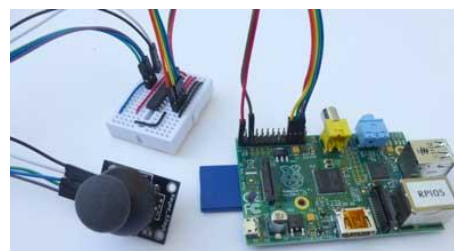




Custom Project Proposal

Using a Arduino Uno (11's) or a RPi (raspberry pi, 12's) along with course related components will allow students to design and build customized projects based on their interests. Through research students can learn more about the requirements and how to complete related projects.



Each project idea is to include information, details, and related pictures in their report with the following *Key information (also showing marks for each level):

- | | |
|---|------------|
| 1. Title, complexity level, controller details, and project description | /2, /2, /2 |
| 2. Hardware components, description, supplier, and cost | /2, /3, /4 |
| 3. General build steps/process | /2, /3, /5 |
| 4. Software and programming - language, preparation, and coding functions | /2, /3, /4 |
| 5. Project operation of how it is supposed to work | /2, /3, /5 |
| 6. Conclusion of learning experience in the form of knowledge, skills, & values | /3, /4, /6 |
| 7. Minimum of three related resource support links | /2, /2, /4 |

Project ideas can use basic hardware to simulate inputs/outputs we already have such as tact switches, simple sensors, LED's, and or piezo buzzers to simulate a game board, security system, or a traffic light as some examples. These project reports must be in your own words summarizing with the key points (i.e not copied from a source document/tutorial), and be supported by images. Once complete, students will present their project ideas to the rest of the class to share and possibly gain further support, ideas, and interests.

Evaluation

Once done, give yourself a Content and Layout mark, then pass to a partner to peer mark the report. After presentation, finish the self and peer evaluation, total up marks and submit to teacher right away.

Your selected project: _____

Evaluation Table for Report of 3 Custom Projects						
#	Category	Description	Mark	Self-Eval. Mark	Peer-Eval. Mark name_____	Teacher Mark
1	Content	* All key information (15+20+30)	/65			
2	Layout	Organized, visual appealing, and easy to read	/15			
4	Presentation	Content, communication, knowledge, & time	/20			
5	Marks	Total Mark	/100			
		Self and peer marks out of 20 (completed by teacher)				

Peer Markers, remember, only mark one person