

Project Idea:

The master calculator will help user understand the problem better by **associating the problem with the process**. It will provide the **better interface** to user, and it will **contain most of the engineering calculation formulas**.

Project need /innovation:

The problem to be solved are:

1. We need a calculator that contain many formulas and calculate many problems.
2. We need a calculator which help user understand the problem better.
3. If the new formula would be discovered in 2030, we need a calculator that may not be difficult to add a new formula into it.

Example:

Regarding the different between the master calculator and the rest of the calculators outside there, I would bring an example of HP 35 electronic calculator which was developed by Thomas Whitney in 1967. The calculator has 35 buttons, and it was named HP 35, or Hewlett Packard 35. It was a wonderful calculator that handles many scientific calculations.



Hewlett Packard company build many other calculators including this nice calculator below. Most of them have more than 35 buttons on it. Still the problem of crowded screen increases as you can see the difference between the one above and the one at the bottom.



Project Scope:

The project scope is a minimum viable product which includes. This scope may increase if the time is not run out.

1. Basic Calculator interface
2. Scientific Calculator interface
3. Engineering Calculator
 - a. Kinetic Energy interface
 - b. Potential energy interface
 - c. Thermal energy interface
 - d. Work interface

Technology and tools to be used.

- High fidelity prototyping I am using adobe XD.
- Development Stack:
 - a. Language will be Java
 - b. Tools for development: Android Studio

- c. User interface framework: Android UI

References

Whitney, T. 1995-2021. Inventor of the World's First Scientific Handheld Calculator. Retrieved on Sept 23, 2021 from <https://www.ece.iastate.edu/profiles/thomas-m-whitney/>

The Museum of HP Calculators: 1972 -1975. Retrieved on Sept 23, 2021 from <https://www.hpmuseum.org/hp35.htm>