

Mini project :-

Basic calculator

A Calculator is a small electronic device used to perform various arithmetic operations like addition, subtraction, multiplication, division, percentage, etc. Also the electricity bill calculator is also the one which calculates and helps the user to enter the units that a user consumed.

Electricity Bill Calculator

Electricity bill cost calculator Electricity usage consumption calculator

Select country: Philippines

Typical appliance: Fan

Power consumption: 12 watts (W)

Hours of use per day: 5 h/day

1 kilowatt-hour (kWh) cost: 9.9766 peso

Calculate Reset

Electricity cost per day: P0.598596

Electricity cost per month: P18.2198

Electricity cost per year: P218.637

Energy Cost Calculator

Consumption / Hour: 35 Watt

Hours / Day: 6

Cost per Watt/KWatt: 0.75

Usage / Day (kWh)	Cost / Day
0.21	157.50
Usage / Week (kWh)	Cost / Week
1.47	1102.50
Usage / Month (kWh)	Cost / Month
6.51	4882.50
Usage / Year (kWh)	Cost / Year
76.65	57487.50

Share Clear

State of Art :-

a) 5 years Ago Calculator :-

Feature & Cost

- This is the old version of calculator
- The cost of units in those days were a bit low to the customers depending on the units used and charge per unit fixed.
- It as used to perform the basic operation on different fields like agriculture, residential, commercial.

b) New Generation Calculator :-

Feature & Cost

- Modern electronic calculators vary from cheap, give-away, credit-card-sized models to sturdy desktop models with built-in printers
- The cost of bills now have changed drastically and unit prices are high, for even normal usage of a 1BHK the bill goes around 300Rs.

Identify your requirements :-

This is the Basic calculator which is manufactured by Cisco. Which is used for basic operations like Addition, subtraction, multiplication, division, Square root.

- **What** :- This helps user to calculate the bill according the units consumed .
- **Where** :- It has to be used easily by the users
- **When** :- It has to be deployed 25th of November 2021.

- **Why :-** I am Developing this Electricity Bill Calculator to perform basic mathematical operation in best easy manner which gives the bill amount and units consumed and improve my coding skills .
- **How :-** I am using C programming language for Developing this simple basic Electricity Bill Calculator.

SWOT Analysis :-

SWOT Analysis is a simple tool that can help you to analyze what your company does best right now, and to devise a successful strategy for the future. SWOT can also reveal areas of the business that are holding you back, or that your competitors could exploit if you don't protect yourself.

a) Strengths :-

- Strengths are things that your Calculators does particularly well, or in a way that distinguishes you from your competitors

b) Weaknesses :-

- Weaknesses, like strengths, are inherent features of your projects, so focus on your people, resources, systems, and procedures.

c) Opportunity :-

- They usually arise from situations outside your organization, and require an eye to what might happen in the future.

- d) Threats :** Threats include anything that can negatively affect your business from the outside, such as supply-chain problems, shifts in market requirements, or a shortage of recruits.

Derive High level Requirements :-

ID	Description
HLR1	It is a basic electricity bill calculator which supports adding and multiplying the units.
HLR2	In feature it will also support other fields (Agriculture, Residential)
HLR3	If we not enter it will let you to perform the operation.

Derive low level Requirements :-

ID	Description
LLR_1_HLR1	<ul style="list-style-type: none">• If we consider Agriculture field it will produce output based on the units fixed to that specific field.• If we consider Residential field it will produce output based on the units fixed to that specific field which differ from agriculture field.• If we consider commercial field it will produce output based on the units fixed to that specific field.
LLR_1_HLR2	<ul style="list-style-type: none">• If I consider commercial field it will provide me the different Result

