A Mini Project Report

on

"Conversion of Mechanical Units Webpage"

Third Year of Engineering
In
Mechanical Engineering

By

Parth Sankhe	**07**
Rahul Sarda	**08**
Aishwarya Sattigeri	**09**
Akash Shahu	**10**
Parth Phanse	**11**

Mechanical Department

Thakur College of Engineering and Technology, Kandivali

2019-20

CERTIFICATE

This is to certify that the students of Third Year **"Mechanical"** Engineering at Thakur College of Engineering and Technology, have satisfactorily completed the requirements of the PROJECT under Employability Skills Development Programme - 2020 while working on "**Conversion of Mechanical Units Webpage"**

(Faculty Name)	**Mr. Amol Dapkekar**	**Dr. Zahir Aalam**	**Dr. B. K. Mishra**
T&P Coordinator	**Training Coordinator**	**Professor (TPO)**	**Principal**

Internal Examiner:

Signature with Date: ……

Name:.....

External Examiner

Signature with Date:……..

Name:…….

PLACE: Mumbai

DATE:

INDEX

EXECUTIVE SUMMARY:

In this project opportunity provided to us we are looking forward to tackling the problem faced by various Mechanical Engineers while using the unit conversions for their calculations. This webpage we are developing consists of some of the most commonly used and typical mechanical properties which would help the Engineering faculty in various ways. This Unit Conversion webpage has its own intelligently managed support system. This support system helps the webpage to become more and more user friendly.

PROBLEM STATEMENT:

To create a compact and elegant Mechanical Unit Conversion Webpage.

DESCRIPTIONS:

The Project is assigned as a part of the Employability Skills Development Program conducted in Thakur College of Engineering and Technology. The aim of this program is to create an insight about the working methodologies in industries, among the students. The Training and Placement cell of TCET with its sole motive of preparing their students for their future, conducted the ESD program. The program consisted of learning of HTML and Javascript for the Students of various Engineering Fraternity. The Program was highly supported by the student. This project also developed many skills such as leadership, team working, and efficient communication among the students. The basics of software programming were learnt and practiced which will be implemented in day to day work

Our topic for this Program is “Mechanical Unit Conversion Webpage”. It is a very commonly faced problem by various engineers to convert units for their calculations and with our project we look forward to making calculations easy as our tagline for the Webpage says, “Designed For an Engineer’s Ease”.

FINDING:

Various pre-existing Unit converter Interface were studied like,
www.unitconversion.org

www.mathisfun.com

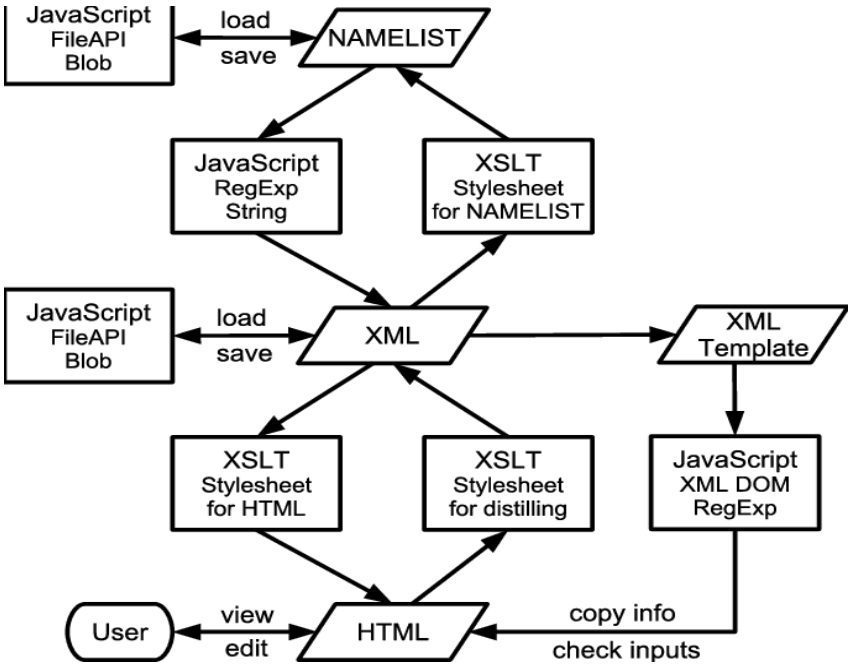
www.unitconverters.net

After studying all such webpages we have tried to make our webpage more and more compact and precise.

IMPLEMENTATION:

Websites that deal with calculations and measurements often need to solve the problem of using both metric and imperial units of measurement. This recipe will demonstrate a data-driven approach to dealing with unit conversions. As this is an HTML book, the solution will be implemented on the client side rather than on the server side.

We're going to implement a client-side, "ideal mechanical" calculator that supports metric and imperial measurements. This time, we're going to create a more general and elegant data-driven solution that utilizes modern HTML5 capabilities, such as data attributes. The goal is to abstract away the messy and error-prone conversion as much as possible.



In the above Flow Chart, we have tried to show how we have used HTML and Javascript to receive our user friendly output.

SOFTWARE : Notepad++

LANGUAGE : HTML, JavaScript

CODE : HTML FILE :
https://github.com/sankhe52/Convex-Unit-Convertor/blob/master/index.html

CSS FILE:
https://github.com/sankhe52/Convex-Unit-Convertor/blob/master/script.js

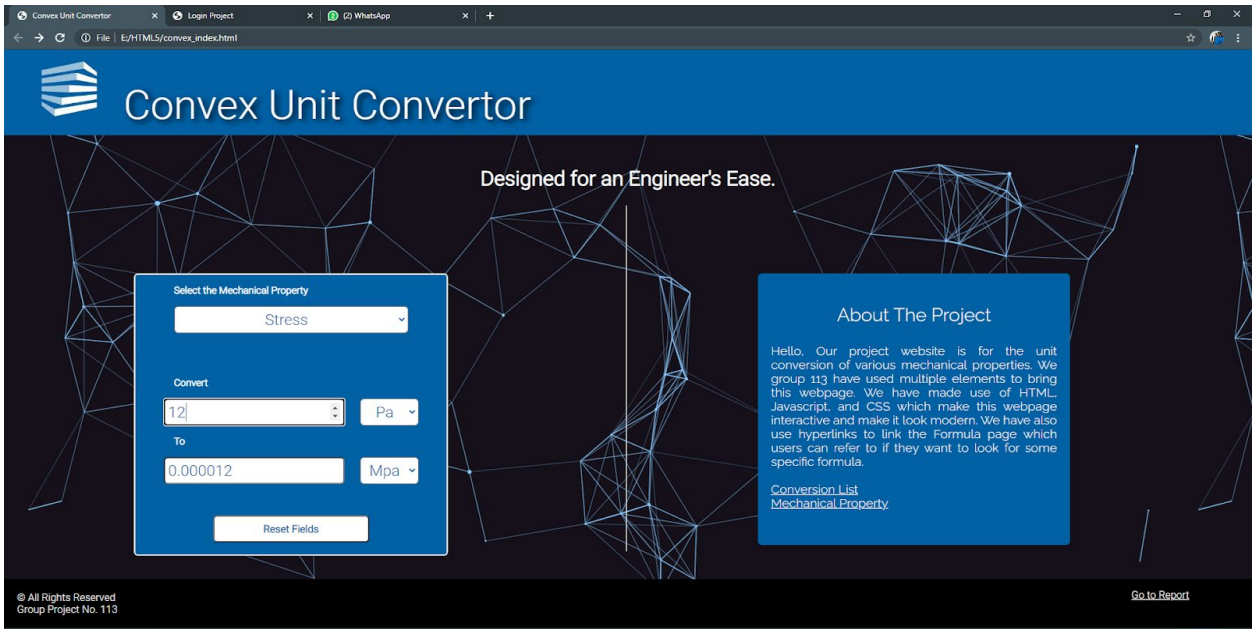
JS FILE:
https://github.com/sankhe52/Convex-Unit-Convertor/blob/master/script.js

PREVIEW :
http://htmlpreview.github.io/?https://github.com/sankhe52/Convex-Unit-Convertor/blob/master/index.html

RESULT & DISCUSSION:

The main motive of this project was to learn and practice the concepts that we learnt in our ESD program. We tried to apply whatever was taught to us and increase our knowledge with the help of the internet. This Mechanical Unit Conversion Webpage is commonly useful to various engineers not only mechanical but others too. We have designed it in a new, simple, compact and user friendly format. We have also included the various formulas used in the calculations for reference and also a small introduction for the properties included in the Calculator.

For the future update we have scope for including new properties and their conversions.



IMPACT STUDY:

This Project mainly impacts and helps to make various tedious and difficult calculations to be done in a snap. We also gained knowledge about the use of HTML and javascript while working on this project. We expect this project not only helps the engineering fraternity but also other people to acquire knowledge about these Mechanical Properties and their conversions.

CONCLUSION:

The Mechanical Unit Conversion Webpage is complete and ready to be used. In the process we learned many new functions and gained knowledge about complex programming. We also tried to make it simple and effective in use. The codes, tricks, shortcuts and functions that we learnt during the ESD course were implemented in the process of building this Webpage and were very useful. We learnt many new ways of solving problems and the steps we should follow in any other such scenario. It developed a progressive mindset and also instilled an urge to explore programming languages more.

REFERENCE:

www.google.com
www.youtube.com
www.codeon.in
www.stackoverflow.com
www.w3school.com
www.geeksforgeek.com