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Introduction:

In today's era of global travel, venturing to foreign lands offers individuals invaluable experiences and perspectives. Understanding the value of their currency in the destination country is crucial for responsible financial management. Currency conversion knowledge enables travelers to make informed decisions about spending and budgeting, ultimately enhancing their overall travel experience. Moreover, staying updated on currency fluctuations provides insights into the cost of living and helps travelers opt for more financial choices during their stay. By leveraging these insights, travelers can effectively manage their finances abroad, leading to a more rewarding and financially sustainable journey.

Objectives:

The primary aim of this webpage is to serve as a reliable resource for accessing current and precise currency values. Its central feature will enable users to seamlessly convert currencies, facilitating easy financial planning and decision-making for travelers and international business professionals alike. Beyond mere conversion tools, the platform will also deliver pertinent updates and insights into currency dynamics. This encompasses timely news reports on economic developments impacting currency valuations, empowering users with the knowledge needed to navigate fluctuations effectively. By offering a comprehensive suite of currency-related services, the webpage can be a trusted companion for individuals seeking to stay informed and in control of their financial affairs across borders.

Functionalities & Features:

Currency Converter – The Currency Converter feature on the webpage serves as a user-friendly tool designed to streamline currency conversion processes for individuals navigating international transactions or travel. Upon accessing the converter, users are prompted to input the specific amount of money they intend to convert. Subsequently, they





are required to specify two additional parameters: the current currency, representing the currency to be converted, and the output currency, denoting the desired currency for conversion.

This intuitive interface empowers users to effortlessly perform accurate currency conversions, enabling them to swiftly assess financial values across different monetary systems. Whether planning a budget for an overseas trip, conducting cross-border transactions, or simply staying informed about currency fluctuations, the Currency Converter provides a convenient solution for users to effectively manage their finances in a global context.

Cryptocurrency — Unlike traditional currencies issued and regulated by central authorities, cryptocurrencies are decentralized and operate on technology. Their value fluctuates based on market demand and supply dynamics, as well as speculative investor activity. While originally conceived for use within virtual gaming platforms, cryptocurrencies have transcended their initial purpose and are now recognized as viable financial assets with the potential for conversion into real-world currencies. Despite their virtual origins, cryptocurrencies possess tangible value, with exchange rates against fiat currencies determined by market forces. In this webpage, the developers used the most common cryptocurrencies such as BitCoin.

Currency News – Within the Currency News section of the webpage, users can access timely updates and insightful analyses on fluctuations in currency values. Recognizing the dynamic nature of global economies, this feature serves as a valuable resource for individuals seeking to stay alerted of evolving market trends and make informed decisions regarding their financial assets. By staying informed about shifts in currency valuations, users are empowered to adapt their financial strategies accordingly, maximizing opportunities for profit and risk mitigation.





Furthermore, the Currency News section facilitates a deeper understanding of currency dynamics, allowing users to discern which currencies may offer the most favorable exchange rates or investment prospects. Whether planning international travel, conducting cross-border business transactions, or engaging in currency trading, access to up-to-date currency news equips users with the knowledge needed to navigate the complexities of the global financial landscape with confidence and precision.

API Integration:

In this software, the developers utilized a total of four public APIs: Email JS, Coin API, Open Exchange, and News API. The said APIs can contribute information about the desired goal of this webpage. These APIs are also concisely used. Therefore, the developers can assure that the information shown in the webpage are all about currencies. The developers can guarantee that there will not be any information or data that are completely disconnected from the main topic or goal of the webpage.

Coin API – in this API, users are able to see cryptocurrency prices. These prices are real-time prices that they may find useful. However, there is a slight margin of error since the value of cryptocurrencies updates every second unlike the API used for real currencies which is Open Exchange. The Coin API supplies real-time data on cryptocurrency values, catering to the growing demand for information on digital currencies within the financial space.

Open Exchange – Unlike Coin API, Open Exchange deals with accurate, real-life currencies that people use on a daily basis. These are also real-time values, but unlike cryptocurrencies, this does not have a margin of error. It empowers users to make informed and better decisions regarding international transactions or travel expenses.

News API – this is the API that is responsible for the news displayed in the webpage (specifically in the 4th section). It filters the news into currency-related news so users can gather more information related to currency. It delivers curated news





articles and insights specifically related to currency markets, enriching users' understanding of the factors influencing currency values and market trends.

Drift – its main purpose is for the site visitors. It contributes mainly to the messaging part of the webpage. It is an AI tool for conversational purposes, allowing user to chat across the sections.

Email JS – this API is mainly for sending emails to users. Upon subscription, the developers will send an email that will notify users about their subscription. However, there are currently no databases present. For that matter, accounts are actually not saved; these are just dummy feature that could add up to the webpage to make it better.

Coinswitch \(\text{zilyankyleO8@gmail.com} \)
to me \(\text{\$\text{v}\$} \)

Dear User,

Thank you for subscribing to the Coinswitch newsletter!

You will receive regular updates on cryptocurrency news, market trends, and special offers.

Best Regards,
Coinswitch Team

Email sent via \(\text{EmailJS.com} \)

WebSocket Integration:

For this webpage, the developers created a WebSocket for the news part of the webpage. It can be seen on the "Latest News" section, which displays everything about currency news that the webpage offers. With this WebSocket, users are able to see up-to-date information from the news. When there is a change about the news displayed, they will be updated real-time. Rest-assured that the information accessed by the users are real-time data that changes whenever there is a change. Without the server being opened, the news will now display.





Restriction:

As mentioned in the 'About Us' page, the developers of this webpage are students. Therefore, the resources that the developers possess are limited. For the selected topic: Currency Conversion, the API that the developers utilized are public APIs. On that note, the said APIs have limited access. There is a request limit of 1000 attempts. Because of this, the purpose of the webpage will only be a short-term solution given that the APIs available are only free trial. Additionally, the News API has a limit of 30 days for the filtering of the news. For this matter, the news will no longer be about currencies after the free 30-day trial of the public API. Therefore, after the trial, the webpage can no longer ensure that the news shown or displayed on the 'Latest News' section are limited to currencies. Other news about issues regarding other matter will also be displayed.





Home

The "Home" section is the landing page of the webpage. It is the first section that is shown when the page is opened. It is a section that consists very minimal information about the webpage itself. It has an overview of what to expect in this webpage. Moreover, this section also contains an Email entry for users to be able to subscribe into our page.

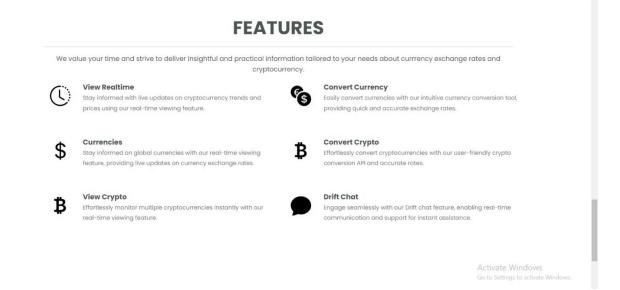












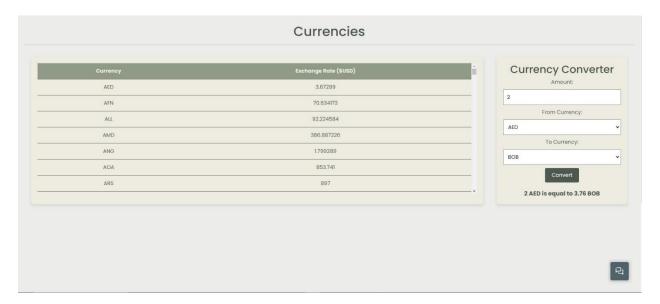
Currencies

This is the second section of our page. This section will contain the main objective of the webpage. It displays the USD currency exchange rate of other currencies. It will three things: Currency, Currency Name, and Exchange Rate.





Below the exchange rate of the currencies, the currency converter feature is displayed. It has three entries: Amount, From Currency, and To Currency. The first one is a standard entry, which will require users to input the amount of money they wish to convert. The other two entries (From Currency and To Currency), will have a drop-down list that will display the available currencies that they can choose. Both drop-down lists will contain the same choices. However, the two differ on their usage. The primer is for the Currency 'Before' it is converted, while the latter is the Currency 'After' it is converted. So, the latter one is basically the type of currency that they wish the money to be converted into.



Cryptocurrency

The Cryptocurrency section is the third section of this webpage. Cryptocurrencies are currencies that can be seen in applications (usually games) that can be converted into real-life physical money. In this section, users will have access towards the information about the change of value in cryptocurrency. Users can clearly see the precise conversion value of the cryptocurrencies. With this feature, users can decide whether to convert their cryptocurrencies now or save it for any future fluctuation.

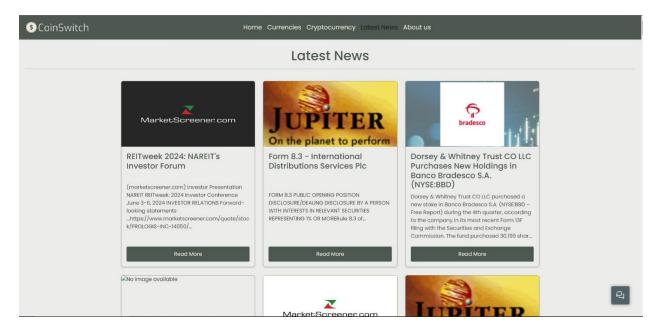




S CoinSwitch	Home Currencies Cryptocurrency Latest News About us	
	Cryptocurrency	
	From: LTC To: US Doilar (USD)	
	Amount: 2 Convert	
	2 LTC = 168.77 USD	
	원	

Latest News

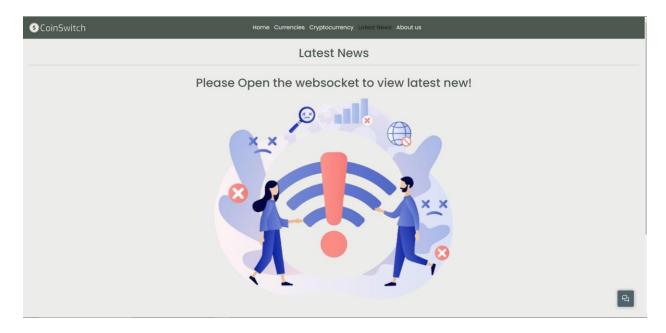
The fourth section of this webpage, Latest News, will contain some currency-related news. The users can utilize these information as they serve as an additional knowledge for them to consider. Through this up-to-date news, the users can make better decisions when it comes to their financial usage.





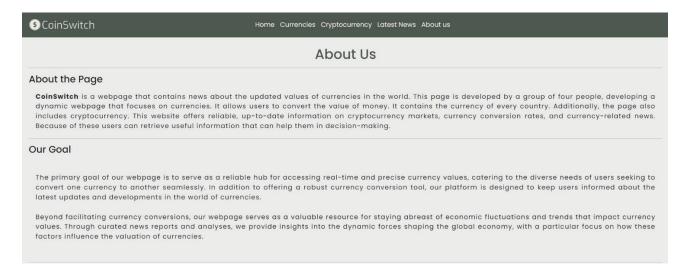


This is what will show when the WebSocket is not on. Make sure to open it before running the page.



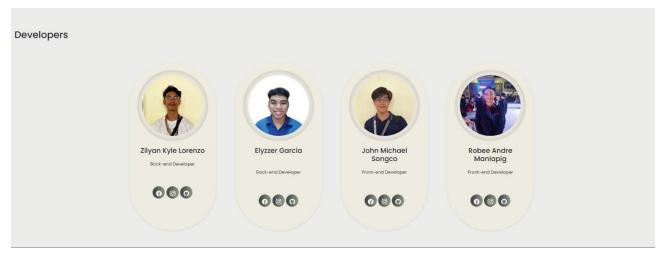
About Us

The "About Us" page is the last section of the webpage. In this page, the users can see detailed information about what the webpage is all about, who developed the webpage, what are the specific targets of the webpage, and a bit of personal information about the developers. In line with this, this section will also display the 'goal' of the webpage.



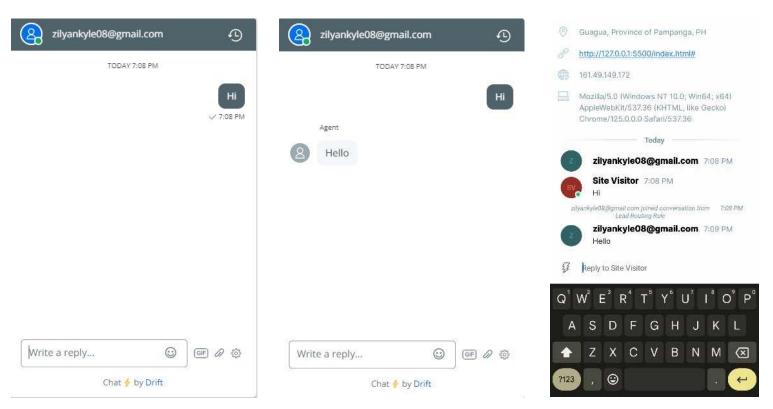






Live Chat

In this webpage, users can freely message across the section. No matter what section is currently opened, the messages will be received.



Footer

