

# 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

| M. Die               |                                  |
|----------------------|----------------------------------|
| )<br>This is         | s to certify that                |
|                      | 7                                |
| Mr.                  | LƯỢNG ĐỨC TÙNG                   |
| Mr.                  | BÙI TRỌNG ANH ĐỨC                |
|                      | Λ / Λ                            |
| Mr.                  | LE KHANH NGUYEN                  |
|                      |                                  |
|                      |                                  |
| Have suco            | cessfully Designed & Developed   |
|                      |                                  |
| M                    | ETRIC CONVERSIONS                |
|                      |                                  |
|                      |                                  |
|                      |                                  |
|                      |                                  |
| Submitted            | d by:                            |
|                      |                                  |
|                      | d by:                            |
|                      | d by:                            |
|                      | d by:  Mr. LE THANH NHAN         |
| Submitted            | d by:  Mr. LE THANH NHAN         |
| Submitted            | d by:  Mr. LE THANH NHAN         |
| Submitted            | d by:  Mr. LE THANH NHAN         |
| Submitted  Date Of 1 | d by:  Mr. LE THANH NHAN         |
| Submitted  Date Of 1 | d by:  Mr. LE THANH NHAN  Issue: |
| Submitted  Date Of 1 | d by:  Mr. LE THANH NHAN  Issue: |

## Content

#### Content

Acknowledge

Synopsis

| Review1           | (điền số trang theo thực tế) |
|-------------------|------------------------------|
| Review2           | (điền số trang theo thực tế) |
| Review3           | (điền số trang theo thực tế) |
| Testting Document | (điền số trang theo thực tế) |
| Final Checklist   | (điền số trang theo thực tế) |
| Tasksheet         | (điền số trang theo thực tế) |

## 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.

| Design Plan:              | Document Name: Problem Definition | SWD/Form No.01/PD/Ver1.0 |
|---------------------------|-----------------------------------|--------------------------|
| Metric Conversions        |                                   |                          |
| Effective Date:08-12-2023 | Version 1.0                       | Page No: 1 of 17         |

### **Problem Definition**

- 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:
    - o Should include the multiplying factors for following
      - Inches millimeters
      - Feet Meters
      - Yards Meters
      - Miles Kilometers
  - Area conversion
    - o 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
    - o Should include the multiplying factors for following
      - Ounces grams
      - Pounds kilograms
      - short tons (2000 lb) mega grams (or "metric ton")
  - Temperature conversion
    - o Fahrenheit Celsius
    - o 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

|           | Prepared by (Student) | Approved by (Faculty) |
|-----------|-----------------------|-----------------------|
|           | Project Group No: 04  |                       |
| Signature |                       |                       |
| Date      |                       |                       |

| Design Plan:              | Document Name: Problem Definition | SWD/Form No.01/PD/Ver1.0 |
|---------------------------|-----------------------------------|--------------------------|
| Metric Conversions        |                                   |                          |
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- 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?

|           | Prepared by (Student) | Approved by (Faculty) |
|-----------|-----------------------|-----------------------|
|           | Project Group No: 04  |                       |
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| Date      |                       |                       |

| Design Plan:              | Document Name:                       | SWD/Form No.02/CRS/Ver1.0 |
|---------------------------|--------------------------------------|---------------------------|
| Metric Conversions        | Customer Requirements Specifications |                           |
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### **Customer Requirements Specifications**

#### User:

#### input:

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

#### **Process:**

- Get type convert from
- Get Numeric
- Get type select convert to
- Multiply the numeric by the conversion factor

#### **Output:**

- Result convert to text box

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|-----------|-----------------------|-----------------------|
|           | Project Group No: 04  |                       |
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| Date      |                       |                       |

| Design Plan:              | Document Name:                       | SWD/Form No.02/CRS/Ver1.0 |
|---------------------------|--------------------------------------|---------------------------|
| Metric Conversions        | Customer Requirements Specifications |                           |
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### Webmaster:

### input:

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

#### **Process:**

- Check username and password
- Create new type convert page
- Create new conversion factor

### **Output:**

- New Page conversion with conversion factor

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|-----------|-----------------------|-----------------------|
|           | Project Group No: 04  |                       |
| Signature |                       |                       |
| Date      |                       |                       |

| Design Plan:              | Document Name:                       | SWD/Form No.02/CRS/Ver1.0 |
|---------------------------|--------------------------------------|---------------------------|
| Metric Conversions        | Customer Requirements Specifications |                           |
| Effective Date:08-12-2023 | Version 1.0                          | Page No: 5 of 17          |

### **Hardware / software requirement:**

#### **Software:**

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

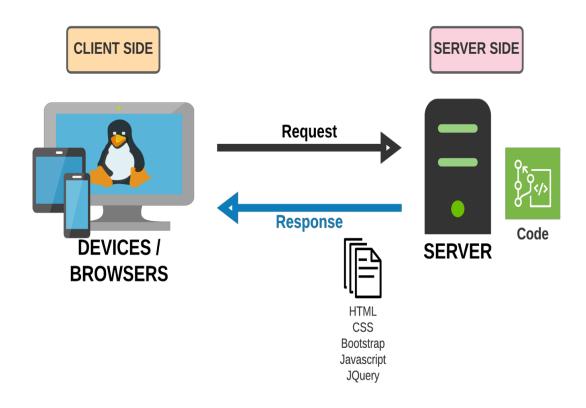
#### Hardware:

- 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

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| Date      |                       |                       |

| Design Plan:              | Document Name:                         | SWD/Form No.03/ARD/Ver1.0 |
|---------------------------|----------------------------------------|---------------------------|
| Metric Conversions        | Architecture and design of the project |                           |
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## Architecture and design of the project



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|-----------|-----------------------|-----------------------|
|           | Project Group No: 04  |                       |
| Signature |                       |                       |
| Date      |                       |                       |

| Design Plan:              | Document Name: SiteMap | SWD/Form No.04/SM/Ver1.0 |
|---------------------------|------------------------|--------------------------|
| Metric Conversions        |                        |                          |
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## SiteMap

- 1. So đồ trang của project.
- 2. Xem Problem Statement trong đề tài của India
- 3. Từ Home, vẽ các menu chính thành cấp F1.
- 4. Bổ sung thêm cấp F2.

|           | Prepared by (Student) | Approved by (Faculty) |
|-----------|-----------------------|-----------------------|
|           | Project Group No: 04  |                       |
| Signature |                       |                       |
| Date      |                       |                       |

| Design Plan:              | Document Name: Screen shots | SWD/Form No.05/SS/Ver1.0 |
|---------------------------|-----------------------------|--------------------------|
| Metric Conversions        |                             |                          |
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### **Screen shots**

Các layout mô tả màn hình. Sinh viên có thể vẽ layout. Nếu không thể thì code HTML cơ bản rồi chụp lại hình màn hình.

Ví dụ cách thứ nhất: (Khuyến cáo sử dụng)

#### I. Homepage:

| Logo                   |            | Banner size x size | Banner size x size |
|------------------------|------------|--------------------|--------------------|
| Homepage               | Categories | Register           | About us           |
| <                      | Services   | Carousel           | >                  |
| Enter text for searchi | ng:        |                    |                    |
|                        |            | C                  | lick for seaching  |
|                        | Foo        | oter               |                    |

**Description** : Mô tả màn hình là gì? Dùng làm gì?

From : Được mở từ đâu? Menu nào?

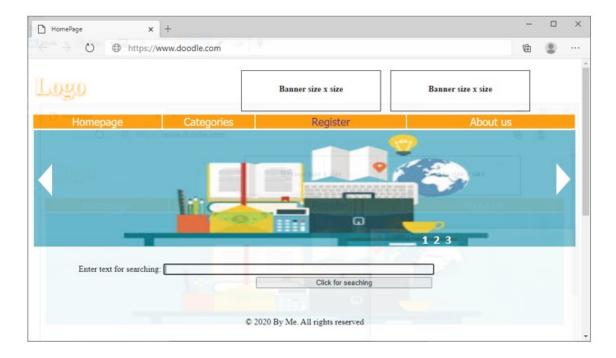
To : Có thể tới được trang nào khác?

|           | Prepared by (Student) Approved by (Faculty) |  |
|-----------|---------------------------------------------|--|
|           | Project Group No: 04                        |  |
| Signature |                                             |  |
| Date      |                                             |  |

| Design Plan:              | Document Name: Screen shots | SWD/Form No.05/SS/Ver1.0 |
|---------------------------|-----------------------------|--------------------------|
| Metric Conversions        |                             |                          |
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#### Ví dụ cách thứ hai:

### I. Homepage:



**Description** : Mô tả màn hình là gì? Dùng làm gì?

From : Được mở từ đâu? Menu nào?

To : Có thể tới được trang nào khác?

|           | Prepared by (Student) Approved by (Faculty) |  |
|-----------|---------------------------------------------|--|
|           | Project Group No: 04                        |  |
| Signature |                                             |  |
| Date      |                                             |  |

| Design Plan:              | Document Name: Testing document | SWD/Form No.06/TD/Ver1.0 |
|---------------------------|---------------------------------|--------------------------|
| Metric Conversions        |                                 |                          |
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## **Testing document**

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

|           | Prepared by (Student) | Approved by (Faculty) |
|-----------|-----------------------|-----------------------|
|           | Project Group No: 04  |                       |
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| Date      |                       |                       |

| Design Plan:              | Document Name: Final checklist | SWD/Form No.07/FC/Ver1.0 |
|---------------------------|--------------------------------|--------------------------|
| Metric Conversions        |                                |                          |
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## Final checklist

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

|           | Prepared by (Student) | Approved by (Faculty) |
|-----------|-----------------------|-----------------------|
|           | Project Group No: 04  |                       |
| Signature |                       |                       |
| Date      |                       |                       |

|   | Design Plan:              | Document Name: Task Sheet | SWD/Form No.08/TS/Ver1.0 |
|---|---------------------------|---------------------------|--------------------------|
|   | Metric Conversions        |                           |                          |
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|    |                     |             |                  | Activity Plan     | Date of Preparation | of Activity    | y Plan |
|----|---------------------|-------------|------------------|-------------------|---------------------|----------------|--------|
| No | Member              | Contents    | Page Name        | Planed Start Date | Actual Start Date   | Actual<br>Days | Status |
| 1  | Ludding D./do Thurs | Hompage     | Hompage.html     | 08-12-2023        | 08-12-2023          | 5              | OK     |
| 2  | Lượng Đức Tùng      | Categories  | Categories.html  | 01-01-2002        | 01-01-2002          | 5              | OK     |
|    |                     |             |                  |                   |                     |                |        |
| 1  | Dùi Trong Anh Di'a  | Register    | Register.html    | 08-12-2023        | 08-12-2023          | 5              | NA     |
| 2  | Bùi Trọng Anh Đức   | Abou tus    | Abou tus.html    | 01-01-2002        | 01-01-2002          | 5              | NA     |
|    |                     |             |                  |                   |                     |                |        |
| 1  | Lâ Khánh Nguyên     | Search      | Search.html      | 08-12-2023        | 08-12-2023          | 5              | OK     |
| 2  | Lê Khánh Nguyên     | Geolocation | Geolocation.html | 01-01-2002        | 01-01-2002          | 5              | OK     |

|           | Prepared by (Student) | Approved by (Faculty) |
|-----------|-----------------------|-----------------------|
|           | Project Group No: 01  |                       |
| Signature |                       |                       |
| Date      |                       |                       |