

1. Estimate how many hours you spent working with Reggie? Estimate how many times you interacted with the application.

Perhaps 2 hours, 4 or 5 interactions

2. Which brand of phone, and size screen did you use?

HTC One S, 960 x 540 pixel/4.3 inch

3. In what situations did you interact with Reggie? (eg. Commute, lunch break, watching TV?)

On the bus, lunch break

4. What words describe the tutorial? Did it help you use the application?

Useful, covered all bases. It helped make the first attempts at programs much easier – no trying to figure out which buttons did what.

5. What improvements are needed for the tutorial? (Please consider design, wording, clarity, etc)

Some points on the English used:

“That's why the updates..are instant” - “instantaneous” instead?

I would use fewer exclamation points. They're useful in some places but the amount used is a few too many, veers into patronising territory.

“When you get good at talking to me..” reads oddly, should be “better” instead of “good”.

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On the example screen for the increment icon, the +< icon can also be pressed as well as the increment box. (Same again for the end icon in the arrow example screen).

The phrase “decrement/branch” is used a few times before the word branch is even referred to in the notes (the “this will be explained later” should appear earlier than it does to cover this).

“This is a decrement/branch red by...” - may be clearer if it reads “Below is...” to differentiate the “this” from the instructions just given by the user in the example.

Found it very tricky to drag the arrows to different instructions, only ^ to v.

By the end of the tutorial, I still wasn't completely sure of what branch meant – that it skips to the next instruction if the box = 0 ?

The instruction regarding the X and the bin was a bit confusing, it took until I tried a program myself to realise that the X changes to a bin, not that they're separate.

6. What words describe the error messages? Did they assist you in correcting errors?

The errors regarding every decrement having a branch or end served as a useful reminder of what was missing from the page. The “I'm already pointing here” one usually popped up when I was having difficulty moving the arrows so that was a bit frustrating!

7. What improvements are needed for the error messages?

None noted

8. What words describe the design?

Clear, screen nicely populated and laid out, easy to navigate, landscape orientation made it easier to use for a longer time (versus using the phone in portrait orientation)

9. What improvements to the design are needed?

The screen moves about when trying to move the arrows which often results in longer been spent on trying to get the instructions to go where you want them to than actually building programs.

10. Did you build any programs? Please give a brief description and attach .txt files/screenshots.

Moving, combining the contents of 2 cells and transferring to a third location, a bit of a premature attempt at multiplication which wasn't well thought out so didn't work – still working on it!

11. What additional assistance would you have needed to build programs?

A more advanced, secondary tutorial for when all attempts at a task fail and extra hints are needed.

12. Did the application perform as expected? If not, please describe.

Yes. The first version I received crashed when arrows were used but an updated version worked smoothly after that.

13. Briefly explain what a register machine is.

A basic CPU, that stores numerical data in cells, which can be moved to other cells under add/subtract instructions, instructions which can be further combined in ways to perform more complicated tasks

14. Explain how a CPU completes an operation (for example, ADD)?

The data held in 2 cells can be added by sequentially incrementing one cell and decrementing the other cell until the 2<sup>nd</sup> cell reaches zero, so that the contents of the second cell has been transferred and added to the first

15. Comment on how the concept of a register machine relates to CPU functionality.

The register machine simulates the action of a cpu in a more basic format

16. Do you feel you have increased your knowledge of CPUs and how they work, or not? Why?

Yes. Reggie really challenges you to figure out why each step works or doesn't and, as such, makes the action of a cpu more understandable at a basic level.

17. What do you like about this application?

It challenges me to try more complicated programs, as if I'm working up through levels – it feels like I win when the program works

18. What changes would you make to the application?

Already noted above.

Also, perhaps a set of preloaded set of challenges that could be worked through as a challenge/game.

19. Any additional information, concerns, comments you would like to add?

Reggie was fun to use, I plan to keep using him after this to figure out some ideas I have for more programs – I WILL master multiplication eventually!