

Nifty Trader

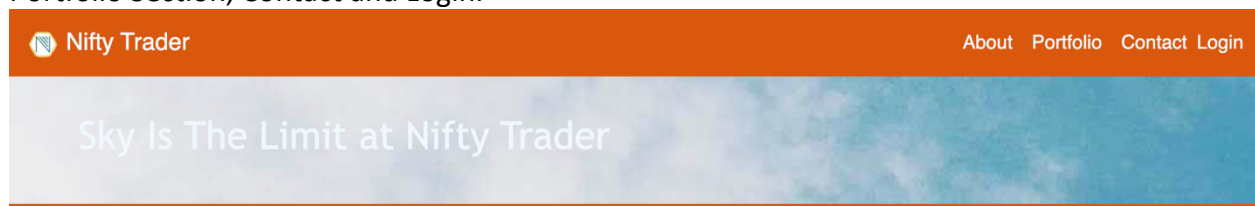
1. Introduction

Nifty Trader is a trading platform which will help users trade various kinds of financial instruments like equities, bonds, derivatives, options, cryptocurrencies.

The idea is to build highly responsive web page following the principle of mobile first using HTML, CSS, Javascript and Bootstrap.

2. Design and Implementation

Basic web page design consists of an index.html which has a nav bar with links for About Page, Portfolio Section, Contact and Login.



Portfolio Section consists of thumbnails for various class of financial instruments which the trading platform allows to trade.

The thumbnails are laid out using bootstrap container, row-column-based grid.



Clicking on each of the thumbnail will take you to a page describing various financial instruments within the class.

For instance, clicking on Bond thumbnail will take you to BondTrading.html which has description of various kinds of Bonds the users can trade.

Below the Portfolio section is a Contact section which lets the user contact the owner of the site/company by leaving a message and contact details.

Please Leave a Message

Have questions about opening a trading account? Send us a messages and we will get back to you as soon as possible!

Full name

Email address

Phone number


Message


+1 (123) 456-7890

Clicking on the login link takes the user to a bootstrap modal dialog which lets the user enter username and password.




×

Login

Username 

Password 


Login




Not a member yet? [Register](#)

It also allows first time users to register which in turn takes the user to another bootstrap modal dialog where they input user details.


×



Your name



Your email

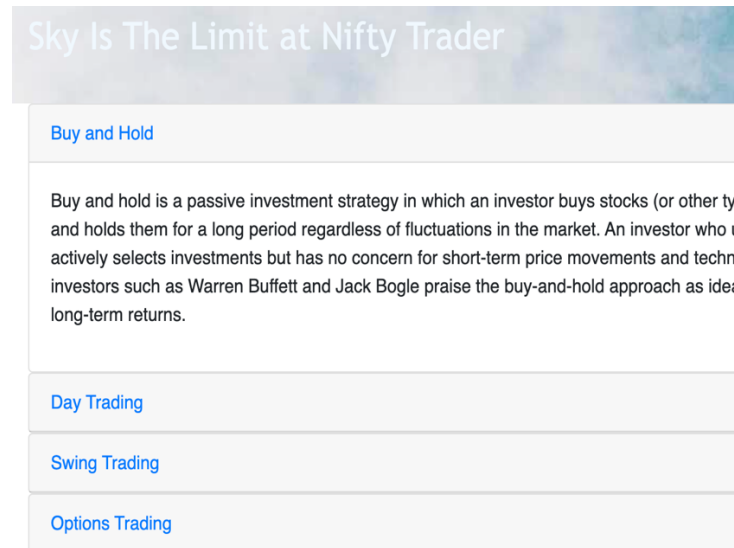


Your password

Sign up

Clicking on Equities on the portfolio, takes the user to Equities Trading page. The page has a jumbotron with the site image on the top.

Below that one would find a Bootstrap's collapse accordion describing various kinds of equities trading.



Clicking on Bond Trading thumbnail takes the user to Bond Trading page which has a carousel of various types of bonds.

There is a button at the lower right corner which toggles between play and pause. Play and pause functionality is controlled by JQuery.

Below the carousel there is a tab panel which describes each kind of bond in a separate tab.



Fixed Rate Bond [Floating Rate Bond](#) [Zero Coupon Bond](#)

A fixed rate bond is a long-term debt instrument that pays a fixed coupon rate for the duration of the bond. The fixed rate is indicated in the trust indenture at the time of issuance and is payable on specific dates until the bond matures. The benefit of owning a fixed rate bond is that investors know with certainty how much interest they will earn and for how long. As long as the bond issuer does not default or call in the bonds, the bondholder can predict exactly what his return on investment will be.

Clicking on Cryptocurrencies takes the user to a page which has information on current prices of various cryptocurrencies and whether the price is up or down.

The information is presented in tabular form using a hover table of Bootstrap.

Crypto Currencies

Today's Top Cryptocurrencies by Market Cap

Cryptocurrency	Price	24 hrs change %
Bitcoin	\$43,415.26	-2.43%
Ethereum	\$3,095.89	-2.01%
Tether	\$1.00	-1.95%
BNB	\$416.50	-0.8%
USD Coin	\$0.9991	-0.01%
XRP	\$0.8168	+1.45
Cardano	\$1.15	+2.43%

Interest Rate Derivatives page presents various kinds of IRDs and the description is done using a card for each kind of IRD.

Swaps

A plain vanilla interest rate swap is the most basic and common type of interest rate derivative. There are two parties to a swap: party one receives a stream of interest payments based on a floating interest rate and pays a stream of interest payments based on a fixed rate. Party two receives a stream of fixed interest rate payments and pays a stream of floating rate payments. Both payment streams are based on the same notional principal, and the interest payments are netted. Through this exchange of cash flows, the two parties aim to reduce uncertainty and the threat of loss from changes in market interest rates.

Caps and Floors

A company with a floating rate loan that does not want to swap to a fixed rate but does want some protection can buy an interest rate cap. The cap is set at the top rate that the borrower wishes to pay; if the market moves above that level, the owner of the cap receives periodic payments based on the difference between the cap and the market rate. The premium, which is the cost of the cap, is based on how high the protection level is above the then-current market; the interest rate futures curve; and the maturity of the cap; longer periods cost more, as there is a higher chance that it will be in the money.

Swaptions

A swaption, also known as a swap option, refers to an option to enter into an interest rate swap or some other type of swap. In exchange for an options premium, the buyer gains the right but not the obligation to enter into a specified swap agreement with the issuer on a specified future date.

About Page consists of description of the team

Has 25 years of experience in the industry

CEO



Has 50 years of experience

CTO



Has 100 years of experience

CFO



Conclusions:

Building a HTML/CSS/Javascript ground up website with the help of Bootstrap is a huge learning experience.

Obviously, lack of instructions from anyone makes you take your own decisions. That comes with its own set of challenges.

Basically, each page uses different kind of components. That way user experience in each page is different and not dull. That's the best part.

Login dialog is available only on index.html. I couldn't figure out how to connect to login dialog in the index.html from other page. That is a shortcoming.