one of the peer reviewers.</p>							
<p>Peer Review #1 Name:</p>							
<p>Go through the checklist. Are all requirements met? If not, list any missing criteria.</p>							
<p>What do you like about the program – be specific!</p>							
<p>Give at least one suggestion. Begin with “what if” or “maybe you could”</p>							

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.	
<b>Post-Mission Reflection</b>	
What did you change in your project after reading the feedback?	
What is something new you learned about programming from completing this project?	

### Unit 3 Remix Project Rubric Checklist:

- Filename is descriptive
- Uses global and local variables appropriately
- Uses one or more constants, each with a descriptive name
- Uses line sensor data to control CodeBot’s movement
- Uses LEDs to communicate information (user LEDs and/or line sensor LEDs)
- Defines and calls at least one function
- Uses a list or dictionary
- Gets input from the user (button press, input() function)
- Includes something extra (sound, more than one sensor, more than one function, etc.)
- Code follows programming conventions of comments, readability, indenting, and capitalization
- Code runs with no errors

