Gap Analysis

History

Date	Modified By	Version
05-03-2025	Gourav Kar	1.0

Reference

Reference ID	Reference	Comment	Comment

Prerequisite

- **Understanding User Needs**: Gather input from users or stakeholders to identify what functionalities are expected or required from each calculator.
- **Defining the Categories**: Clearly specify the types of calculations or features under consideration (e.g., basic math, trigonometry, interest calculations).
- **Assessing Current State**: Conduct a review of the existing functionalities to determine what is already implemented and any limitations.
- **Setting Objectives (Desired State)**: Identify what improvements or features are desired in the calculators for better user experience or performance.
- **Identifying Gaps**: Compare the current state with the desired state to pinpoint what's missing or needs improvement.
- **Action Planning**: Brainstorm and list the steps needed to bridge those gaps effectively

Gap Analysis Table

	Feature	Current State	Desired State	Gap	Action Plan
1	Basic Calculator (Addition Division Multiplication Subtraction)	Supports basic addition of two numbers, works with integers, limited to manual input,	Support for adding multiple numbers, decimal inputs, improved error handling.	No multi-number support, lacks decimal compatibility,	Implement multi-number addition, introduce decimal support,

		no error handling.		no error handling.	enhance error handling.
2	Scientific Calculator (Trigonometry Factorials & Combinatorics)	Supports basic trig functions (sin, cos, tan). Supports basic factorials and combinations, struggles with large numbers.	Support for inverse trig functions. Handle large values. Missing inverse functions, No large factorial handling.	Missing inverse functions, No large factorial handling.	Implement inverse trig functions, Optimize factorial computation.
3	Financial Calculations (Interest)	Supports compound and simple interest, manual input provided.	Value should be taken from the user.	Information is not taken from the user.	Implement the user input section

Overall Missing Features

ITEM	Description
1	Error Handling Across All Functions
2	Multi-Unit Conversion
3	Export Results (PDF/CSV)