

Mini project :-

Basic calculator

A Calculator is a small electronic device used to perform various arithmetic operations like addition, subtraction, multiplication, division, percentage, etc. It makes our calculations easier and faster. It is a portable device that can use anywhere to perform simple mathematical operations.



We use a scientific or sophisticated calculator in some situations, where we need to solve complex calculations like trigonometry functions, exponential operators, degrees, radians, log functions, hyperbolic functions etc



10 Year Ago Calculator



5 Year Ago Calculator



New Version Calculator

State of Art :-

a) 10 years Ago Calculator :-

Feature & Cost

- This is the old version of calculator
- They later became used commonly within the petroleum industry (oil and gas).
- It as used to perform the basic operation like +,-,/,*
- It will cost you around 100Rs.

b) 5 years Ago Calculator :-

Feature & Cost

- Modern electronic calculators vary from cheap, give-away, credit-card-sized models to sturdy desktop models with built-in printers

- The end of that decade, prices had dropped to the point where a basic calculator was affordable to most and they became common in schools (300Rs)

c) New Generation Calculator :-

Feature & Cost

- Power sources of calculators are batteries, solar cells or mains electricity (for old models), turning on with a switch or button.
- We can perform the all basic operation (+, -, /, *, %) along with trigonometric operations etc
- It will cost you around (500rs) depends more features.

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 makes the calculation of basic operation like +, -, /, *, square root of a Number
- **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 basic Calculator to perform basic mathematical operation in best easy manner and improve my coding skills.
- **How :-** I am using C programming language for Developing this simple basic 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 :-

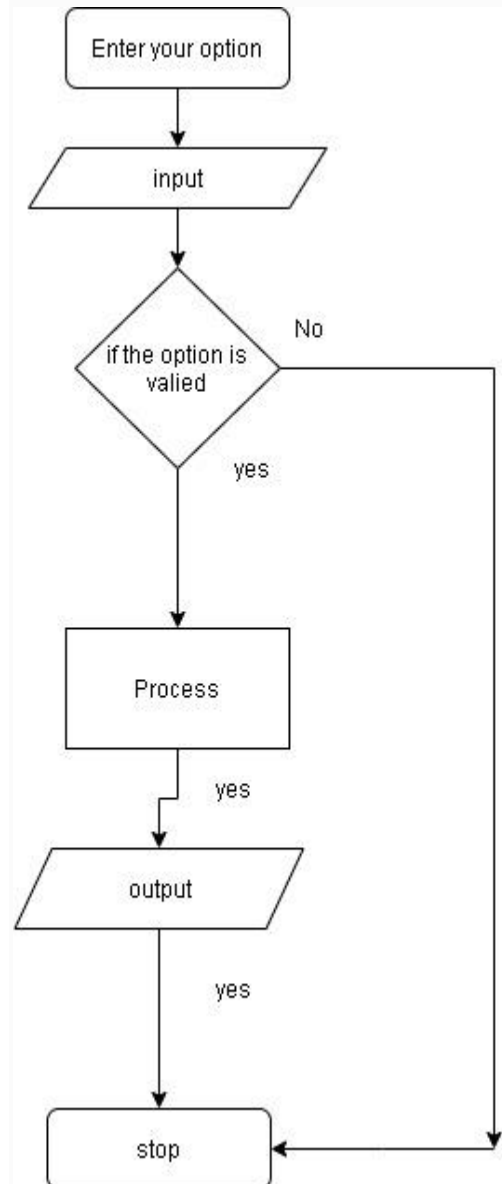
ID	Description
HLR1	It is a basic calculator which support basic operations like (+,-,*,/)
HLR2	In feature it will also supports Financial operations (simple interest etc)
HLR3	If we not choices it will let you to perform the calculation operation.

Derive low level Requirements :-

ID	Description
LLR_1_HLR1	<ul style="list-style-type: none">• If we consider + it will integer inputs and produces the float ,array output• If we consider - it will integer inputs and produces the float ,array output.• If we consider * it will integer inputs and produces the float ,array output.• If we consider / it will integer inputs and produces the float output.
LLR_1_HLR2	<ul style="list-style-type: none">• If I consider financial operation it will provide me the appropriate Result

Design :-

Structural Diagram :-



Flow charts