ADAFRUIT INNOVATION LAB

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KEYPAD

LIBRARY:-

#include<Keypad.h>

FUNCTION:-

Here are various functions which are present in keypad library and is used to interface keypad with Arduino. There should be an object created first to access all functions.

syntax:- Keypad *objectName;*
eg:- Keypad kpad;

1. **Keypad():-** This is used to initialize the keypad and map the pins with keypad pins.
   syntax:- Keypad *objectName* = Keypad(makeKeysmap(*keysPointer), rowPinArray, columnPinArray, totalRow, totalColumn);*
   eg:- Keypad kpad = Keypad(makeKeymap(keys), rowPins, colPins, 4, 4);

2. **getKey():-** This is used to get a single key.
   syntax:- char *variableName = objectName*.getKey();
   eg:- char ch = kpad.getKey();

3. **getKeys():-** This is used to get the number of keys simultaneously.
   syntax:- char* *variableName = objectName.*getKeys();
   eg:- char* ch = kpad.getKeys();

4. **isPressed():-** This is used to check whether the key is pressed or not.
   syntax:- bool *variableName = objectName.*isPresses(*key*);
   eg:- bool check = kpad.isPressed(ch);

5. **findInList():-** This will find location of a given key from the list of active keys.
   syntax:- int *variableName = objectName.*findInList(*givenKey*);
   eg:- int I = kpad.findInList(ch);

6. **waitForKey():-** This function will pause the execution and wait for user to press any key.
   syntax:- char *variableName = objectName.*waitForKey();
   eg:- char ch = kpad.waitForKey();

7. **numKeys():-** This will scan and give the total number of keys present in key list.
   syntax:- byte *variableName = objectName.*numKeys();
   eg:- byte num = kpad.numKeys();

8. **setDebounceTime():-** This function is used to set the debounce time of a key. Minimum debounce time is 1ms.
   syntax:- *objectName*.setDebouncetime(*time*);
   eg:- kpad.setDebounceTime(5);

These are various function which are defined in Keypad.h library and can be used to interface keypad with Arduino UNO.