#### LOCK CLASS

The Lock class contains the functions and variables for handling the lock interface and its associated hardware controls

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| Properties | | |
| iLock | ILock \* | iLock is a pointer to a ILock type interface which is implemented in the HardwareControl class. The iLock will essentially point to a HardwareControl object which it can use to interact with the hardware IO. |
| lock | Boolean | The lock is a Boolean property that describes the status of the lock switch on the board and needs to be otherwise true in order to run a washing program. |
| Operations | | |
| Lock(): *default constructor of the class* | | |
| Lock(ILock \*) : *constructor of the class which takes an ILock pointer and assigns it to iLock* | | |
| lockMachine() : void  *This is the polling function to check what the lock switch status is and will turn on or turn off the lock.* | | |
| checkLock(): Boolean  *Returns status of lock switch on the board.* | | |
| setLock(Boolean ): void  *Is the setter function for lock property.* | | |
| setInterface(ILock \*) : void  *Assigns the pointer to ILock object(actually HardwareControl object) in its argument to the iLock property.* | | |
| Remarks:  All functions are implemented. The classes are yet to be tested. | | |

#### SOAP CLASS

The Lock class contains the functions and variables for handling the lock interface and its associated hardware controls

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| Properties | | |
| iSoap | ISoap \* | iSoap is a pointer to an ISoap type interface which is implemented in the HardwareControl class. The iSoap will essentially point to a HardwareControl object which it can use to interact with the hardware IO. |
| soapCpt1 | Boolean | The soapCpt1 is a Boolean property that describes the status of the soap compartment 1 switch on the board and needs to be otherwise true in order to run a washing program. |
| soapCpt2 |  | The soapCpt2 is a Boolean property that describes the status of the soap compartment 2 switch on the board and needs to be otherwise true in order to run a washing program. |
| Operations | | |
| Soap(): *default constructor of the class* | | |
| Soap(ISoap \*) : *constructor of the class which takes an ISoap pointer and assigns it to iSoap* | | |
| checkCpt1() : boolean  *This is the polling function that will check if soap switch 1 is turned on and will turn on soap 1 LED accordingly.* | | |
| checkCpt2() : boolean  *This is the polling function that will check if soap switch 2 is turned on and will turn on soap 2 LED accordingly.* | | |
| lockCpt1(Boolean ): void  *Is the setter function for soapCpt1 property, and will turn the soap 1 LED on or off according to the Boolean argument provided.* | | |
| lockCpt2(Boolean ): void  *Is the setter function for soapCpt2 property, and will turn the soap 2 LED on or off according to the Boolean argument provided.* | | |
| setInterface(ISoap \*) : void  *Assigns the pointer to ISoap object(actually HardwareControl object) in its argument to the iSoap property.* | | |
| Remarks:  All functions are implemented. The classes are yet to be tested. | | |