Appendix

Interview with Client/Advisor Ms xx

Me: Hello! As we agreed I will help you with creating interactive educational game for your students. I will write computer program which will make you able to create different activities and give students basic knowledge and skills in computer science.

Ms xx: I am very happy to hear that. But I have a question: according your program will I be able to change activities or everything will be already created and students will only solve the problems?

Me: You will be able to create as many activities as you wish and give them students. You will edit, delete them too. And I try my best that this process would be easy for you.

Ms xx: Thank you. That is what I wanted. How can I help you to create the program?

Me: Can you tell me what type of games do you want to have?

Ms xx: For the beginning, I need 3 different types of game which will help kids to develop logical thinking. Is it enough for you?

Me: I think it's absolutely enough and in case of need we can change plans during working process. Did you already decide which 3 games you want to have in a program?

Ms xx: Yes! I will explain everything.

1st game

I will make sequence of numbers, for example: 1, 1, 2, 3, 5, 8, ?, 21, 34

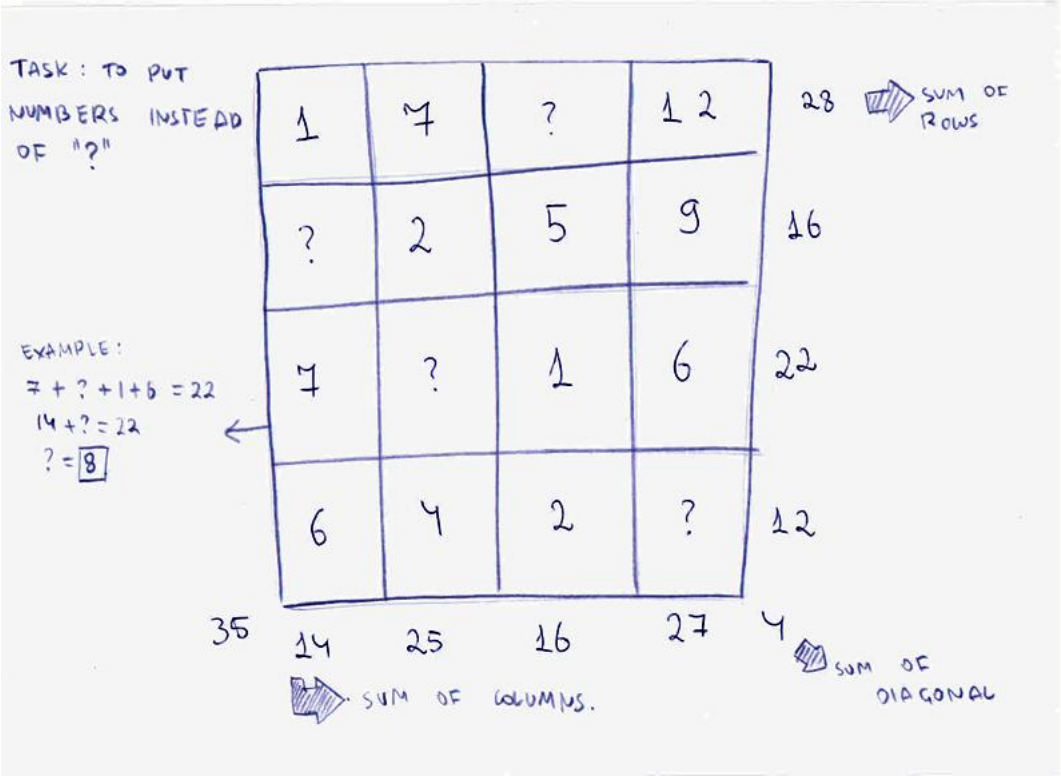
And student should find out number behind "?"

Is this possible to make in program?

Me: Of course, I will try my best!

Ms xx: So… 2nd game:

It will be like a board, for example:



(Source: Table was sketched up by Ms xx during the Interview)

Student should enter numbers instead of "?" to make sum of numbers in row/columns or diagonal equal to number written outside of chart.

Me: Should we make only 4x4 square or is it possible to have 3x3 or 5x5?

Ms xx: In my opinion, 3x3 charts will be too easy for kids, so I think 4x4 charts will be suitable for them.

Me: Yes, I will try to make it.

Ms xx: Now, 3rd game:

It will be game to convert numbers from base 10 to base 2. There will be 7 cards:

64	32	16	8	4	2	1

For example: given number 97. Students should choose those cards that sum of numbers written on them equals to 97. In this case, these numbers are 64+32+1=97. Thus, students

should write under 1st, 2nd and 7th cards number 1 and under rest of cards 0, so the result will be 1100001.

64	32	16	8	4	2	1
1	1	0	0	0	0	1

this is the wonderful way for kids to convert decimal numbers into binary system.

Me: do you want to have only these 3 types' activities?

Ms xx: for the first year it will be enough and then we will see…

Me: Thank you for information. If I have questions I will contact you immediately.

Ms xx: Okay thank you, goodbye

Me: Goodbye