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//
// ViewController.m
// bankApplication
//
// Created by Rozzles on 30/01/2014.
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//

#import "ViewController.h"
#import "MBFaker.h"
#import "InvestmentAccount.h"
#import "CreditAccount.h"
#import "DebitAccount.h"

@interface ViewController ()

@end

@implementation ViewController

//Initialise local variables used by this class

@synthesize AccountPicker;
NSMutableArray *AccountsPickerArray;
int DepositValue;
int WithdrawValue;
int pickerPosition;

/*
 *viewDidLoad delegate method that sets up the pickerView's dataSource
 *and initialised the AccountsPickerArray
 */
- (void)viewDidLoad
{
    [super viewDidLoad];
    pickerPosition = 0;
    AccountPicker.delegate = self;
    AccountPicker.dataSource = self;
    AccountsPickerArray = [[NSMutableArray alloc] init];
}

- (void)didReceiveMemoryWarning
{
    [super didReceiveMemoryWarning];
}

//Creates a new object of InvestmentAccount with peramaters and reloads the
PickerView. This is called when the button 'Investment Account' is clicked
- (IBAction)addInvestmentButton:(id)sender {
    [AccountsPickerArray addObject:[[InvestmentAccount alloc]
        initWithCustomerName:[MBFakerName name] Balance:arc4random_uniform(2000
        )]];

    [AccountPicker reloadData];
}

//As before with CreditAccount
- (IBAction)addCreditButton:(id)sender {
    [AccountsPickerArray addObject:[[CreditAccount alloc]
        initWithCustomerName:[MBFakerName name] Balance:arc4random_uniform(2000
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    ]]];

    [AccountPicker reloadDataComponents];
}

//As before with DebitAccount
- (IBAction)addDebitButton:(id)sender {
    [AccountsPickerArray addObject:[DebitAccount alloc] initWithCustomerName:
        [MBFakerName name] Balance:arc4random_uniform(2000)];

    [AccountPicker reloadDataComponents];
}

//Called when the 'Simulate Interest Year' button is clicked. Runs through all
    the objects in UIPickerViewArray and sends them [simulateInterest] then
    reloads the pickerView after running this for all the classes.
- (IBAction)simulateYearOfInterest:(id)sender {
    for (int i=0; i<[AccountsPickerArray count]; i++) {
        [[AccountsPickerArray objectAtIndex:i] simulateInterestYear];
    }
    [AccountPicker reloadDataComponents];
}

//Delegate method to initialise the UIPickerView's titles to the description of
    the selected object. - See [BankAccount description].
- (NSString *)pickerView:(UIPickerView *)AccountPicker titleForRow:(NSInteger)
    row forComponent:(NSInteger)component
{
    return [[AccountsPickerArray objectAtIndex:row]description];
}

//Delegate method called when the pickerView changes it's selection. Sets the
    pickerPosition int to the selected value.
- (void)pickerView:(UIPickerView *)AccountPicker didSelectRow:(NSInteger)row
    inComponent:(NSInteger)component
{
    pickerPosition = row;
}

//Delegate method to initialise the UIPickerView's X size
- (NSInteger)numberOfComponentsInPickerView:(UIPickerView *)AccountPicker
{
    return 1;
}

//Delegate method to initialise the UIPickerView's Y size
- (NSInteger)pickerView:(UIPickerView *)AccountPicker numberOfRowsInComponent:
    (NSInteger)component
{
    return [AccountsPickerArray count];
}

//Called when the 'Deposit' button is clicked. Sends the selected account
    'deposit' with the parameters of the dposit slider's value.
- (IBAction)DepositAction:(id)sender {
    [[AccountsPickerArray objectAtIndex:pickerPosition] deposit:DepositValue];
    [AccountPicker reloadDataComponents];
}

//As above with withdrawals.
- (IBAction)WithdrawAction:(id)sender {
    [[AccountsPickerArray objectAtIndex:pickerPosition] withdraw:WithdrawValue
        ];
    [AccountPicker reloadDataComponents];
}

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//Delegate method called when the Withdraw slider us changed. Keeps the values
of the slider small as it has a high D.P precision.
- (IBAction)WithdrawValueChanged:(UISlider *)sender {

    WithdrawValue = roundl([sender value]); // Rounds float to an integer
    [sender setValue:(float)WithdrawValue];
    [_WithdrawSliderDisplay setText:[NSString stringWithFormat:@"%f",
        WithdrawValue]];
}
//As above with deposits.
- (IBAction)DepositValueChanged:(UISlider *)sender {

    DepositValue = roundl([sender value]); // Rounds float to an integer
    [sender setValue:(float)DepositValue];

    [_DepositSliderDisplay setText:[NSString stringWithFormat:@"%f",
        DepositValue]];
}

@end
```