

EASYCALCULATION

Live Project

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.

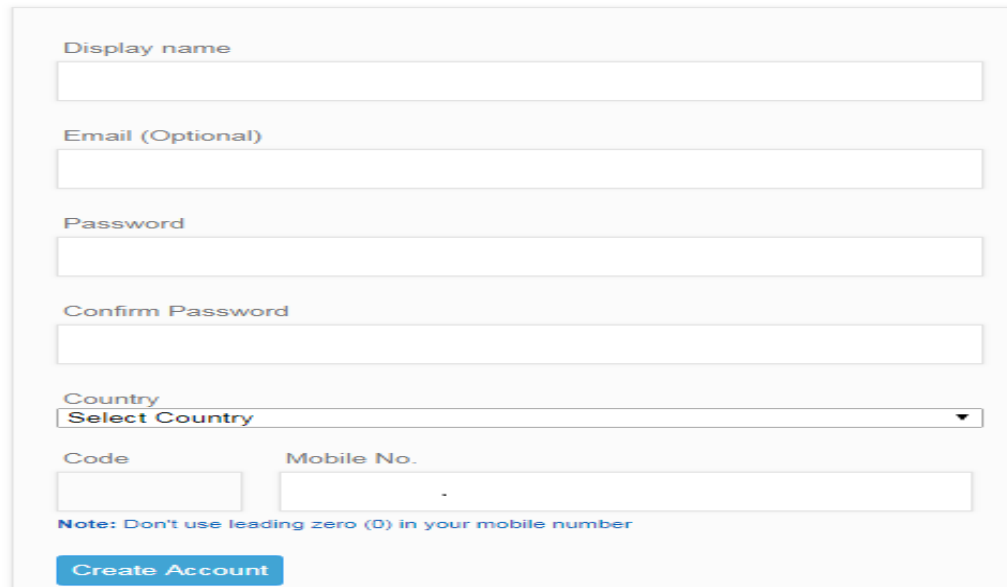
3. Information Architecture

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



The registration form is titled "Create your HIOX Account". It contains the following fields and elements:

- Display name**: A text input field.
- Email (Optional)**: A text input field.
- Password**: A text input field.
- Confirm Password**: A text input field.
- Country**: A dropdown menu with "Select Country" as the placeholder text.
- Code**: A text input field.
- Mobile No.**: A text input field.
- Note**: A small text note below the mobile number field stating "Note: Don't use leading zero (0) in your mobile number".
- Create Account**: A blue button at the bottom of the form.

Fig: 1.0

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

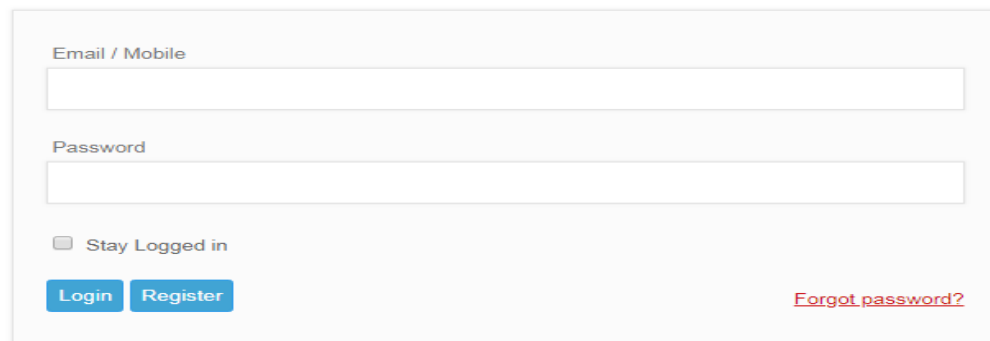
3.2 Log in

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.



The login form is titled "Login to Easycalculation.com". It contains the following fields and elements:

- Email / Mobile**: A text input field.
- Password**: A text input field.
- Stay Logged in**: A checkbox with the label "Stay Logged in".
- Login**: A blue button.
- Register**: A blue button.
- Forgot password?**: A red text 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 titled "Age Calculator" with tabs for "Next Birthday", "My Birthday Days", and "My DOB". The main section is titled "How old Am I ?" and contains two date input sections. The first section, "Today's Date is :", has input fields for Date (16), Month (1), and Year (2020). The second section, "Select Your Date of Birth :", has empty input fields for Date, Month, and Year. Below these fields are two buttons: a red "Go" button and a black "Reset" button. The results section, titled "Your Age is", contains four input fields: "Your Age is" (empty), "Your Age in Days" (empty), "Your Age in Hours" (empty), and "Your Age in Minutes" (empty). The "Your Age in Hours" and "Your Age in Minutes" fields are labeled "(Approximate)".

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:

Your Age is
Your Age in Days
Your Age in Hours
(Approximate)
Your Age in Minutes
(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:

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.

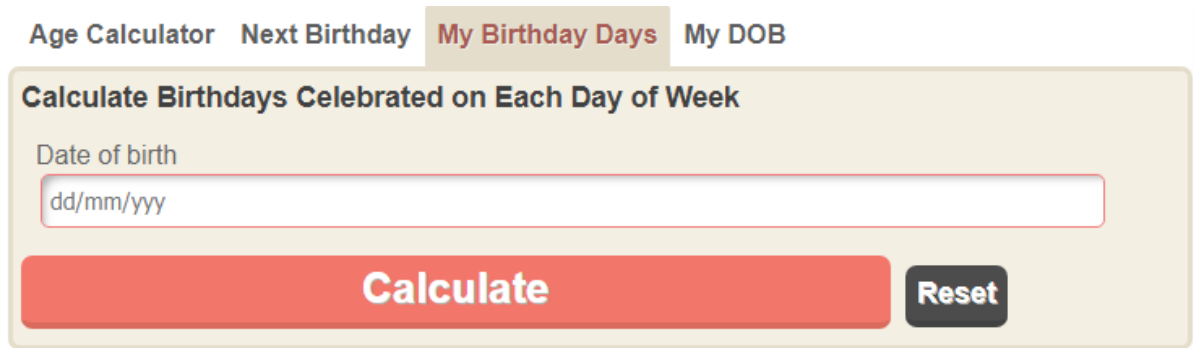


Fig: 1.5

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

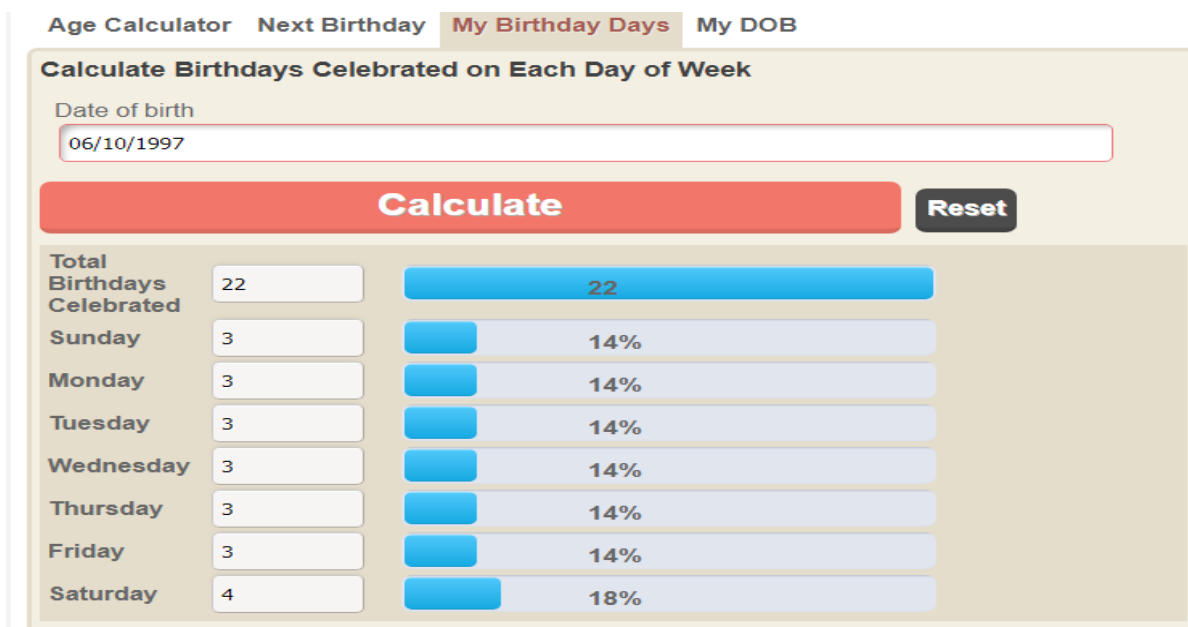
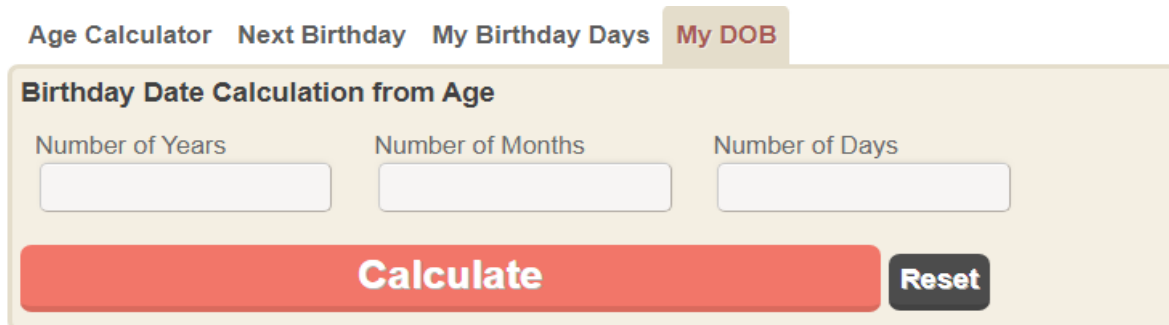


Fig: 1.6

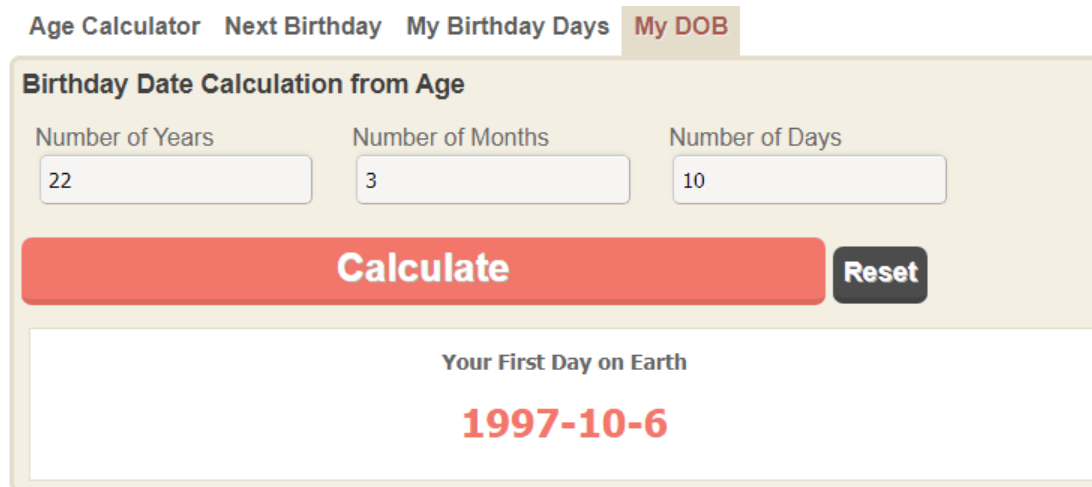
4.1.4 DOB Calculator

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. Below the tabs is a section titled "Birthday Date Calculation from Age". It contains 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 black "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 has been clicked, and the result "1997-10-6" is displayed in a large red font. Above the date, the text "Your First Day on Earth" is shown. The "Reset" button remains visible.

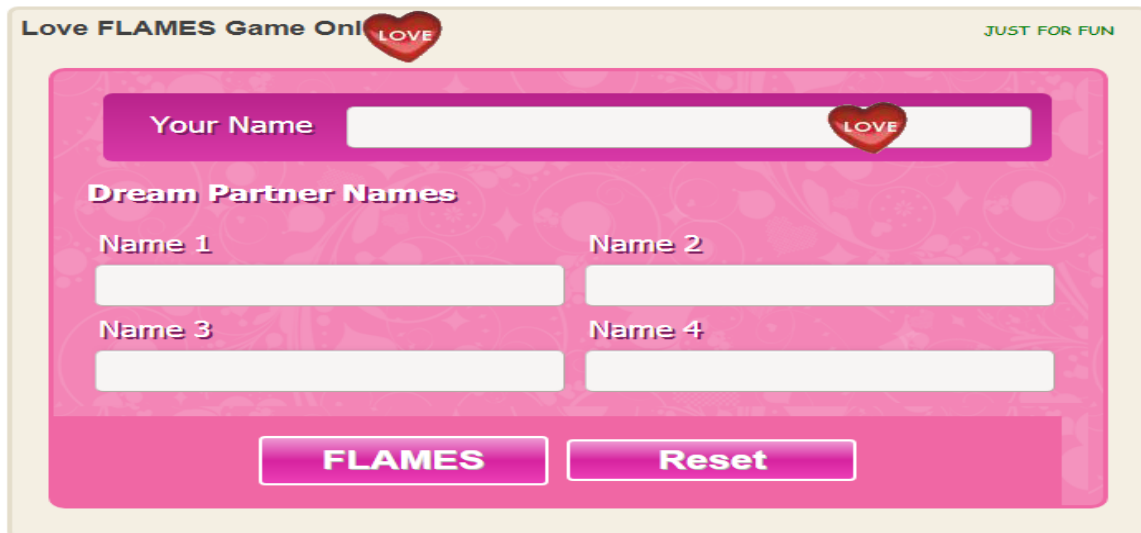
Fig: 1.8

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. There is a small heart icon with the word 'LOVE' inside it next to the 'Your Name' field and another similar icon next to the 'Name 3' field.

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' field contains the text 'Jack'.
- The 'Name 1' field contains the text 'Lisa'.
- The 'Name 3' field contains a small heart icon with the word 'LOVE' inside it.
- The 'Name 2' and 'Name 4' fields are empty.
- The 'FLAMES' and 'Reset' buttons are still present at the bottom.

The background and layout are consistent with the previous screenshot.

Fig: 2.0

Love FLAMES Game Online JUST FOR FUN

Your Name JACK

Dream Partner Names

Name 1 LISA	Name 2
Name 3 	Name 4

FLAMES **Reset**

LISA & JACK

Marriage

Fig: 2.1

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

Love FLAMES Game Online JUST FOR FUN

Your Name Jack

Dream Partner Names

Name 1 Lisa	Name 2 Rose
Name 3 Raveena	Name 4 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 website. The header features the site logo, a Google Custom Search bar, and language/sign-in options. A navigation menu includes links for Calculators, Converters, Formulas, Currencies, Charts, Examples, Tutorials, Answers, and Others. The main content area is divided into several sections:

- Advertisement:** A blue banner for Jira Software promoting a 7-day free trial.
- Text Block:** A paragraph explaining the concept of units and their standardization, mentioning fields like Engineering and Chemistry.
- Most Used Conversions:** A table listing popular conversion tools:

Most Used Conversions	
Area Unit Converter	Light Luminance conversion
Length Unit Converter	Bandwidth Unit conversion
Weight Unit Converter	Square Foot Conversion
Volume Unit Converter	Land Area Conversion Calculator
- Calculators and Converters:** A sidebar on the right with a search bar and a list of featured tools:
 - Top Calculators:** Age Calculator, SD Calculator, Logarithm Calculator, LOVE Game.
 - Popular Calculators:** Derivative Calculator, Inverse of Matrix Calculator, Compound Interest Calculator, Pregnancy Calculator Online.
 - Top Categories:** Algebra.

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.

Land Area Converters

- ▶ Land Area Hectares Conversion
- ▶ Cent Conversion
- ▶ Square Yard Conversion
- ▶ Yard Conversion

[More](#)

Physics Conversions

- ▶ Inductance
- ▶ Linear current density
- ▶ Mass Flux Density
- ▶ Charge
- ▶ Magnetic Flux density

[More](#)

Chemistry Conversions

- ▶ Weight of Water Conversion
- ▶ Fluid Ounces Conversion
- ▶ PPM to Micrograms per Grams
- ▶ Gallon
- ▶ Entropy

[More](#)

Basic Conversions

- ▶ Bandwidth Megabits Conversion
- ▶ Bandwidth Kilobits Conversion
- ▶ Apothecary Conversion
- ▶ Per Mille (‰) Conversion Calculator
- ▶ Circumference

[More](#)

Volume Conversions

- ▶ Volume Converting Factors
- ▶ Volume to Weight Unit Conversion Calculator
- ▶ CFM Calculator
- ▶ MM³ to Bbl Calculator

[More](#)

Length Conversions

- ▶ Length Converting Factors
- ▶ Furlong
- ▶ MPH to KPH Converter
- ▶ FPS to KPH Calculator
- ▶ Mph to Knots Conversion

[More](#)

Other Conversions

- ▶ Cooking Converter
- ▶ Astronomy
- ▶ Apothecary Conversion
- ▶ Parts per Conversion

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.

- ▶ Bigha to Murabba Conversion Calculator
- ▶ FPS to KPH Calculator
- ▶ Height Converter
- ▶ Kilometers To Steps Converter
- ▶ Kn/mm² to KSI Converter
- ▶ Knot to KPH (Kilometers Per Hour) Conversion Calculator
- ▶ Knots to Mph Conversion

- ▶ KSI to Kn/mm² Calculator
- ▶ Length Converting Factors
- ▶ Length Unit Converter
- ▶ m/s to km/h Calculator
- ▶ Metres to Steps Converter
- ▶ Mph to Knots Conversion
- ▶ MPH to KPH Converter

- ▶ MPH to MPS Converter
- ▶ MPS to FPM Converter
- ▶ Psi To Durometer Converter
- ▶ Steps To Kilometres Converter
- ▶ Steps to Meters Converter
- ▶ Yarn Count Calculator

Fig: 2.6

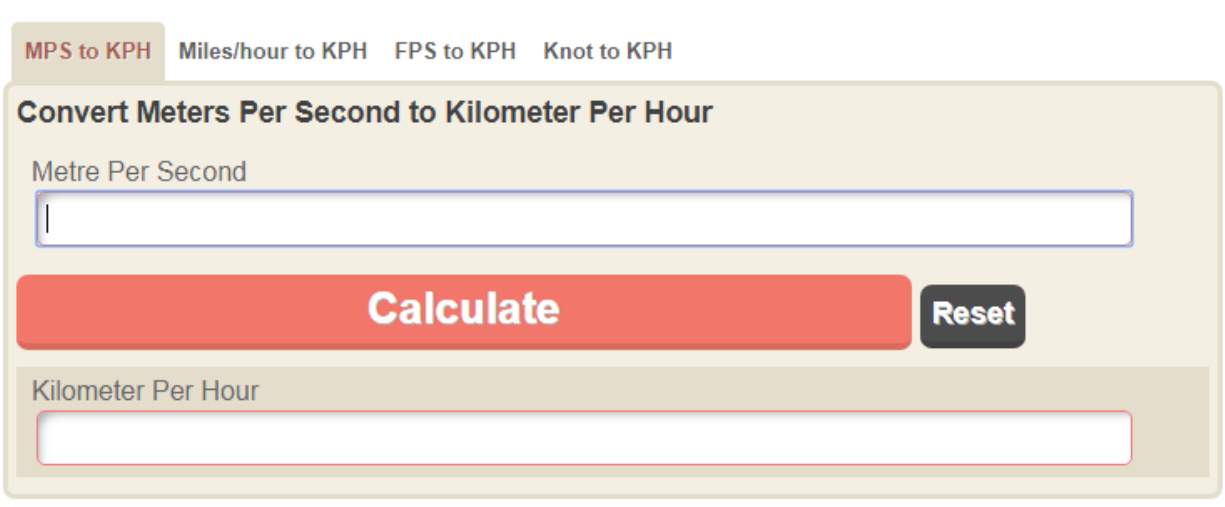
In the above figure it shows so many one to one conversions like FPS to KPH Calculator, Height Converter, and Meters to Steps Converter, and MPH to MPS Converter etc.

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

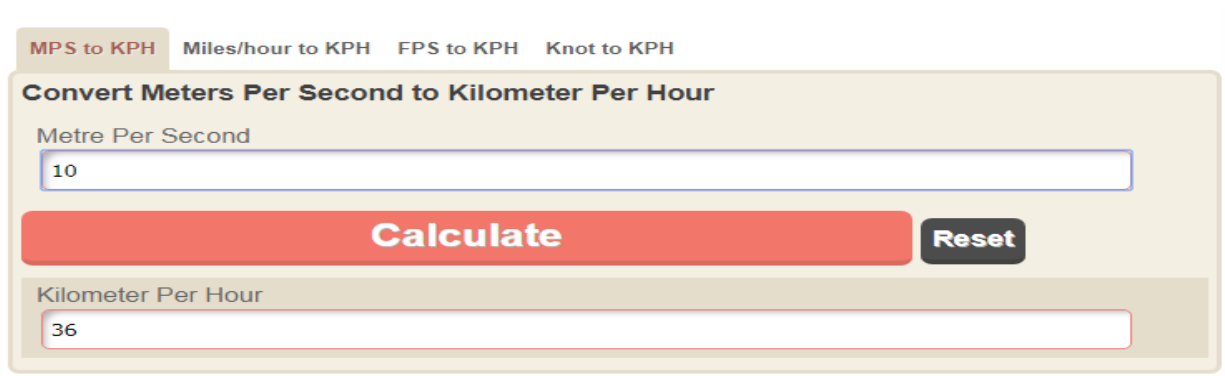
Meter per second is the derived SI unit of speed, which is used to measure distance. It is both scalar and vector quantity. 1 meter per second is exactly equal to 3.6km per hour. A kilometre is 1000 times greater than a meter. It is a metric unit used in the transportation. Use this conversion calculator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



The screenshot shows a web-based conversion calculator for 'MPS to KPH'. 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 title 'Convert Meters Per Second to Kilometer Per Hour' is displayed. 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 'MPS to KPH' converter interface as Figure 2.7, but with real-time results. The 'Metre Per Second' input field now contains the value '10'. The 'Kilometer Per Hour' output field at the bottom now contains the value '36'. The 'Calculate' button remains visible but is not being used, demonstrating the real-time calculation feature.

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**

Meter Per Second (m/s) to Feet Per Minute

Meter Per Second m/s

Calculate **Reset**

Feet Per Minute 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)

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

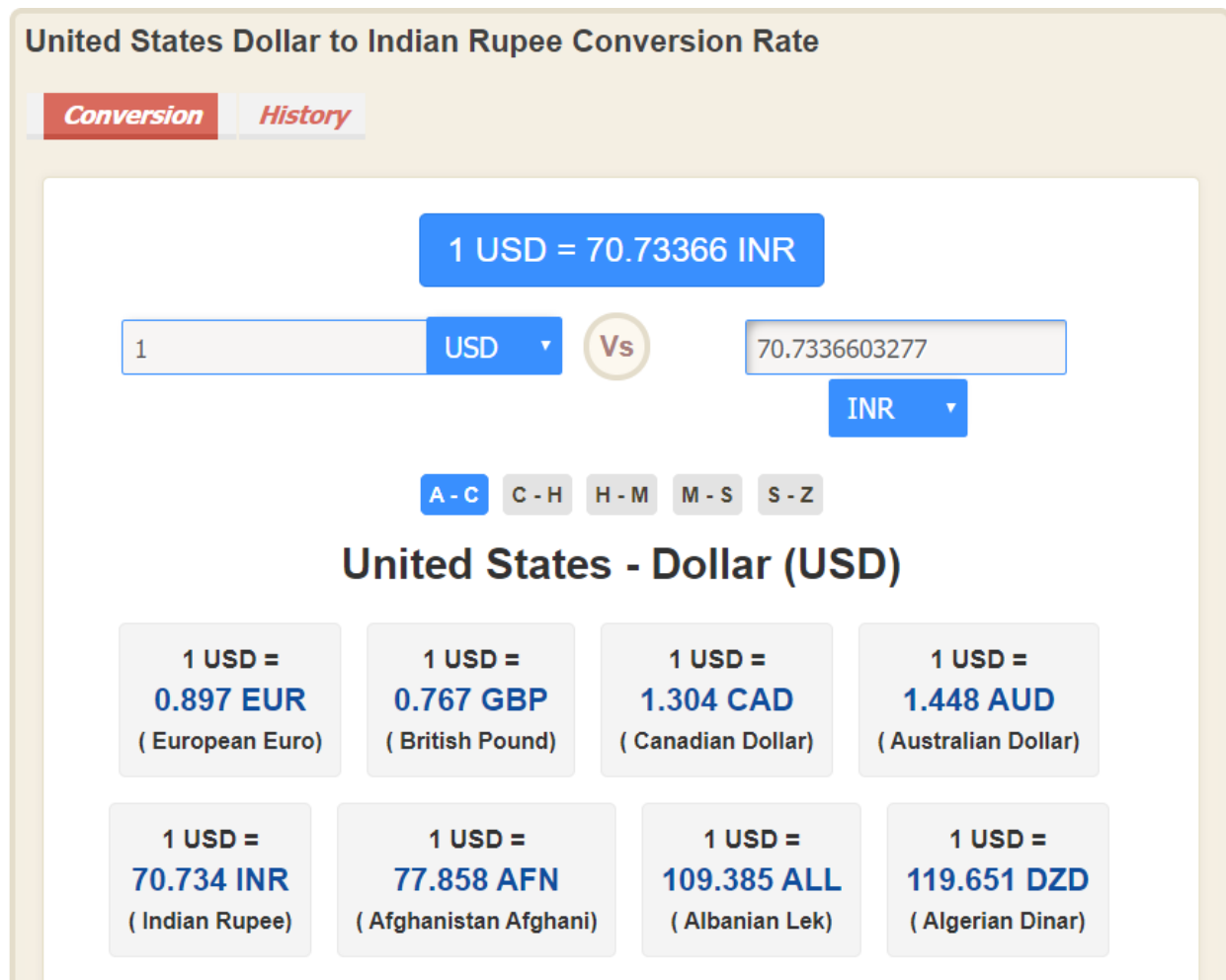


Fig: 3.1

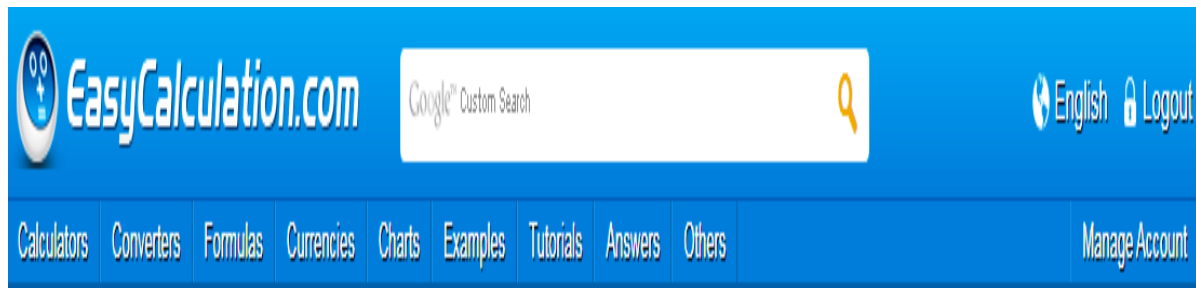
The above fig shows the USD currency to Indian rupee currency rate i.e., 1USD =70.73 INR.

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

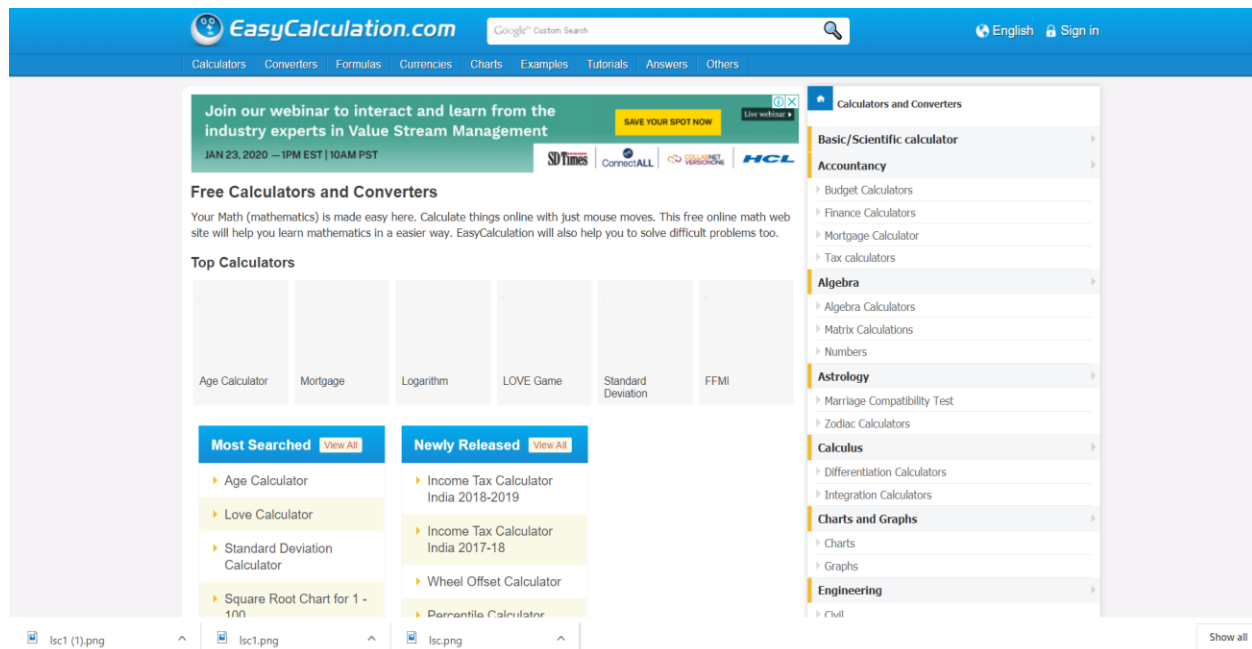


Fig: 3.2