

PAYBITO CRYPTO BANK



PayBito Banking Application

PayBito banking application allows a customer to conduct a variety of banking transactions easily.

The red button on the below screenshot refers to the PayBito bank Button.



On clicking the Paybit bank button / signing in through Paybit redirect to banking application - bank.paybit.com

On entering the banking application it'll have one tap activation for banking services -

Activate your Banking services

The user needs to click on ACTIVATE button and an auto-generated savings account with a unique ID will be created. Once the account is generated it will automatically redirect to the banking application dashboard with the below three options on the left panel.

1. Home 2. Savings 3. Loan



DASHBOARD HOME

It will show an overview of asset balance if any, balance transfer button to transfer asset balance from Paybito. Below is the table giving an overview-

Hi <user name>

Balance Transfer Button	
transfer from v	transfer to v
paybito wallet	paybito wallet
saving ac	saving ac
SUBMIT	

HOME	----->	Asset	Balance	Interest earned		Recent Transactions	
						• Date	
SAVINGS		BTC	BTC [amount of crypto]	BTC [amount of crypto]		BTC added [amount of crypto]	
LOAN							
						• Date	
		ETH	ETH [amount of crypto]	ETH [amount of crypto]		BTC withdrawn [amount of crypto]	

Savings

It will show an overview of the total balance, interest earned if any etc.

Accounts		
Total Balance		
XYZ \$		
Account	Total Balance	Interest Earned
Savings ••••7890BTCBTC
ETHETH



Total balance is total of all the cryptos combined

Total interest is total of all the cryptos combined

LOANS

Loans will have two tabs as following-

My Loans give an overview of the Active loans and the Past loan history as well.

Again Active Loans will give an overview of the ongoing orders and the assets.

My Loan v

Active Loan

Loan History

Active Loan v

Ongoing orders

Asset overview >

On selecting any of the above options it will show the details for the same as follows-

Flexible Rate		Stable Rate	
Total Debt Amount (USD)	Total Collateral Amount (USD)	Total Debt Amount (USD)	Total Collateral Amount (USD)
= USD	= USD	= USD	= USD

Debt Assets			Collateral Assets from Simple Earn (Flexible) Wallet		
Asset	Amount	Equity Value	Asset	Amount	Equity Value
You have no debt			You have no debt		

Loan History

It will show the details as follows-

Flexible Rate		Stable Rate *				
From date - To date	Coin Borrowed v	Collateral Coin v	Status v	Search Button	Reset Button	
CALENDER	All Coins listed to be borrowed	All Coins listed to be used as a collateral	All			



			Pending			
			Success			
			Failed			
Loan Date	Coin Borrowed	Loan Amount	Collateral Coin	Collateral Amount	Initial LTV	Status

Stable Rate *										
Order Id	From date - To date	Coin Borrowed v	Collateral Coin v	Type v	Status v	Search Button	Reset Button			
	CALENDAR	All Coins listed to be borrowed	All Coins listed to be used as a collateral	All	All					
				Normal	Pending					
				Renew	Success					
				Staking	Failed					
Order ID	Loan Date	Coin Borrowed	Initial Loan Amount	Collateral Coin	Initial Collateral Amount	Hourly Interest Rate	Loan Term	Expiration Time	Type	Status

Next is the **Borrow Market** and it will reflect the rates for all the loanable coins of Paybit.

An illustration of the same is given below as reference ::

Borrow for Spot/Margin/Futures Trading

Borrow Market

Loanable Coin	Flexible Rate	7days-stable Rate	30 days-stable Rate	
	Hourly/ Annual Interest Rate	Hourly/ Annual Interest Rate	Hourly/ Annual Interest Rate	
BTC	0.00017%/1.49%	0.000222%/1.94%	0.000256%/2.24%	Borrow
ETH	0.000189%/1.65%	0.000246%/2.15%	0.000284%/2.49%	Borrow
DOGE	0.000324%/2.83%	0.000421%/3.69%	0.000486%/4.26%	Borrow
(Display list of all cryptos in Paybit)				
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After clicking on the BORROW option a window is opened which will have the options to choose from different loan type and the asset of choice to collateralise -

BORROW MARKET

Search Coin v

(Display list of all cryptos in Paybito)

Loan Type v

Flexible rate - use earn wallet assets as collaterals, use spot wallet as supply

7 Days - Stable Rate

30 Days - Stable Rate

<i>I want to borrow</i>	<i>The Asset one wants to borrow</i>
<i>Amount</i>	<i>USD/USDT(CASH OUT)</i>
<i>Collateral</i>	<i>The Asset one wants to collateralise against the loan</i>
<i>MAX Amount</i>	List of Crypto v (Display list of all cryptos in Paybito)

Annual interest rate * - https://binance-docs.github.io/apidocs/spot/en/#get-loanable-assets-data-user_data

Estimated Hourly interest

LOAN CALCULATION

Here the formulae and methods of variance for loan calculation is deduced for reference ::

Volatility Index Calculation

- Firstly, gather daily crypto price and then determine the mean of the crypto price. Let us assume the daily crypto price on an ith day as P_i and the mean price as P_{av} .
- Next, compute the difference between each day's crypto price and the mean price, i.e., $P_i - P_{av}$.
- Next, compute the square of all the deviations, i.e. $(P_{av} - P_i)^2$.



- Next, find the summation of all the squared deviations, i.e. $\sum (P_{av} - P_i)^2$.
- Next, divide the summation of all the squared deviations by the number of daily crypto prices, say n, called the variance.

$$\text{Variance} = \sum (P_{av} - P_i)^2 / n$$

Next, compute the daily volatility or standard deviation by calculating the square root of the variance of crypto.

$$\text{Daily volatility} = \sqrt{\sum (P_{av} - P_i)^2 / n}$$

Annualized volatility would be $\sqrt{365}$ * crypto's daily volatility

Monthly volatility would be $\sqrt{30}$ * crypto's daily volatility

INITIAL LTV CALCULATION

$$\text{LTV} = (\text{LTV\%})(\text{AV})$$

$$\text{Liquidation \%} = (\text{LTV\%})(1 + \text{LV\%})$$

$$= 80/100(1 + 10/100)$$

$$= (80/100) * (110/100)$$

$$0.88$$

Liquidation condition - $\text{AV}_c > 0.88 (\text{AV}_i)$ OR otherwise Liquidate

Margin Call

$$\text{M\%} = 95\% \text{AV}_i - \text{L\%}$$

$$= (95\% * 100) - 0.88$$

$$94.12$$

$\text{AV}_c > 95\% \text{AV}_i$ or otherwise Margin call notify

Parameters	
Asset Value - AV	
Asset Value Initial - AV _i	100
Asset Value Current - AV _c	
Liquidation % - L%	
Loan To value % - LTV % (Loan Amount / Collateral Amount x 100%)	80%
Margin Call % - M%	
Liquidation value % - LV%	10
Loan Amount = Principal + Interest	

P.S :: The values mentioned in the above table are for the calculations shown.

