FPT ACADEMY INTERNATIONAL

FPT – APTECH COMPUTER EDUCATION

Metric Conversions

Supervisor: *LÊ THANH NHÂN*

Semester: *01*

Batch No: *T5.2309.E0*

Group No: *04*

Order:	**Full name**	**Roll No.**
1.	*Lượng Đức Tùng*	*Student1513387*
2.	*Bùi Trọng Anh Đức*	*Student1513435*
3.	*Lê Khánh Nguyên*	*Student1513438*

***Month**: 12 **Year**: 2023*

This is to certify that

Mr. **LƯỢNG ĐỨC TÙNG**

Mr. **BÙI TRỌNG ANH ĐỨC**

Mr. **LÊ KHÁNH NGUYÊN**

Have successfully Designed & Developed

METRIC CONVERSIONS

Submitted by:

Mr. LE THANH NHAN

Date Of Issue:

Authorized Signature:

Content

Acknowledge

I would like to extend my heartfelt gratitude to all those who played a crucial role in the successful development and implementation of the eProject: Metric Conversion Website at APTECH. This project marks a significant milestone, and it is with great pleasure that I acknowledge the contributions of the individuals and teams involved.

First and foremost, I express my sincere appreciation to Mr Le Thanh Nhan faculty and staff who provided unwavering support and guidance throughout the entire process. Their expertise and encouragement were instrumental in steering the project towards success.

I am deeply thankful for the dedication and hard work of the project team members . Their collaborative efforts and creative input have resulted in a website that not only meets the academic standards of our institution but also showcases innovation and excellence.

Special recognition goes to Le Thanh Nhan faculty, whose mentorship and insightful feedback were invaluable. His guidance helped shape the project and ensured its alignment with the academic goals of APTECH.

Lastly, I extend my appreciation to the FPT Aptech administration, alumni, and all stakeholders whose continued support has been instrumental in bringing this project to fruition. The collaborative spirit demonstrated by the FPT Aptech community has made this achievement possible.

In conclusion, the eProject: Metric Conversion Website stands as a testament to the dedication and collaboration within our Aptech community. I am confident that this platform will serve as a valuable resource for students, faculty, and the broader academic community.

Your Sincerely,

Team Group 04.

Synopsis

The Objective of this program we aim is to give a sample project to work on real life projects. These applications help us build a larger more robust application.

The objective is not to teach us HTML/JavaScript but to provide us with a real life scenario and help us create basic applications using the tools.

Hence, we can revise the chapters before we start with the project.

This project is meant for students like us who have completed the module of HTML5. These programs should be done in the Lab sessions with assistance of the faculty if required.

With this website, we hope everyone can easily calculate units more quickly and easily.

We collaborative efforts and creative input have resulted in a website that not only meets the academic standards of our institution but also showcases innovation and excellence.

It is very essential for us that will have a clear understanding of the subject. We think we should go through the project and solve the assignments as per requirements given.

And get back ***eprojects@aptech.ac.in*** as the assigned schedule.

Problem Definition

Why does one need metric conversion for? Science projects seem more authoritative when the units used are metric units, such as grams, milliliters, and degrees Celsius.

Anyone can do good backyard science with inches and ounces, but when he shows his work in a science fair, metric conversion will show that he understand the importance of these units to scientists.

There are various units of measurement; one of the earliest types of measurement concerned that of length. Many times we need to convert some data from one unit to other. Hence you are expected to develop a calculator for such metric conversions.

1. There should be a separate web page that displays the metric conversion chart. The chart should include the multiplying factors for the conversion

    - Length conversion:
        - Should include the multiplying factors for following
            - Inches millimeters
            - Feet Meters
            - Yards - Meters
            - Miles Kilometers
    - Area conversion
        - Should include the multiplying factors for following
            - Square inches Square millimeters

        - Square feet Square meters
        - Square yards Square meters
        - Acres Hectares
        - Square miles Square kilometers

- Volume conversion
    - Should include the multiplying factors for following
        - fluid ounces milliliters
        - gallons liters
        - cubic feet - cubic meters
        - cubic yards - cubic meters

- Mass conversion
    - Should include the multiplying factors for following
        - Ounces grams
        - Pounds kilograms
        - short tons (2000 lb) - mega grams (or "metric ton")

- Temperature conversion
    - Fahrenheit Celsius
    - Celsius Fahrenheit

2. There should be separate web pages for the various conversions, you need to include the conversions of

    a. Area

    b. Length

    c. Volume

    d. Mass

    e. Temperature

    f. Currency

3. Along with the above conversion techniques, there should also be information related to all the measurement units as how / who invented them. A brief history about these units should be provided under the separate section as history of measurement units

4. Provide some articles e.g.

    a. The SI System : An article describing what the SI system of units is

    b. Metric System : An article describing the differences between the various metric systems.

    c. The meter An article defining the meter as used in the metric system, both past and present.

    d. Traditional U.S. Units: An article describing the traditional units of measurement used throughout the United States.

5. Also provide the frequently asked questions (FAQs) like

    a. How do I enter numbers in Scientific Notation?

    b. What is a knot? What is a nautical mile?

    c. What about rainfall? How do I convert between inches of rain, and millimeters of rain?

    d. What is the difference between the long ton, short ton, and metric ton?

    e. At what temperature are Celsius and Fahrenheit the same?

Customer Requirements Specifications

User:

input:

- Select type convert from
- Numeric
- Select type convert to

Process:

- Storage type convert form user input
- Multiply the numeric by the conversion factor

Output:

- Result convert to text box

Webmaster:

input:

- Enter username and password
- New type conversion
- Conversion factor

Process:

- Validate account
- Create new type convert page
- Create new conversion factor

Output:

- New Page conversion with conversion factor

Hardware / software requirement:

Software:

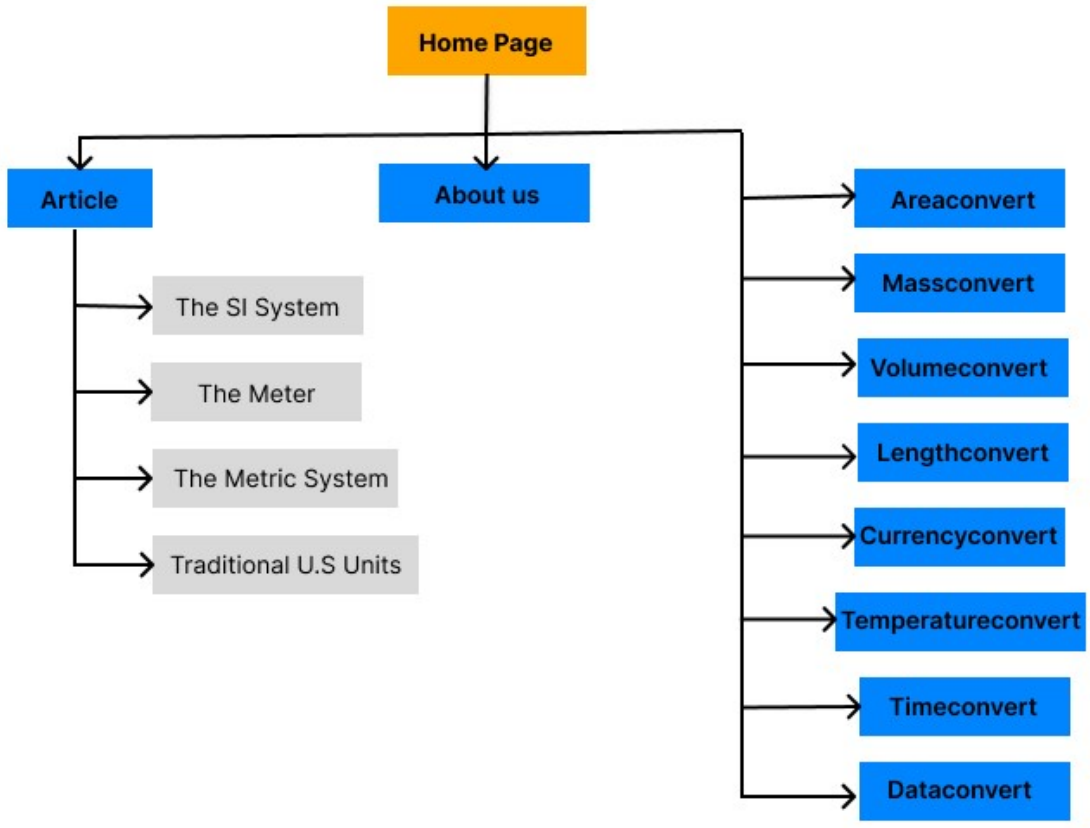
- Notepad/HTML editor
- Dreamweaver
- IE 5.0/ Netscape 6.0

Hardware:

- A minimum computer system that will help you access all the tools in the courses is a Pentium 166 or better
- 64 Megabytes of RAM or better

Architecture and design of the project

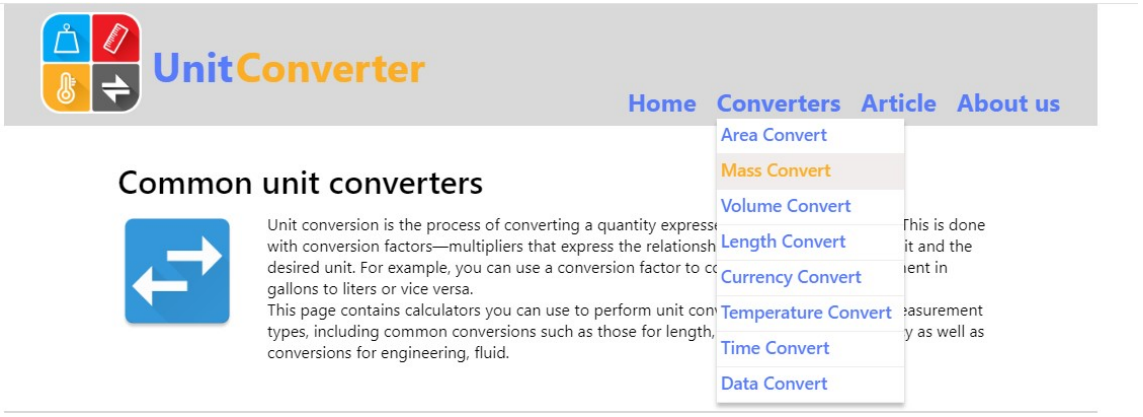
SiteMap


Home Page
Article
About us
Areaconvert
Massconvert
Volumeconvert
Lengthconvert
Currencyconvert
Temperatureconvert
Timeconvert
Dataconvert
The SI System
The Meter
The Metric System
Traditional U.S Units

Screen shots

I. Homepage:

1.Header:

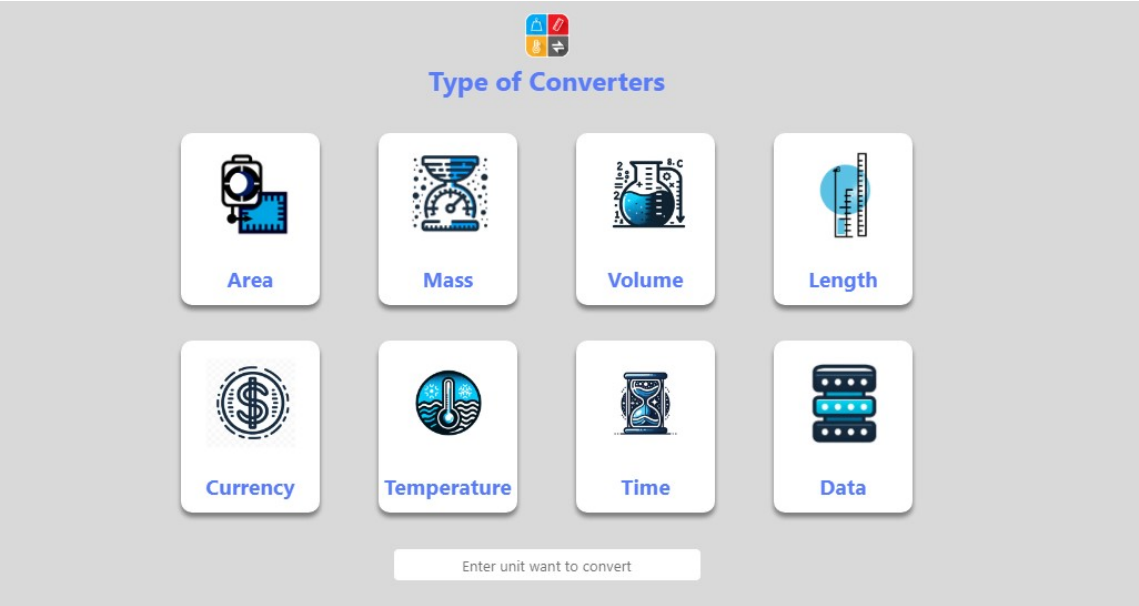


Description: on top of home page, include: Logo and Navbar

From: Homepage

To: Homepage, AreaCovert, DataConvert, LengthConvert, TemperatureConvert, TimeConvert, VolumeConvert, Article, Aboutus

2.TypeOfConver:

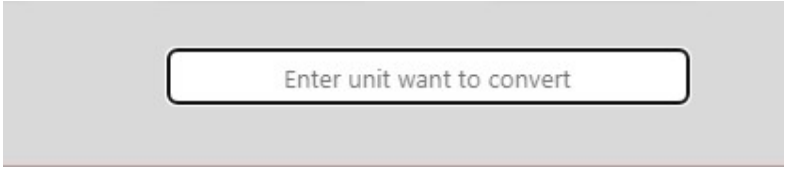


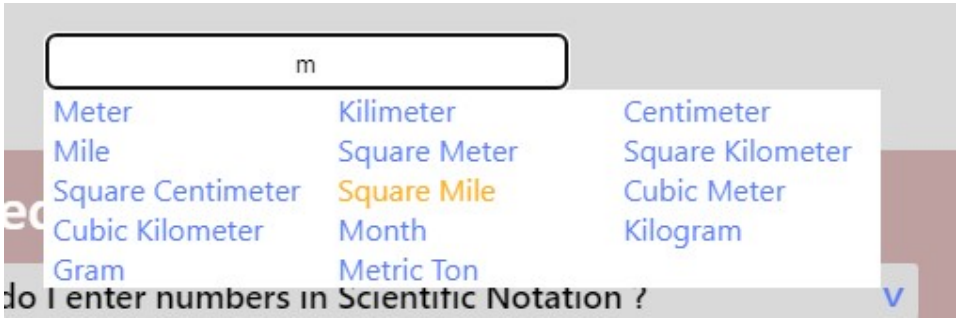
Description: Show type of convert

From: Homepage

To: AreaCovert, DataConvert, LengthConvert, TemperatureConvert, TimeConvert, VolumeConvert.

3.Search Unit Convert:



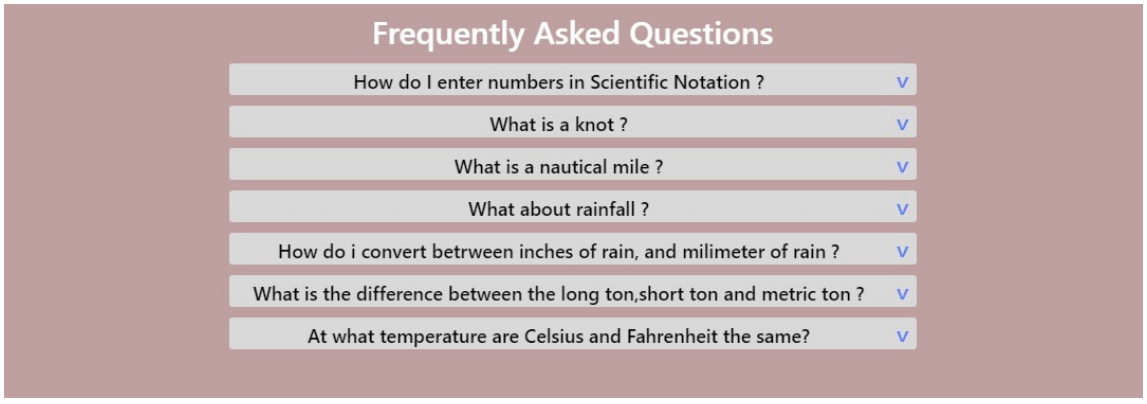


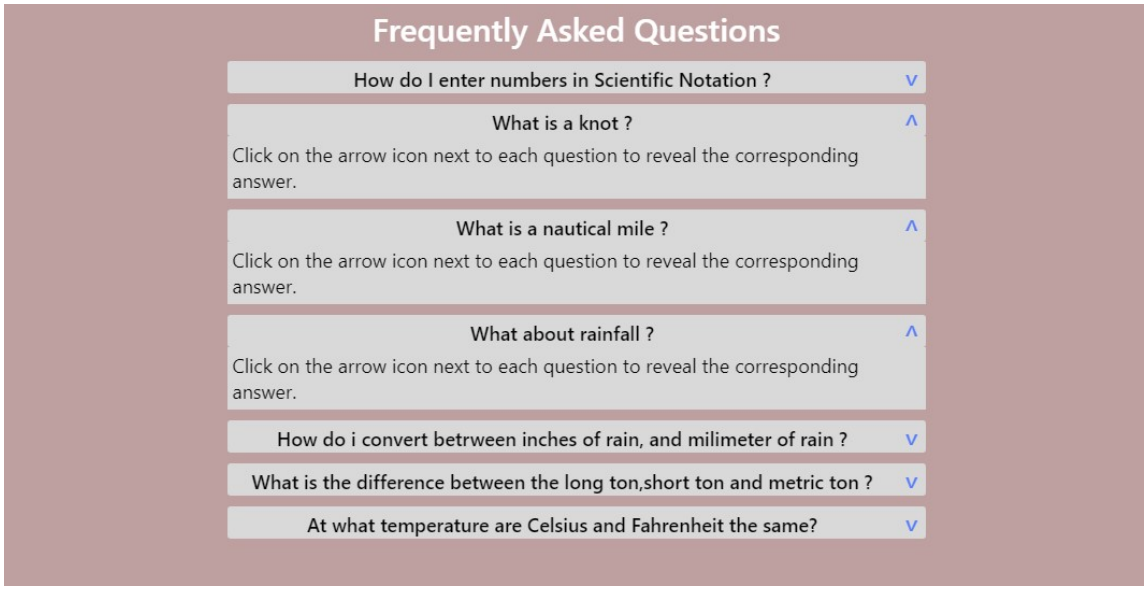
Description: user find unit to convert

From: Homepage

To: AreaCovert, DataConvert, LengthConvert, TemperatureConvert, TimeConvert, VolumeConvert.

4.FAQs:





Description: Provide the frequently asked questions and answer its

From: Homepage

5.Footer:

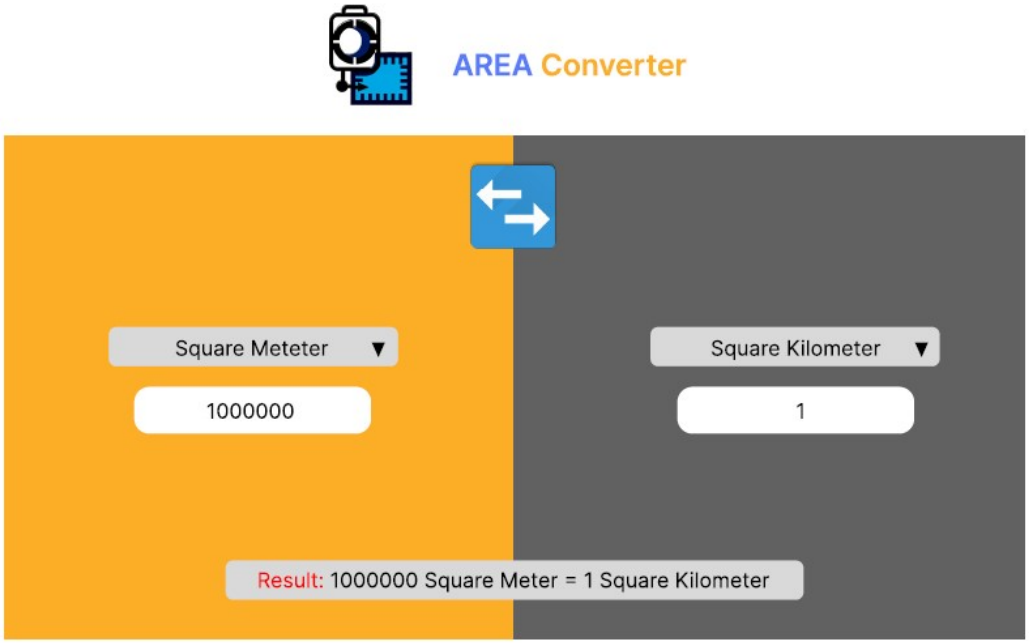
Description: on end of home page, include: Logo, copyright information, link to type of convert and location

From: Homepage

	Prepared by (Student)	**Approved by (Faculty)**
	Project Group No: 04	**Le Thanh Nhan**
Signature		
Date		

To: Homepage, AreaCovert, DataConvert, LengthConvert, TemperatureConvert, TimeConvert, VolumeConvert, Article, Aboutus

II. AreaConvert:



- The square metre (international spelling as used by the International Bureau of Weights and Measures) or square meter (American spelling) is the unit of area in the International System of Units (SI) with symbol m2. It is the area of a square with sides on
- The square kilometre (square kilometer in American spelling; symbol: km2) is a multiple of the square metre, the SI unit of area or surface area.
- The square kilometre (square kilometer in American spelling; symbol: km2) is a multiple of the square metre, the SI unit of area or surface area.
- The square mile (abbreviated as sq mi and sometimes as mi2)[1] is an imperial and US unit of measure for area. One square mile is equal to the area of a square with each side measuring a length of one mile.
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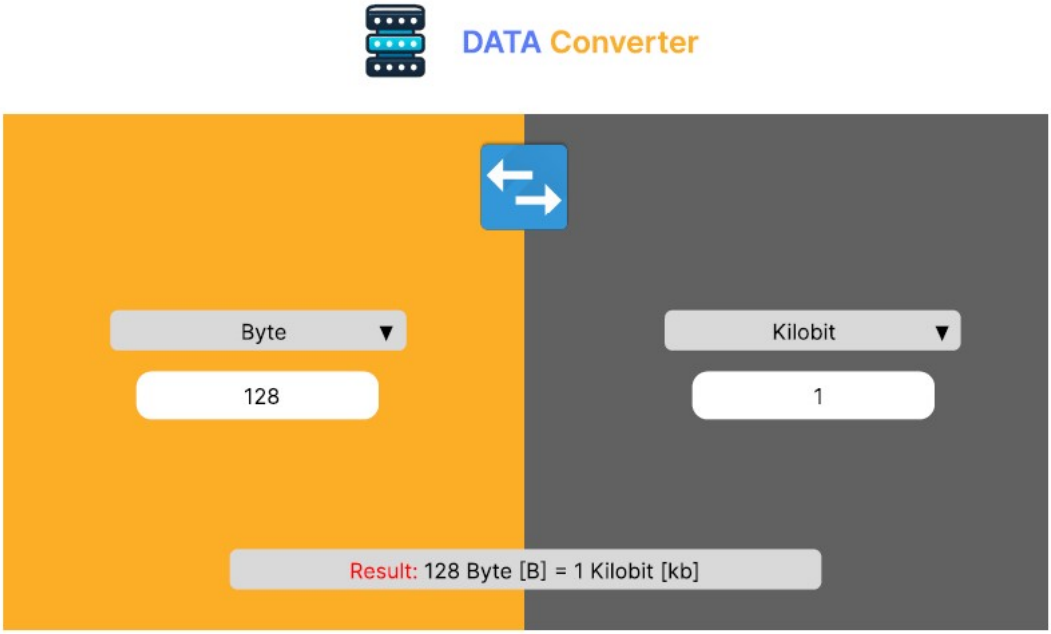
- The square kilometre (square kilometer in American spelling; symbol: km2) is a multiple of the square metre, the SI unit of area or surface area.

Description: include convert of area, information related to all the measurement area units

From: Navbar, Type of Convert , Search unit convert and Footer on homepage

III. DataConvert:



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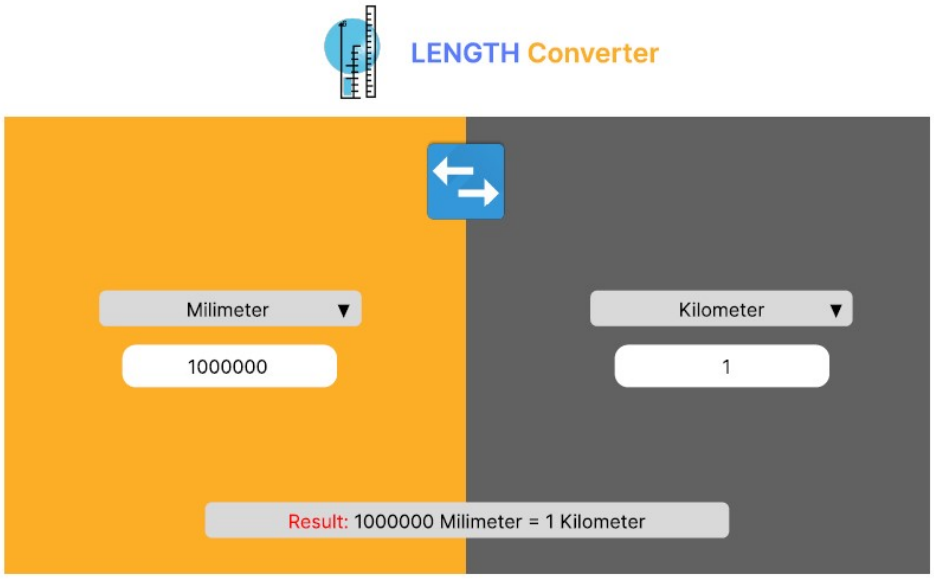
Description: include convert of data, information related to all the measurement data units

From: Navbar, Type of Convert , Search unit convert and Footer on homepage

IV. LengthConvert:



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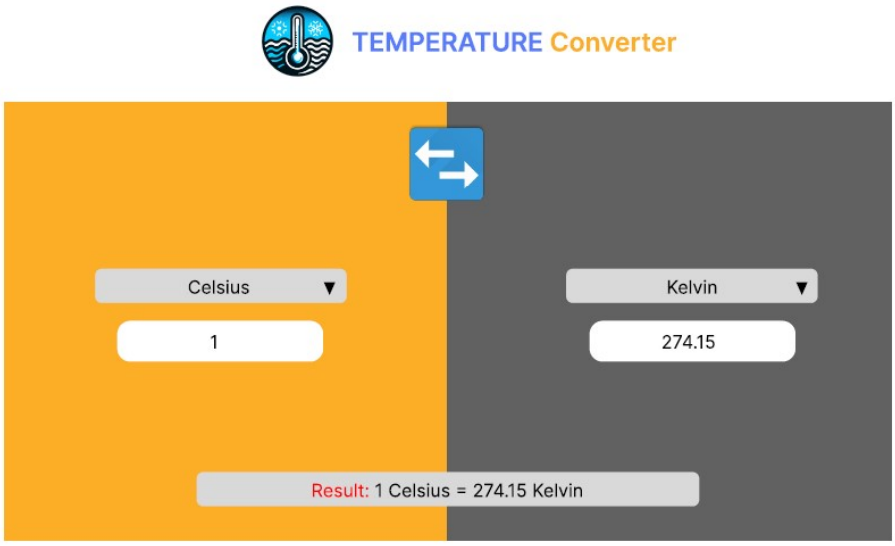
- The square kilometre (square kilometer in American spelling; symbol: km2) is a multiple of the square metre, the SI

Description: include convert of length, information related to all the measurement length units

From: Navbar, Type of Convert , Search unit convert and Footer on homepage

V. TemperatureConvert:



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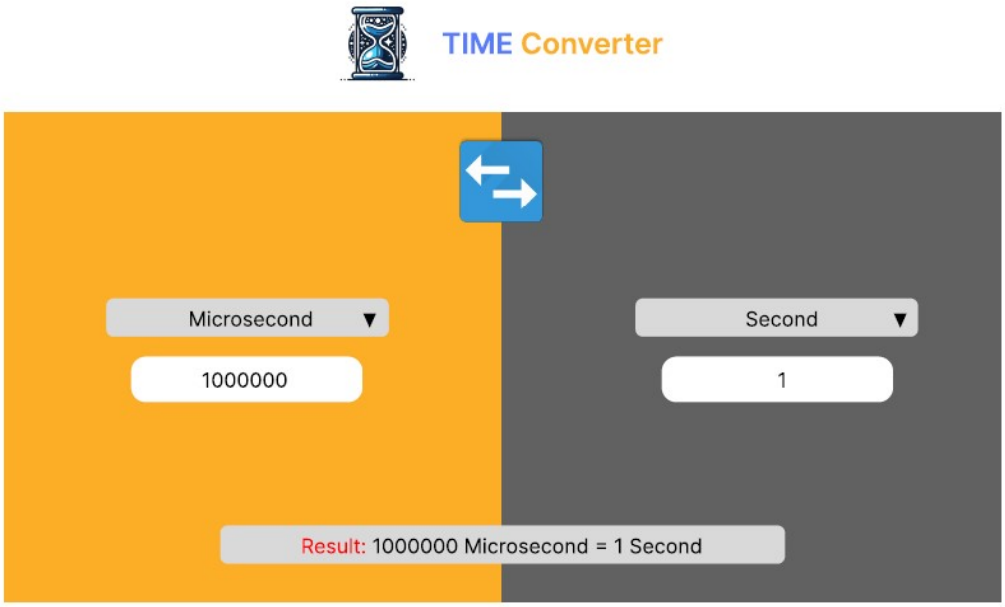
Description: include convert of Temperature, information related to all the measurement Temperature units

From: Navbar, Type of Convert , Search unit convert and Footer on homepage

VI. TimeConvert:



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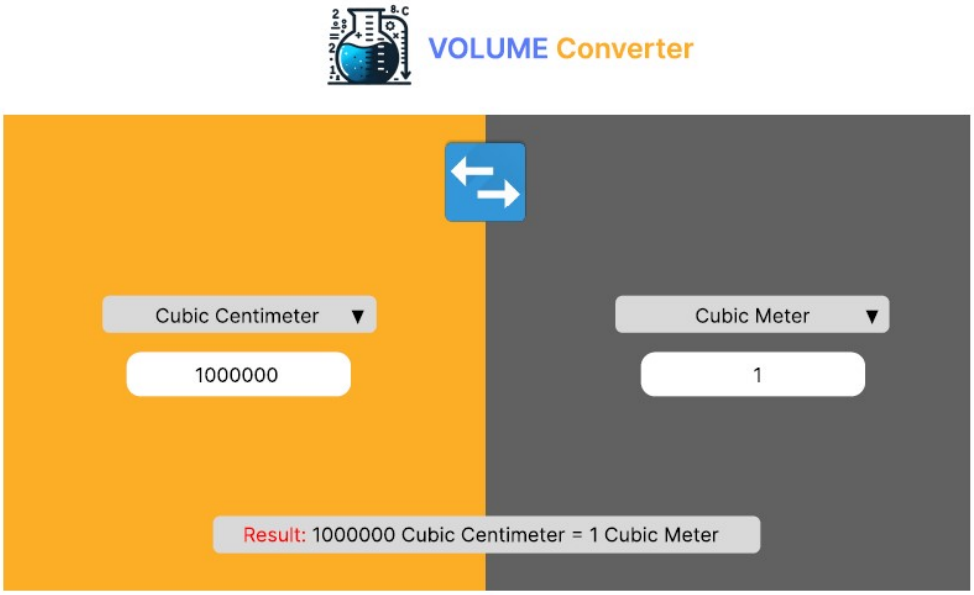
Description: include convert of time, information related to all the measurement time units

From: Navbar, Type of Convert , Search unit convert and Footer on homepage

VII. VolumeConvert:



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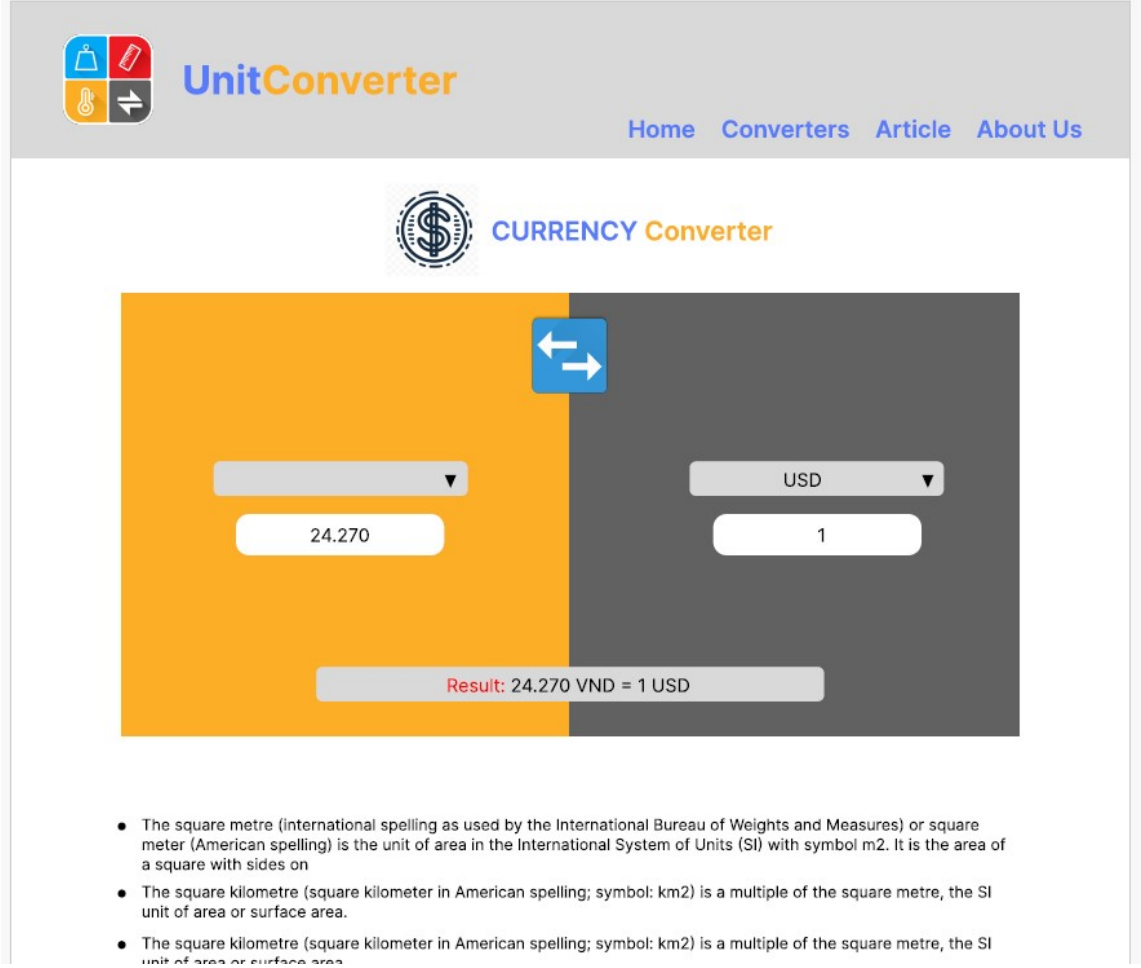
Description: include convert of volume, information related to all the measurement volume units

From: Navbar, Type of Convert , Search unit convert and Footer on homepage

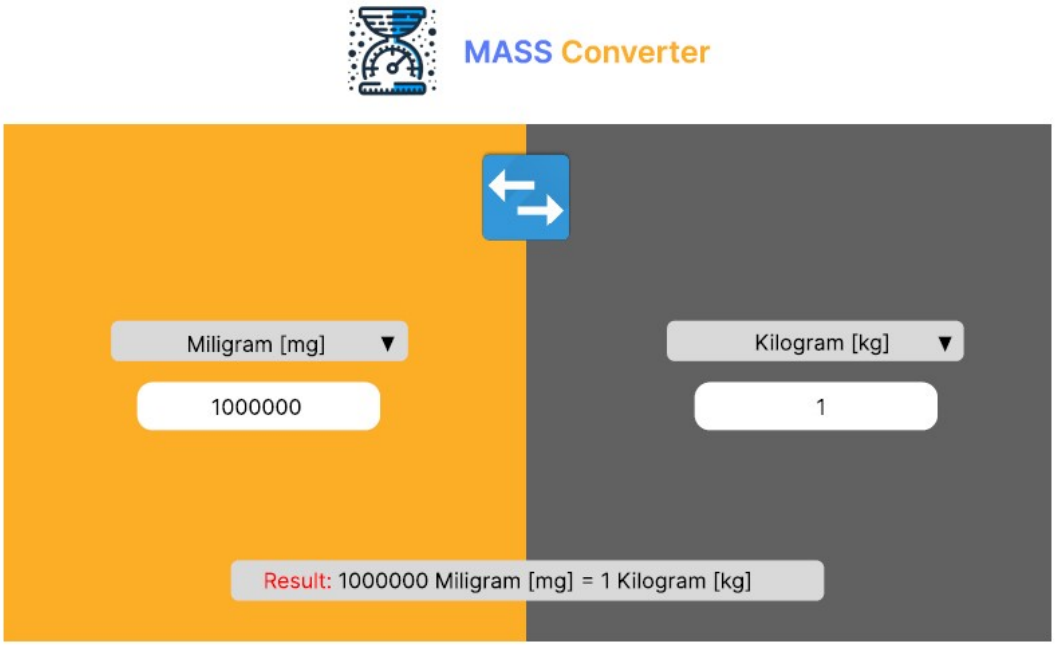
VIII.CurrencyConvert:



Description: include convert of currency, information related to all the measurement currency units

From: Navbar, Type of Convert , Search unit convert and Footer on homepage

IX. MassConvert:



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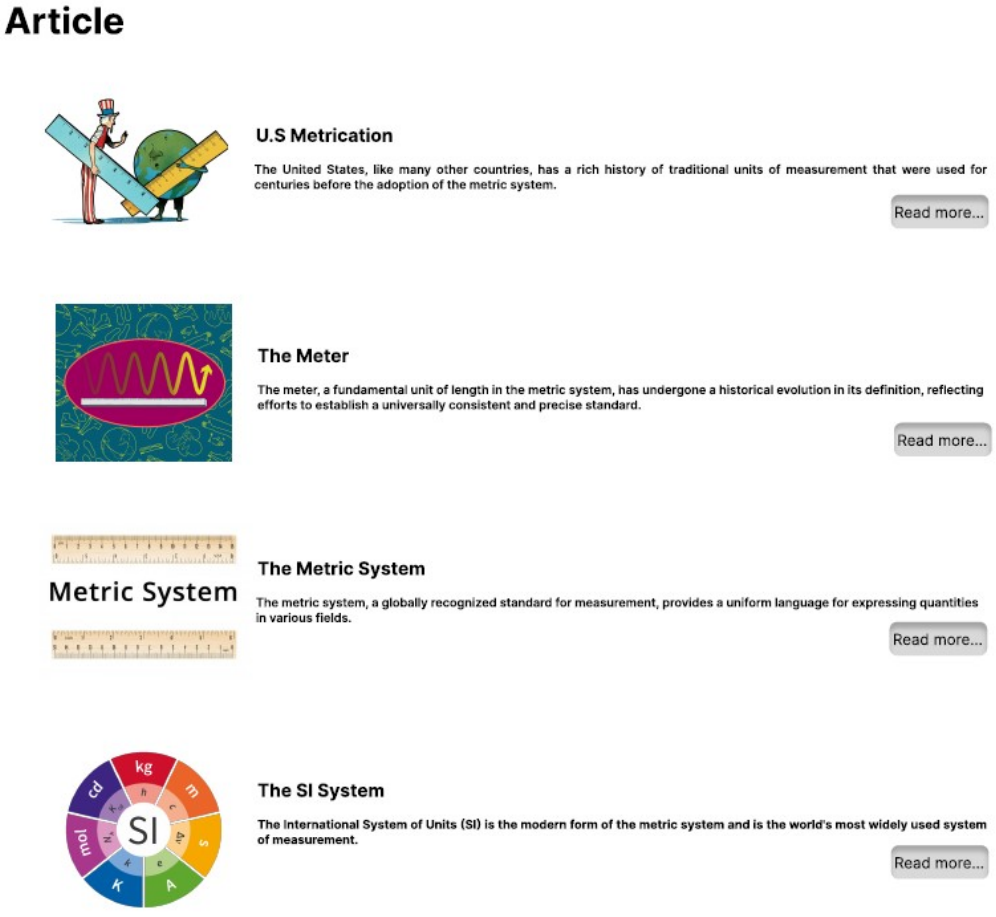
Description: include convert of mass, information related to all the measurement mass units

From: Navbar, Type of Convert , Search unit convert and Footer on homepage

X. Article



Description: Provide some articles : The SI System , Metric System, Traditional U.S. Units...

	Prepared by (Student)	Approved by (Faculty)
	Project Group No: 04	**Le Thanh Nhan**
Signature		
Date		

To: Article detail : theSIsytem, themetricsystem, themeter, usmetrication…

From: Navbar and Footer on homepage

1. **SI Units:**

Description: Provide articles detail about : The SI Unit

From: Article

2. U.S Metrication:

Description: Provide articles detail about : U.S Metrication

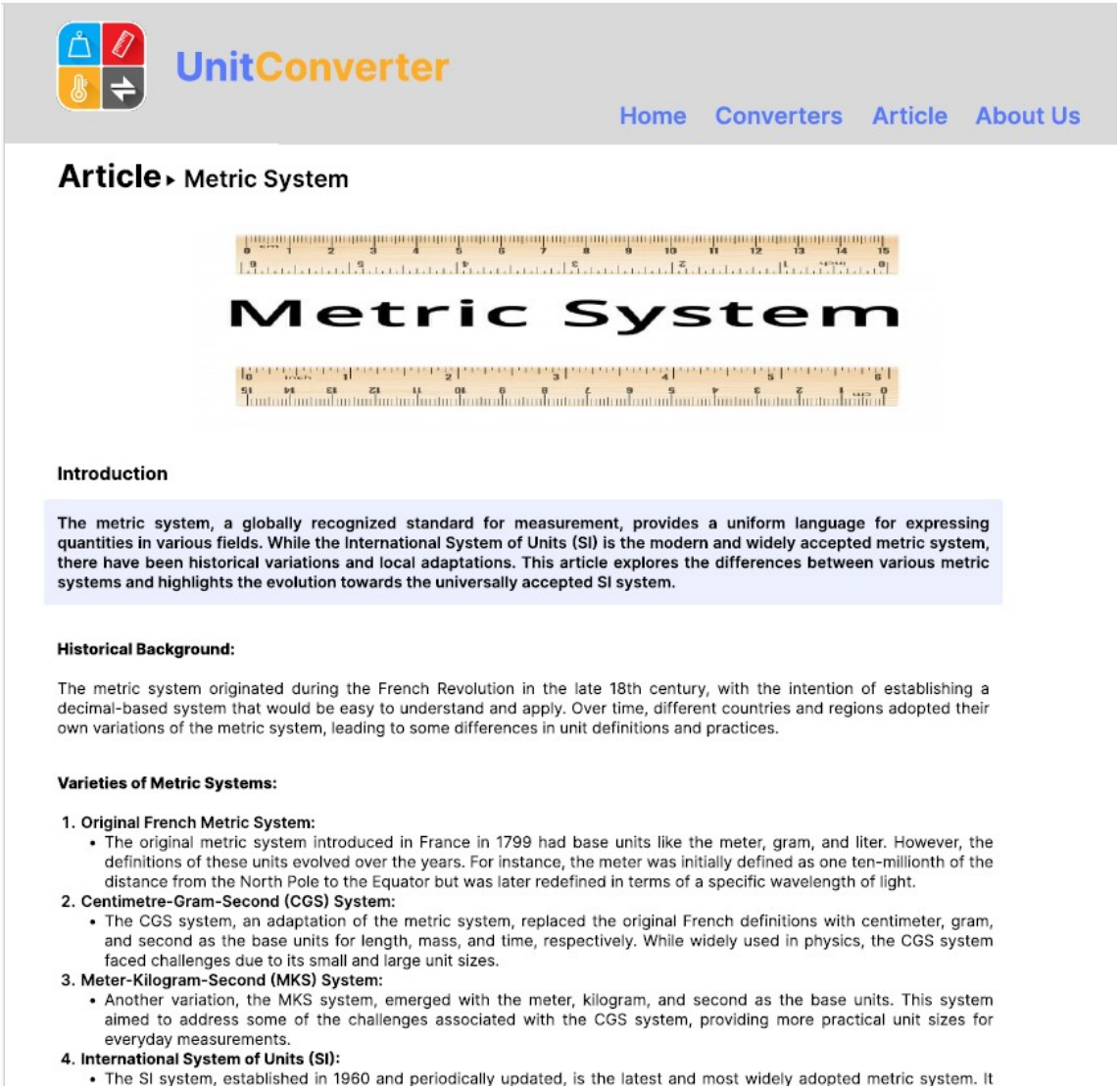
From: Article

3. The Meter:

Description: Provide articles detail about : The Meter

From: Article

4. Metric System:

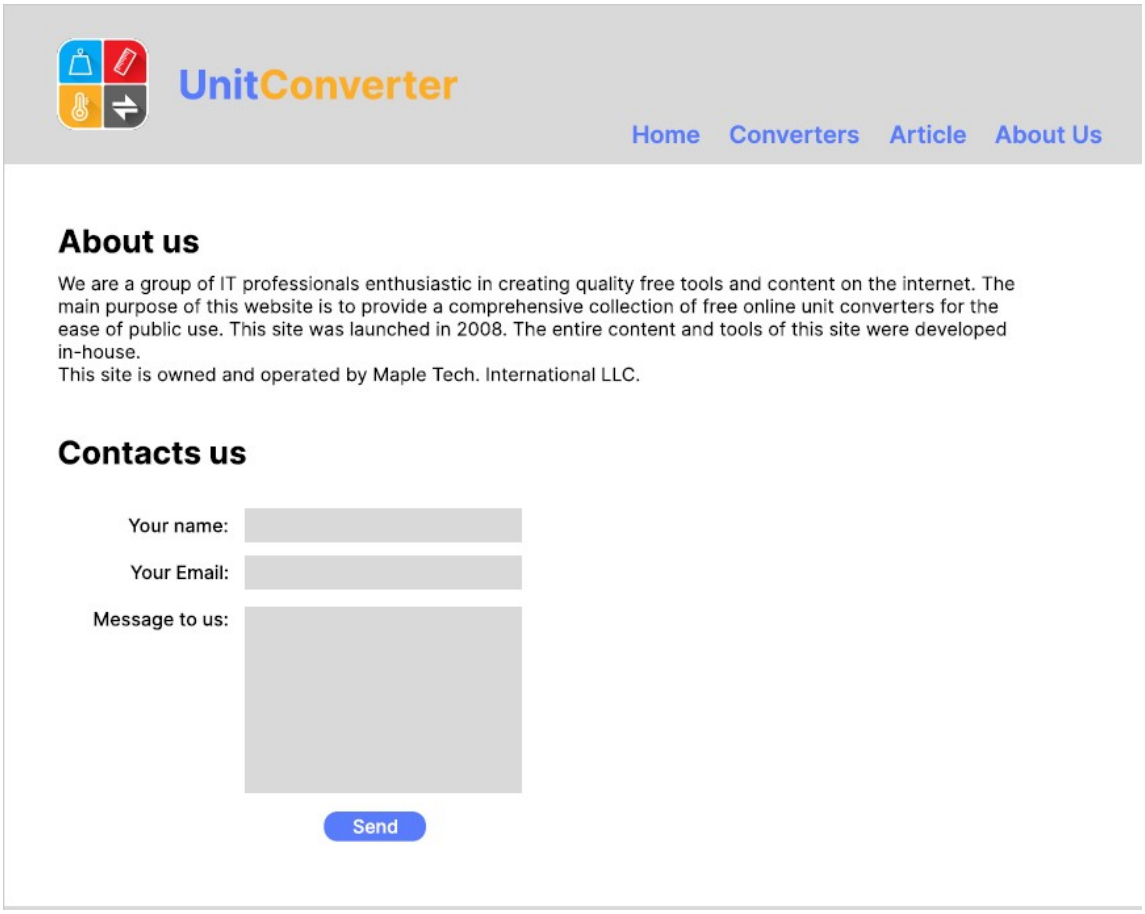


Description: Provide articles detail about : The Meter

From: Article

XI. Aboutus

	Prepared by (Student)	Approved by (Faculty)
	Project Group No: 04	Le Thanh Nhan
Signature		
Date		



Description: Provide information of my team, and contact us

From: Navbar,footer on homepage

Checklist of Validations

Option	Validated

	Prepared by (Student)	Approved by (Faculty)
	Project Group No: 04	**Le Thanh Nhan**
Signature		
Date		

Submission Checklist

Sr. No.	Particulars	Yes	No	NA	Comments
1.					
2.					
3.					
4.					
5.					
6.					
7.					

Testing document

Sr.No	Features Tested	Remarks
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Final checklist

Sr.No	Aspected Tested	Suggestion/ Remarks
1	Are all the users able to view the images and links?	
2	Have all the views, modules and controllers been properly integrated and is the site function as a single page application?	
3	Are the GUI content devoid of spelling mistakes?	
4	Is the application user-friendly?	
5	Is the Website launching correctly in all popular browsers?	
6	Are all the forms validated with proper criteria?	
7	Do all text links lead to the appropriate website?	
8	Do all image links lead to the appropriate website?	
9	Are all the images and links clearly visible on the page?	
10	Does the Web page work properly in all the tested browsers?	
11	Does the Web page take too long to be loaded fully?	
12	Is the navigation sequences correct through all the Web pages on the site?	
13	Is the JavaScript code working as expected in all click events?	
	(Sinh viên ghi thêm…)	

No	Member	Contents	Page Name	Activity Plan	Date of Preparation of Activity Plan		
				Planed Start Date	Actual Start Date	Actual Days	Status
1	Lượng Đức Tùng	Hompage	Hompage.html	08-12-2023	08-12-2023	8	OK
		Areaconvert	Areaconvert.html	08-12-2023	08-12-2023	10	OK
		Massconvert	Massconvert.html	08-12-2023	08-12-2023	10	OK
		Volumeconvert	Volumeconvert.html	08-12-2023	08-12-2023	10	OK
		Currencyconvert	Currencyconvert.html	08-12-2023	08-12-2023	10	OK
		Lengthconvert	Lengthconvert.html	08-12-2023	08-12-2023	10	OK
2	Bùi Trọng Anh Đức	Timeconvert	Timeconvert.html	08-12-2023	08-12-2023	10	NA
		Dataconvert	Dataconvert.html	08-12-2023	08-12-2023	10	NA
		Aboutus	Aboutus.html	08-12-2023	08-12-2023	8	NA
3	Lê Khánh Nguyên	Article	Article.html	08-12-2023	08-12-2023	8	OK
		Temperatureconvert	Temperature.html	08-12-2023	08-12-2023	8	OK
		The meter	Article.html/the-meter	08-12-2023	08-12-2023	8	OK
		The metric system	Article.html/the-metric-system	08-12-2023	08-12-2023	8	OK
		Traditional us unit	Article.html/traditional-us-unit	08-12-2023	08-12-2023	8	OK
		The SI system	Article.html/the-si-system	08-12-2023	08-12-2023	8	OK

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Signature		
Date		

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