

0.1 Common interviewee points summarized

Sarah

HR Student

- inputting full eqn like she memorized
- physical calculator
- simple calculator
- prefers physical calculator but uses others
- functions in the book
- downloadable functions or packages
- cares about precision and the right answer
- doesn't care about aesthetics
- hot keys for common functions

Victoria Benlala

Entrepreneur, Spa Owner

- Button to calculate the taxes (simple programmable functions)
- physical calculator first doesn't mind others
- doesn't use complicated functions
- simplicity and soft buttons. Would like a more portable version.
- mapping numbers to number keys on computer. Being able to have hot keys or set them up himself with the functions he or she is given

Kevin

Engineering student

- Would like to be able to access functions easily for engineering
- Comfortable with both software and hardware but prefers hardware
- He wants shortcuts
- Wants basic functions also
- Wants to use computer keyboard and not mouse pointer
- Portable and key mappable
- Use symbols that are already commonly found on calculator on the cpu keyboard also
- Include a shortcut quit key
- Hot keys (like S for sin, T for Tan, etc.)
- Recommends skins for calculator
- Would like downloadable packages for functions to customize calculator

Tarek

Electrical engineering student

- accuracy, speed, and comfort
- basic essential functions
- he would like it to be able to plot graphs
- he would like to transfer his work from calculator to mobile
- prefers physical but he uses other for quick calculations
- wants calculator easy to hold
- would like it to be cheap even if it's customizable

Arash

Avionics Engineering Student

- specific buttons for each function
- prefers an app
- He would assign each function to a specific button

0.2 Common Ideas

- Simplicity
- Physical calculators → GUI could look like physical calculator
- Hot keys
- Simple functions (plus, minus, etc.)

- Portability
- Customizable (physical and software wise) download functions

0.3 Summary

Looking through all the interviews we were able to pick up on some important points that we chose to consider when creating our use case diagrams and to move forth with our project. We interviewed a Human Resource, Mechanical Engineering, Electrical Engineering, and Avionics Engineering student. We also interviewed an Entrepreneur/Spa Owner to gather our data. Each individual had very different needs specifying what kinds of functions they would like to see on their ideal calculator. For example, Engineers wanted integration functions, while an entrepreneur wanted percentages or tax calculating functions.

What they all had in common though was the want for simple operations (like addition, subtraction, etc.). They all also wanted simplicity in terms of the calculator's look, how easy it would be to access the functions they wanted to use, understand what they are, and it's portability. The majority also wanted a reliable calculator in terms of precision and accuracy. They all preferred physical calculators over software calculators (like those you would find on a computer as an extra tool application). They all liked the idea of mapping keys on a computer keyboard to their desired functions to make the calculating experience more personalized and simple to them. They all had different ways they wanted to customize their calculator, which included personalizing it physically and software-wise. The important point though was that customizability was what they valued commonly amongst each other.

Based on the research we made from the stakeholders we interviewed, the calculator will need to be **simple**, **customizable**, and **reliable**.