#### COINWALLET CLASS

CoinWallet is the class contains the functions and variables for handling coins and the amount of money that users put into the machine

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| Properties | | |
| nrOfCoin10 | Integer | This is a instance variable to indicate how many coin of value 10 which is put by users |
| nrOfCoin50 | Integer | This is a instance variable to indicate how many coin of value 50 which is put by users |
| nrOfCoin200 | Integer | This is a instance variable to indicate how many coin of value 200 which is put by users |
| balance | Integer | The current amount of money in the wallet |
| mCoin | ICoin \* | An pointer with point to an ICoin object. It is used to reference to methods related to coin functionalities in hardware class |
| Operations | | |
| CoinWallet(ICoin \*) : *constructor of the class* | | |
| mappingCoin(char nrofCoin) : char  *This is used to map the nrOfCoinX variable to become a level of bits for hardware class is able to handle it* | | |
| Withdraw(int amount): Boolean  *This is used to for withdrawing the amount of money indicated by given parameters. If the amount is less than or equal the balance, the amount of money is withdrawn and this functions return true. Otherwise, false is return.* | | |
| AddCoin10(): void  *Is called in the poll function to always detect weather the button to put coin 10 is pressed or not. If it is, increase the nrOfCoin10 by 1 (only allow it up to 3) and turn on the corresponding LED to indicate the coin is successfully put.* | | |
| AddCoin50() : void  *Is called in the poll function to always detect weather the button to put coin 50 is pressed or not. If it is, increase the nrOfCoin50 by 1 (only allow it up to 3) and turn on the corresponding LED to indicate the coin is successfully put.* | | |
| AddCoin200() : void  *Is called in the poll function to always detect weather the button to put coin 200 is pressed or not. If it is, increase the nrOfCoin200 by 1 (only allow it up to 2) and turn on the corresponding LED to indicate the coin is successfully put.* | | |
| WithdrawAll() : void  *Withdraw all of the current money in the wallet. Then the balance is set into 0.* | | |
| GetAmount() : int  *Return the current balance in the coin wallet.* | | |
| Poll(): void  *This function is called in the main loop for polling all functions related to coin mentioned above.* | | |
| Remarks:  All functions are implemented. The unit test environment and implementation of the unit test are setting up | | |