**1. What is your current program of study/profession?**

Visual effects

**2. How much experience do you have in this field of study/work?**

20+/-

**3. Do you enjoy your studies/work? If yes, which part interests you the most? If no, what do you not like about it?**

I do enjoy it

likes working with people

sharing knowledge

doesn’t like politics

**4. What tasks or jobs would you say you mostly do in your field of study/work?**

reproducing computer graphic elements for the purposes of entertainment

**5. Can you tell me some of your likes and dislikes and what you enjoy doing?**

telling stories with images

learning aesthetics + relationships with the physical world into the digital

working in a team

**6. What are your values when it comes to your field of study?**

methodical

understanding the subject of intent

research and understanding

**7. What occupation are you aiming towards, if you are not already employed?**

Visual effect, no change.

**8. What skills have you been developing which you feel will be the most important for this future career?**

N/A

**9. What are your current goals for yourself? If you have none, do you think you will have some in the future?**

better artist

better teacher

**10. Do you prefer to use to use the hand-held calculator or computer calculator?**

computer calculator

**11. Do you have experience using the command line of your computer? And using a calculator on your computer?**

yes to both

**12. Are you comfortable enough to use a calculator without a Graphical Interface and just with the command line?**

yeah

if the help section is there (--help or man)

**13. Currently, my team and I are designing a scientific calculator and we are hoping to get your input to improve our design. How much experience do you have with a Scientific Calculator, and how often do you use one?**

I don’t use one very much

Would probably benefit from using one

Uses generic/basic calculator

sine, cos, tan make use of all the time inherently use these functions

degrees to radians conversion and vice versa

prefers black box functionality

**14. Are there any functions you feel should be included in a Scientific Calculator but aren’t?**

custom algorithm or functions (definitely this)

trig functions

matrix math -> positional and rotational into matrix + scale

multiplying matrices + matrix math

laws of energy (inertia)

temperature conversion

Planck's law to color conversion

API

quaternion

Vector to velocity

loops over dataset

array support

regex support

LUT support (Look up table) -> Support for .Cube files

remap of a value (sRGB to linear)

**15. Does your operating system provide any calculator? if yes, Do you think its functions are enough for you?**

yes and yes

**16. What function/ functions do you usually need from a Scientific Calculator most?**

addition, subtraction, multiplication, division, PI, sine cosine, rand, srt, log, Exp

**17. Do you think you will use a scientific calculator in your field of study and in your future career. If yes, what will some of your uses for it, if no, do you think you would use for personal use?**

I think so, provided this custom calculator gets built. But not the standard calculator currently available

**18. Do you use Scientific Calculator during your work or your exams or your course projects or anything else?**

Not the scientific one specifically unless need to know PI to certain decimal

**19. Our calculator will include the functions for exponential functions, arccos, log, Gamma, Mean Absolute Deviation, Standard Deviation, sinh and a special exponential function which allows variables and expressions for the base instead of natural numbers. Can you tell us which function you would find most usable for yourself? Why?**

Series of numbers, MAD

GAMMA used for pixel values but integrated into the software

**20. If no, is it because you don’t see yourself using any of the functions mentioned, or some other reason?**

For the ones I wouldn’t use, I simply don’t know them enough to use them.

**21. How familiar are you with these functions and how they work?**

Not too familiar with them

**22. Do you think it is necessary that a Scientific Calculator should take a function as input?**

yes

**23. Are there any features you would like to see included in this calculator that you think would make the design better?**

High DPI display

more visualization of any function inputted.

**24. What should the precision for a Scientific Calculator be?**

64-bit resolution

10 decimal places

**25. When using a calculator do you prefer to receive a step-by-step solution or simply a final answer?**

learning point of view, step by step

but a toggle feature when it’s not needed.

**26. Do you think a history is essential for a calculator? If yes, how big should the history be?**

yes.

10 is sufficient.

Inspect the entire history (from an instance)

**27. Do you have any positive experiences with a Scientific Calculator, if yes please elaborate?**

generally, the work well, nothing too much of note

**28. Do you have any negative experiences with a Scientific Calculator, if yes please elaborate?**

Improvements listed above would help.

**29. In your opinion, what would improve your experience when using a Scientific Calculator on a computer? What features would improve its usage for you?**

API -> not isolated.

**Summary of Interview Process**

The question method followed the funnel model, as it allowed me to familiarize myself with the interviewee and to build a better rapport. Starting off with general question helped take the edge off and allowed for a smoother interview process when it came to answering questions about the product. By getting to know the interviewee, I was able to get a better sense of whether they would find this type of product interesting, and useful in their everyday life. After going through the general questions, it seemed to have helped give the interviewee security of being able to answer truthfully without being in fear of judgement when it came time to answer the question about the product. Originally, they had stated that they may not have any useful input, however it turned out to be quite the opposite. Their answers provided useful insight into what kinds of functionalities we can adopt into our product and considerations that could be made. Given the circumstances, the interview was conducted in a semi-proximal manner, meaning over a Zoom call. Having the interviewee in view allowed me to judge how the interview process was going, whether the questions perhaps needed to be rephrased and judge the overall mood and status of the interviewee.

The interview was performed in a semi-structured manner, with many of the questions being open-ended. Although I had originally planned it to go in a more structured manner, I decided it was best to use a semi-structured method to allow the interviewee to explain their answers, that way I would be able to extract more useful information from certain questions. The open-ended questions helped in this regard as well since it allowed the interviewee to freely give their answer and explanation. Though, at times it would require a follow-up question to get to the core of the answer, this method proved to elicit more information. In the end, this method worked out quite well.

**Analysis of Responses:**

It was clear from the beginning that the interviewee had particular needs when it came to the product’s functionality. Given their field of work, many, if not all, the existing tools on the scientific calculator are integrated into the software they use. However, they did express a great interest in having the ability to construct general functions, the ability to perform matrix calculations as well as an API to integrate into existing software, to name a few. Some of the desired functionalities may be more attuned to a graphing calculator, however many of their suggestions point to clear deficiencies in currently available scientific calculators. They also stated that existing calculator lack a decent UI element, and they would therefore be happy if such an element was considered in the construction of this product. In terms of their general experience with using a scientific calculator, most of it was a positive experience, the negative portion being the lack of some of the functionalities above, however it was not enough to deter its use. To conclude, their answers were very insightful and provided many considerations to ponder on.