

# EASYCALCULATION

## Live Project

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### Project Functional Requirement Specification Version 1

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## 1. Purpose of the document:

This is **not** a project plan. It is a guide for system architecture and development, not for phasing, timelines or deliverables.

This document is divided into three sections:

- Project Overview
- Information Architecture
- Site Design

## 2. Project Overview:

### 2.1 Audience:

This document provides the information about mathematical calculations and conversions, currency conversions

Mathematics made easy through **EasyCalculation.com**. Calculate things online with just mouse moves. The site online math calculators, converters and tutorials. Use these simple math tools to solve complex calculations, conversions, logical and arithmetic problems.

Free mathematical calculation tools in this site include mathematics Calculator and Converters, Basic/Scientific Calculator, Math Calculator, Matrix Calculations, Hex, Decimal, Binary Conversions, HEX Colour Converter, Date and Day Calculator, Mortgage Calculator, Unit Conversions and Bandwidth Calculator.

### 2.2 Hardware and Software Components:

The requirements required for the EasyCalculation are computer/laptop with good internet connection. EasyCalculation servers will be hosted at X company's site.

EasyCalculation will be hosted on two servers: One to host the actual website and (language) code, and the other to host the (database name) database.

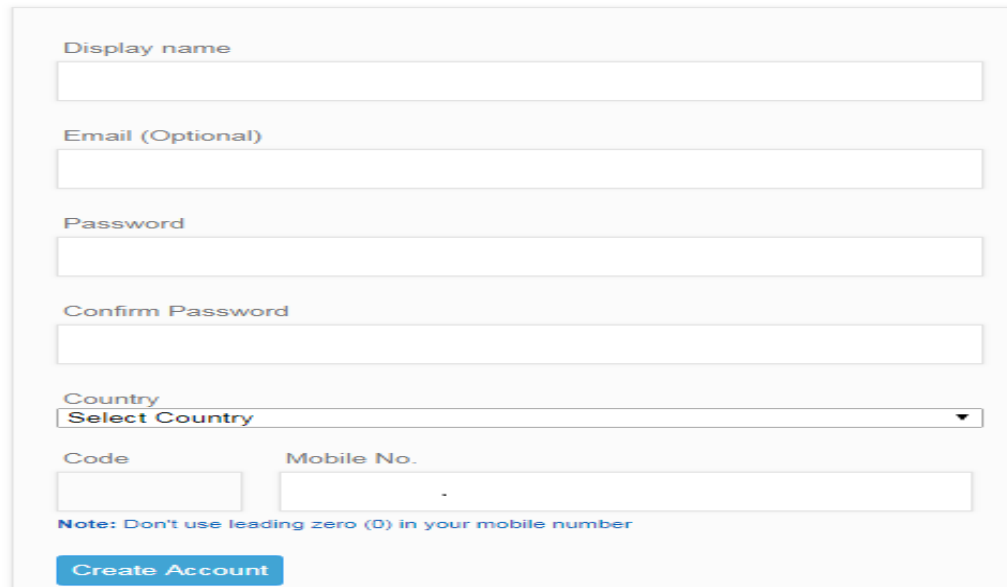
## 3. Information Architecture

In order to access the easycalculation.com site the new users have to create their own account. For the account creation they need registration process.

### 3.1 Registration

Easycalculation.com application is part of HIOX Network and uses HIOX login. Enter URL <https://www.easycalculation.com/>, here the user can create his/her account by clicking on sign in option available at the top right corner of current window. After clicking sign in option, it will redirect to registration page as shown in fig: 1.0

## Create your HIOX Account



Registration form for HIOX account. The form includes the following fields:

- Display name
- Email (Optional)
- Password
- Confirm Password
- Country (Dropdown menu with "Select Country" as the placeholder)
- Code (Input field)
- Mobile No. (Input field)

**Note:** Don't use leading zero (0) in your mobile number

**Create Account** (Button)

Fig: 1.0

After filling the particulars shown in above, by clicking on create account the new user can get his/her account registered.

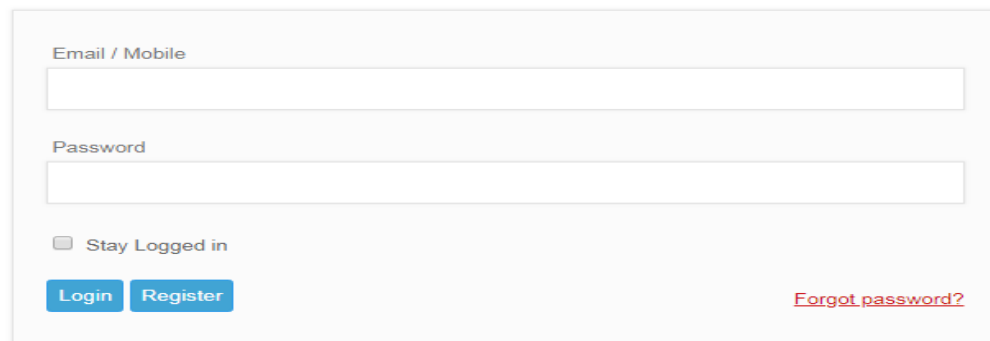
### 3.2 Log in

Now the user can log in by his/her credentials such as

E-mail/mobile number provided during the registration and password as shown in the fig: 1.1

## Login to Easycalculation.com

Easycalculation.com is a part of [HIOX Network](#) and uses HIOX login.



Login form for Easycalculation.com. The form includes the following fields:

- Email / Mobile
- Password

☐ Stay Logged in

**Login** **Register** (Buttons)

[Forgot password?](#) (Link)

Fig: 1.1

After entering the credentials, by clicking on login the user can login into his/her account. If user forgotten his/her password, it is easy to reset the password by clicking on “Forgot password” which is visible in log-in window.

## 4. Calculators:

### 4.1 Age Calculators

An electronic calculator is typically a portable electronic device used to perform calculations, ranging from basic arithmetic to complex mathematics. By EasyCalculation.com application, we can calculate things online with just mouse moves. This free online math web site will help us to learn mathematics in an easier way. EasyCalculation will also help us to solve difficult problems too.

#### 4.1.1 Age Calculator

Age Calculator is used to find the age of a person or any living things in years, months, days, hours, and minutes. By entering our Date of Birth we can compute the age interval between your birth date and current date.

The screenshot shows a web application interface for an age calculator. At the top, there are four tabs: "Age Calculator" (selected), "Next Birthday", "My Birthday Days", and "My DOB". Below the tabs, the main heading is "How old Am I ?". Under this, there are two sections for date input. The first section, "Today's Date is :", has three input fields for "Date" (containing "16"), "Month" (containing "1"), and "Year" (containing "2020"). The second section, "Select Your Date of Birth :", also has three empty input fields for "Date", "Month", and "Year". Below these input fields are two buttons: a large red "Go" button and a smaller black "Reset" button. At the bottom, there are four rows of output labels and input fields: "Your Age is" with an empty field, "Your Age in Days" with an empty field, "Your Age in Hours" with an empty field, and "Your Age in Minutes" with an empty field. Below the "Your Age in Hours" and "Your Age in Minutes" fields, the word "(Approximate)" is displayed.

Fig: 1.2

Age Calculator
Next Birthday
My Birthday Days
My DOB

**How old Am I ?**  
 Today's Date is :  
 Date:  Month:  Year:   
 Select Your Date of Birth :  
 Date:  Month:  Year:   

Go
Reset

Your Age is

22 years, 3 months, and 10 days

Your Age in Days

8137 days since your birth

Your Age in Hours

195288 hours since your birth

(Approximate)

Your Age in Minutes

11717280 minutes since your birth

(Approximate)

264 Days Left for Your Next Birthday

Fig: 1.3

### 4.1.2 Birthday Calculator by DOB

A simple online birthday calculator by date of birth (DOB) is used to find our current age and the number of days left for our next birthday. By using this calculator we can also identify the day of our next birthday and which stage of life we are in your life now (Eg: Some stages are Justice, Soldier, Teenage Boy, School Boy etc.)

Age Calculator
Next Birthday
My Birthday Days
My DOB

**Calculate Next Birthday by Date of Birth**  
 Select Date:  Select Month:  Select Year:   

Calculate
Reset

Tuesday
Day of the Next Birthday

22
Age

264 days Left For Your Next Birthday

Soldier
Stage

Fig: 1.4

### 4.1.3 My Birthday Days Calculator

This online fun calculator counts the number of birthdays we have celebrated since our birth in each day of the week. In this calculator we have to enter our DOB by selecting the date, month and year we were born. By using this calculator we can find out how many birthdays we have celebrated until now from our birth and the number of birthdays celebrated on Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, and Saturday.

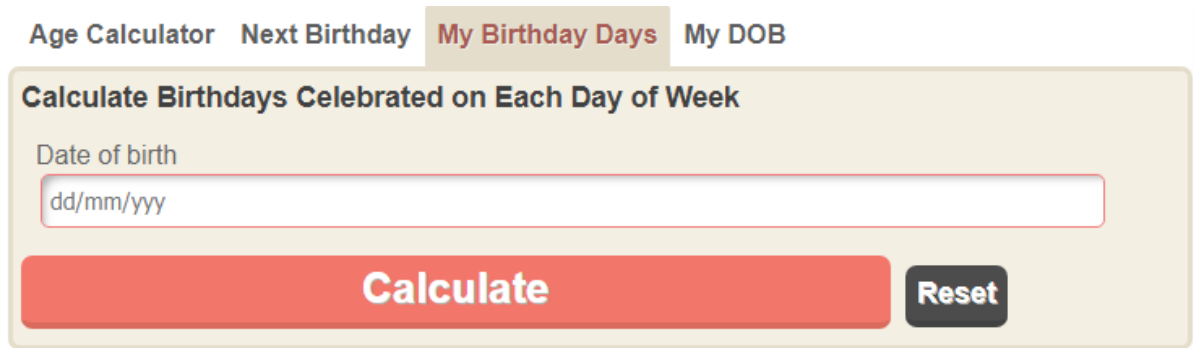


Fig: 1.5

After entering the date of birth the user have to click on the calculate then it calculates and gives the result as follows:

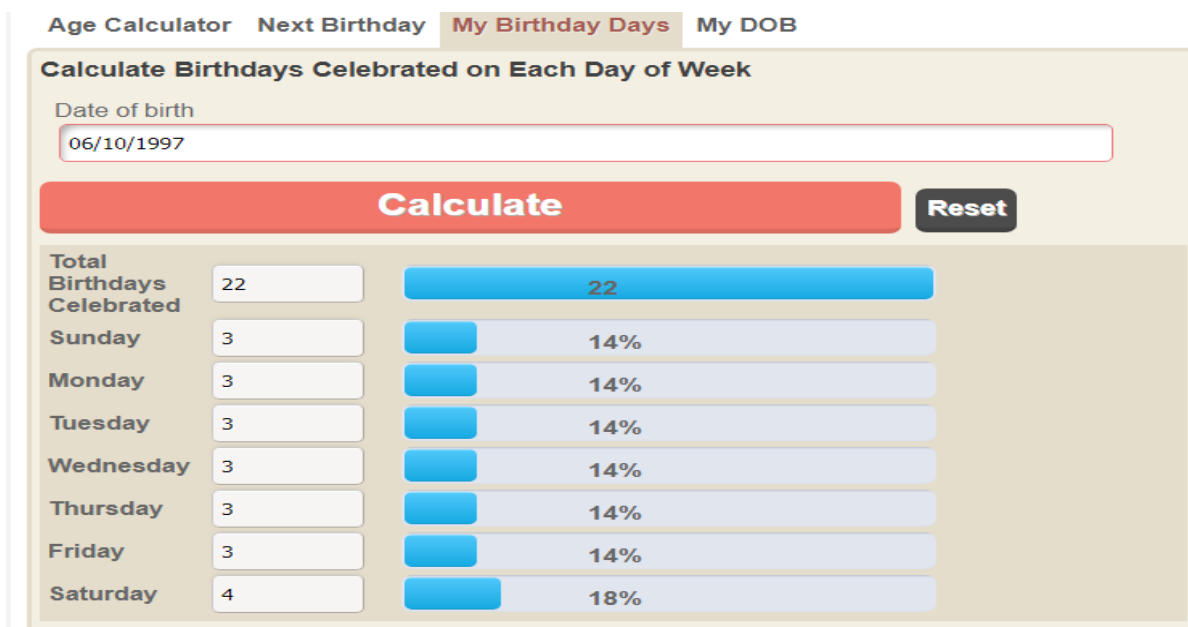
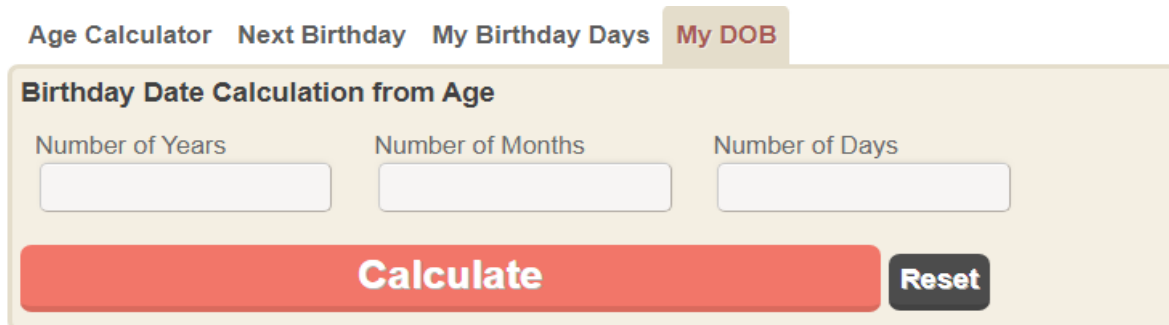


Fig: 1.6

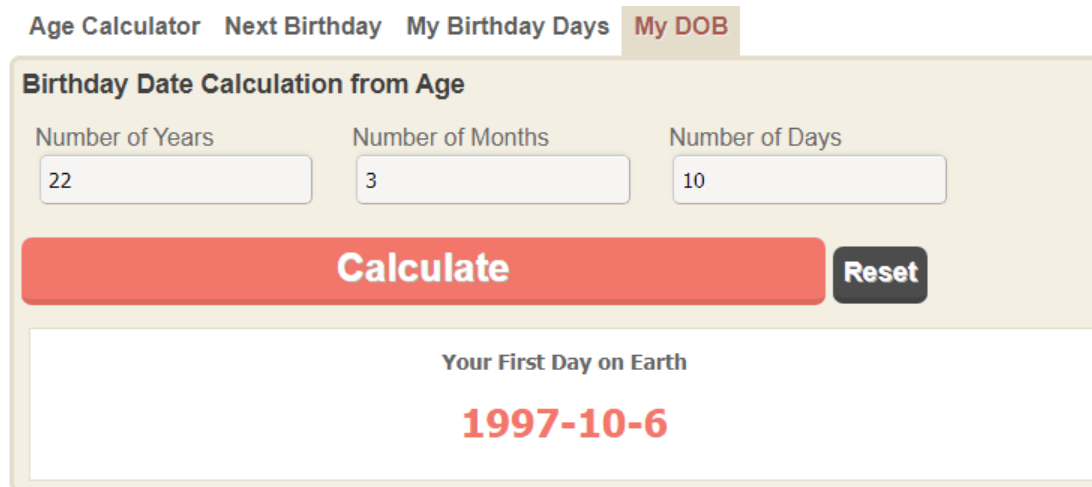
### 4.1.4 DOB Calculator

This date of birth calculator allows us to find our birthday date by inserting the number of years, number of months and number of days since we born. The birthday date from age calculator will display our date of birth in year-month-date format (yyyy-mm-dd). For example, if we are 30 years 3 months and 16 days old as of April 7, 2018 then your DOB would be 1987-12-24.



The screenshot shows a web interface with four tabs: "Age Calculator", "Next Birthday", "My Birthday Days", and "My DOB". The "My DOB" tab is selected and highlighted in a light brown color. Below the tabs, the title "Birthday Date Calculation from Age" is displayed. There are three input fields labeled "Number of Years", "Number of Months", and "Number of Days". Below these fields is a large red "Calculate" button and a smaller dark grey "Reset" button.

Fig: 1.7



This screenshot shows the same interface as Fig 1.7, but with the input fields filled with the values 22, 3, and 10. The "Calculate" button is highlighted in red. Below the buttons, a white box displays the result: "Your First Day on Earth" followed by the date "1997-10-6" in a large, bold, red font.

Fig: 1.8

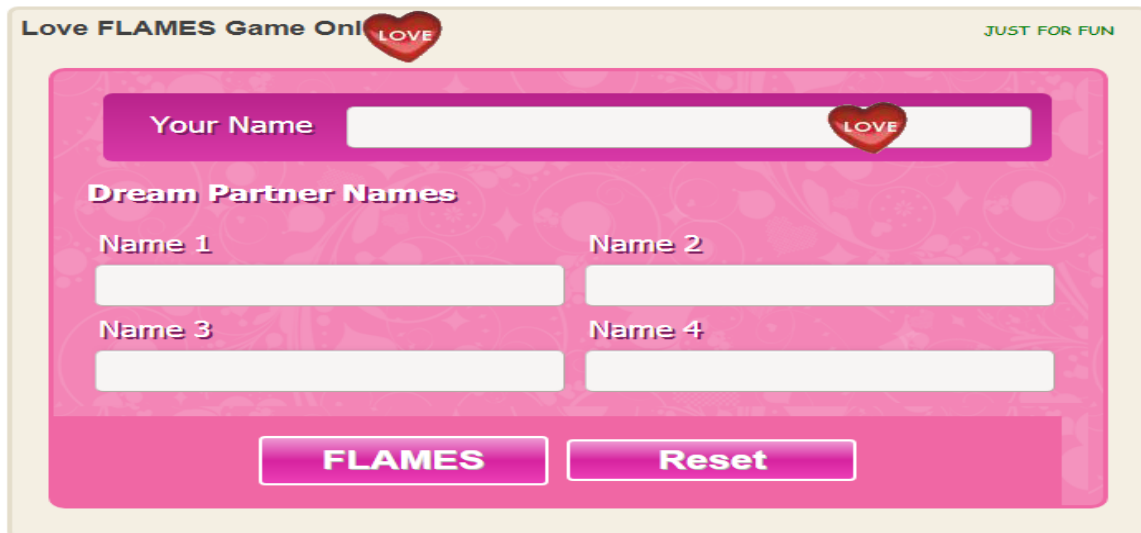
### 4.2 Love Calculators

A Love calculator online to test your relationship strength and compatibility. It is a fun filled love calculator to test the status of your love relationship between him/her based on the FLAMES game.

**FLAMES** stands for -**F**riends, **L**over, **A**ffection, **M**arriage, **E**nemy, **S**ister. If you are in love with someone, and if you would like to test the love compatibility between him/her then take this Love Flames Game online test.



The following figure shows the text boxes which are empty. The users have to fill these boxes. The user may fill one reference name and one or more partner name at a time in order to get a result by clicking on **FLAMES** Option.



The screenshot shows the 'Love FLAMES Game Online' interface. At the top, there is a title bar with 'Love FLAMES Game Online' on the left and 'JUST FOR FUN' on the right. Below the title bar, there is a pink background with a floral pattern. The main form area contains the following elements:

- A 'Your Name' label followed by a text input field.
- A 'Dream Partner Names' label.
- Four text input fields labeled 'Name 1', 'Name 2', 'Name 3', and 'Name 4' arranged in a 2x2 grid.
- Two buttons at the bottom: 'FLAMES' and 'Reset'.

The input fields are currently empty.

Fig: 1.9

After entering the data from user the text boxes are shown in fig

**Case 1:** One Reference Name and One Partner Name:




The screenshot shows the 'Love FLAMES Game Online' interface with user input. The title bar remains the same. The main form area now contains the following data:


- The 'Your Name' input field contains the text 'Jack'.
- The 'Name 1' input field contains the text 'Lisa'.
- A small red heart icon with the word 'LOVE' inside is positioned over the 'Name 3' input field.
- The 'Name 2', 'Name 3', and 'Name 4' input fields are empty.
- The 'FLAMES' and 'Reset' buttons are still present at the bottom.

Fig: 2.0

Love FLAMES Game Online JUST FOR FUN

**Your Name**  

**Dream Partner Names**

<b>Name 1</b> <input type="text" value="LISA"/>	<b>Name 2</b> <input type="text" value=""/> 
<b>Name 3</b> <input type="text" value=""/>	<b>Name 4</b> <input type="text" value=""/> 

**FLAMES** **Reset**

**LISA & JACK**





Fig: 2.1

**Case 2:** One reference name and more than one partner names:

Love FLAMES Game Online JUST FOR FUN

**Your Name**

**Dream Partner Names**

<b>Name 1</b> <input type="text" value="Lisa"/>	<b>Name 2</b> <input type="text" value="Rose"/> 
<b>Name 3</b> <input type="text" value="Raveena"/>	<b>Name 4</b> <input type="text" value="Sweety"/>

**FLAMES** **Reset**

Fig: 2.2

By clicking on FLAMES option we will get the result as follows:

Love FLAMES Game Online

JUST FOR FUN

Your Name

Jack

LOVE

Dream Partner Names

LOVE

Name 1

Lisa

Name 2

Rose

Name 3

Raveena

Name 4

Sweety

FLAMES

Reset

LISA & JACK

ROSE & JACK

RAVEENA & JACK

SWEETY & JACK

Marriage

Affection

Enemy

Lover

Fig: 2.3

## 5. Currency Conversions

A standard measure of any physical quantity is called as a unit. For example, Volume is a physical quantity and unit to measure it is litres or millilitres. Similarly, weight is measured using kilograms or pounds. Some units have originated naturally and some have been standardized. Here is a list of large number of unit converters that are being used in many fields like Engineering, chemistry and many more.

### 5.1. Conversions Homepage

The screenshot displays the EasyCalculation.com homepage. At the top, there is a navigation bar with links to Calculators, Converters, Formulas, Currencies, Charts, Examples, Tutorials, Answers, and Others. A search bar with the text "Google Custom Search" is also present. Below the navigation bar, there is a large advertisement for Jira Software, which includes the text "Try Jira free for 7 days. Voted the #1 agile tool for teams." and a "Get started" button. To the right of the advertisement, there is a section titled "Calculators and Converters" which includes a "Ask a Question" button and a list of "Top Calculators" such as Age Calculator, SD Calculator, Logarithm Calculator, and LOVE Game. Below the advertisement, there is a section titled "Most Used Conversions" which lists various conversion tools including Area Unit Converter, Length Unit Converter, Weight Unit Converter, Volume Unit Converter, Light Luminance conversion, Bandwidth Unit conversion, Square Foot Conversion, and Land Area Conversion Calculator. On the right side of the page, there is a section titled "Popular Calculators" which lists tools like Derivative Calculator, Inverse of Matrix Calculator, Compound Interest Calculator, and Pregnancy Calculator Online. At the bottom right, there is a section titled "Top Categories" which lists Algebra and other categories.

Fig: 2.4

There are so many types of conversions based on their physical quantity like Area Conversions, Length Conversions, Weight Conversions, Volume Conversions, Light Luminance Conversions, Bandwidth Conversions and Square Foot Conversions etc.

Based on the requirement we can select any one of the conversions. Suppose if we want Length based conversions we can select length unit converter.

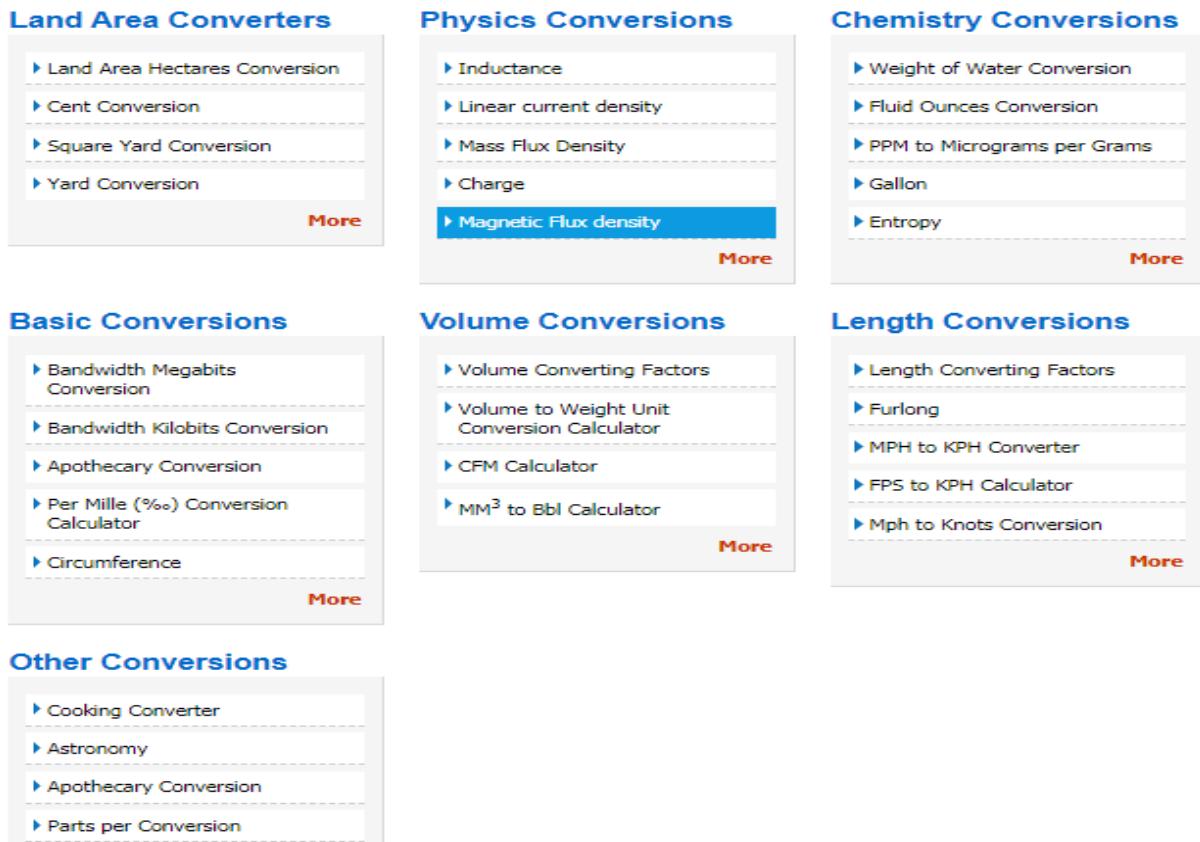


Fig: 2.5

### 5.1.1 Length Unit Conversions

Length is a standard measure of distance expressed in millimetres, centimetres, steps, kilometres and other various units. It can also be termed as distance unit conversions. Here is a list of large number of length unit converters that are being used in many fields like mathematics, civil, engineering, chemistry, geometric calculations and many more. Click on the converter for which you want to convert and enter the values to convert length units.

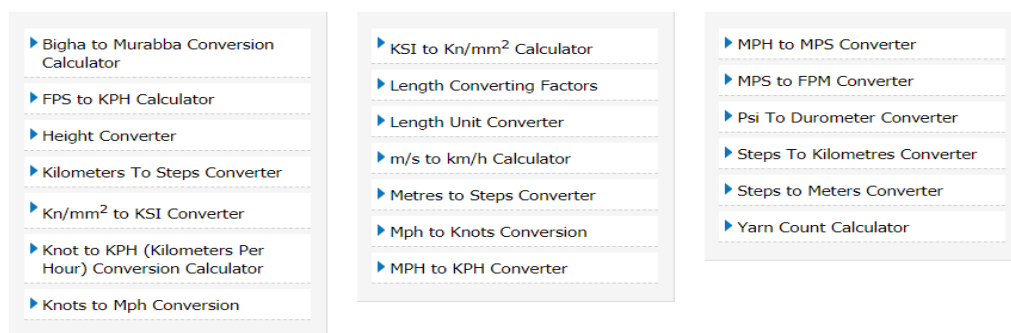


Fig: 2.6

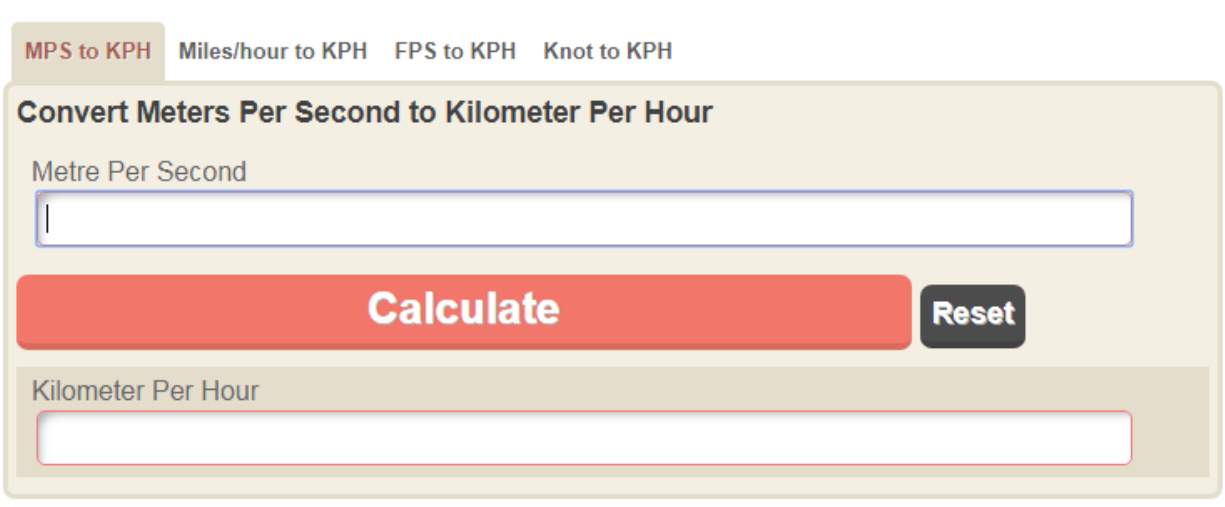
In the above figure it shows so many one to one conversions like FPS to KPH Calculator, Height Converter, and Meters to Steps Converter, and MPH to MPS Converter etc.

Based on the requirement we can select one of the converters. Suppose if we want Conversion between MPS to KPH we can select the required MPS to KPH Converter.

### 5.1.2 Example

#### MPS to KPH Converter

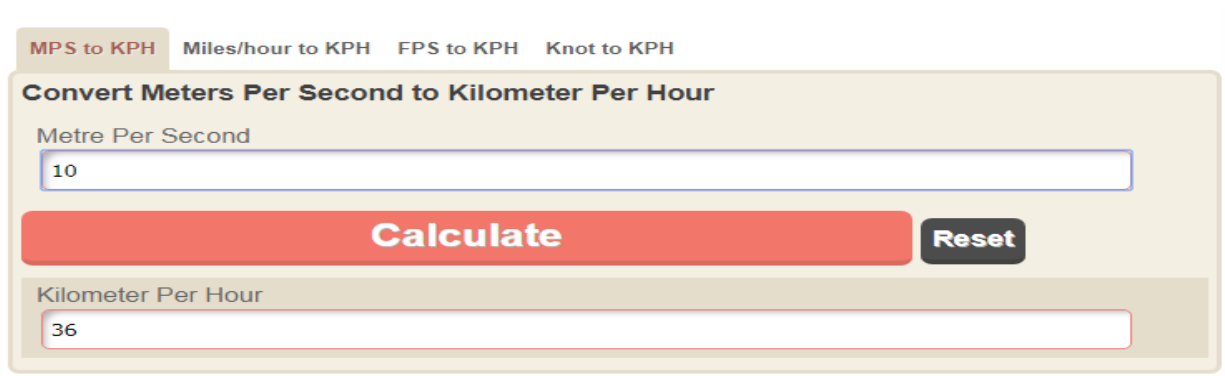
Meter per second is the derived SI unit of speed, which is used to measure distance. It is both scalar and vector quantity. 1 meter per second is exactly equal to 3.6km per hour. A kilometre is 1000 times greater than a meter. It is a metric unit used in the transportation. Use this conversion calculator to convert meters per second to kilometres per hour.



The screenshot shows a web-based conversion calculator interface. At the top, there are four tabs: "MPS to KPH" (selected), "Miles/hour to KPH", "FPS to KPH", and "Knot to KPH". Below the tabs, the main heading is "Convert Meters Per Second to Kilometer Per Hour". There is a text input field labeled "Metre Per Second" which is currently empty. Below this field is a large red "Calculate" button and a smaller dark grey "Reset" button. At the bottom, there is a text input field labeled "Kilometer Per Hour" which is also empty.

Fig: 2.7

In the below figure as it is shown MPS to KPH Converter gives the real time results, there is no need of using calculate button that is one of the advantage of this calculator.



This screenshot shows the same conversion calculator interface as Figure 2.7, but with values entered. The "Metre Per Second" input field now contains the number "10". The "Kilometer Per Hour" output field now contains the number "36". The "Calculate" button remains visible, but the result is displayed automatically without needing to click the button.

Fig: 2.8

Calculate option is used for calculating results and Reset option is used for clearing the results as shown in the figure below.

**MPS to FPM Converter** **FPM to m/s Converter**

**Meet Per Second (m/s) to Feet Per Minute**

Meter Per Second

**Calculate** **Reset**

Feet Per Minute

m/s

ft/min

Fig: 2.9

## 6. Currency Convertors:

Basically the currency rates in different countries are having different value. So, there is a need to convert the one currency rate into other currency rate, which is required.

The easycalculation.com site provides this feature also as shown in below fig:

**Currency Converter - Foreign Money Exchange Rates Calculation**

**Conversion** **History**

**1 USD = 0.896578 EUR**

**USD** **Vs**  **EUR**

**A - C** **C - H** **H - M** **M - S** **S - Z**

**United States - Dollar (USD)**

<b>1 USD =</b> <b>0.897 EUR</b> (European Euro)	<b>1 USD =</b> <b>0.767 GBP</b> (British Pound)	<b>1 USD =</b> <b>1.304 CAD</b> (Canadian Dollar)	<b>1 USD =</b> <b>1.447 AUD</b> (Australian Dollar)
<b>1 USD =</b> <b>70.742 INR</b> (Indian Rupee)	<b>1 USD =</b> <b>77.89 AFN</b> (Afghanistan Afghani)	<b>1 USD =</b> <b>109.433 ALL</b> (Albanian Lek)	<b>1 USD =</b> <b>119.663 DZD</b> (Algerian Dinar)

Fig: 3.0

### Example- Conversion of United states dollar currency to Indian rupee conversion rate

The currency conversion can be made by selecting required currency options as shown in fig:

The screenshot displays a web interface for converting the United States Dollar (USD) to the Indian Rupee (INR). At the top, the title "United States Dollar to Indian Rupee Conversion Rate" is shown. Below the title are two tabs: "Conversion" (active) and "History". The main conversion area features a large blue box stating "1 USD = 70.73366 INR". Below this, there is a form with a text input field containing "1", a dropdown menu set to "USD", a "Vs" button, another text input field containing "70.7336603277", and a dropdown menu set to "INR". Below the form are five category buttons: "A - C", "C - H", "H - M", "M - S", and "S - Z". The section is titled "United States - Dollar (USD)". Below the title, there are eight boxes, each showing the conversion of 1 USD to a different currency: 0.897 EUR (European Euro), 0.767 GBP (British Pound), 1.304 CAD (Canadian Dollar), 1.448 AUD (Australian Dollar), 70.734 INR (Indian Rupee), 77.858 AFN (Afghanistan Afghani), 109.385 ALL (Albanian Lek), and 119.651 DZD (Algerian Dinar).

1 USD =
0.897 EUR ( European Euro)
0.767 GBP ( British Pound)
1.304 CAD ( Canadian Dollar)
1.448 AUD ( Australian Dollar)
70.734 INR ( Indian Rupee)
77.858 AFN ( Afghanistan Afghani)
109.385 ALL ( Albanian Lek)
119.651 DZD ( Algerian Dinar)

Fig: 3.1

The above fig shows the USD currency to Indian rupee currency rate i.e., 1USD =70.73 INR.

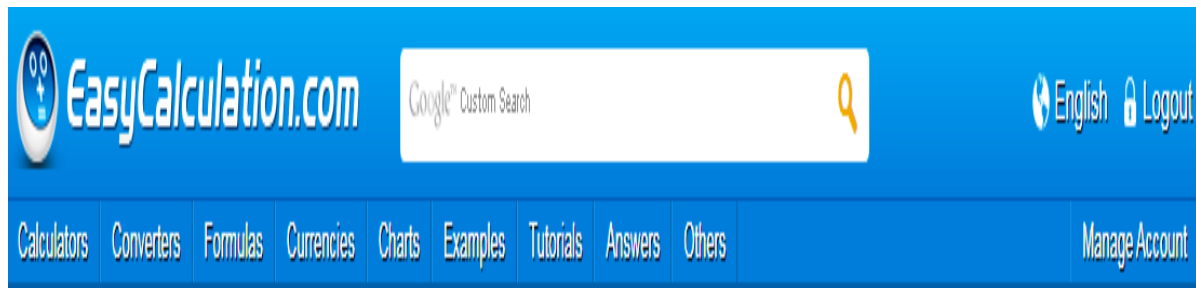
By using this conversion category site we can easily get the required currency rate from any available form of currency rate.



## 7. Log out:

This section provides the information to user about logout from the Easycalculation.com application.

Here the users have to click on LOGOUT option that is available at the top right corner of the application i.e., as shown in below figure.



After logout from the application the page is redirected to its homepage i.e. as shown in below figure

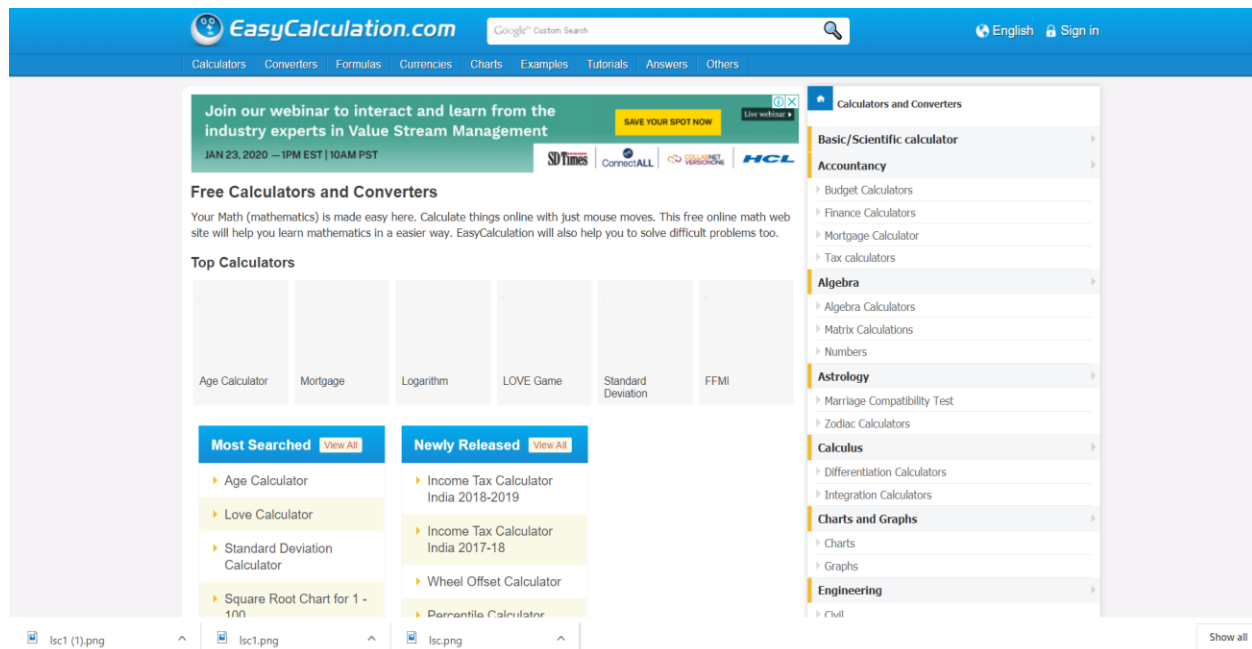


Fig: 3.2