## Quiz design

# Quiz 1: Excel quiz

# I have chosen American political history as my topic and the questions I will use are:

- 1. What is the Electoral college: The correct answer is 'the system used to elect presidents'.
- 2. What do al gore and Hillary Clinton have in common: The correct answer is 'they won the popular vote but lost the electoral vote'
- 3. Which Supreme Court judge has T1D: The correct answer is, 'Sonia Sotomayor'
- 4. What government branch is congress part of: The correct answer is 'Legislative'
- 5. Which branch is the police force part of: The correct answer is 'Judicial'
- 6. Which of these is not a government party: The correct answer is 'America united'
- 7. What was started by Abraham Lincoln on the day he was assassinated: The correct answer is 'the secret service'.
- 8. Who started the Republican Party: The correct answer is 'Abraham Lincoln'
- 9. What is the Democratic Party's mascot: The correct answer is, 'A donkey'

#### The formulae that I used:

If: This enabled the quiz to determine if an answer was 'correct'. If the answer that was selected matched what was correct, the computer would respond by saying 'correct'. If the answer was correct, the score for that question would be changed to 1.

Nested if': Without the nested if, if the participant had not yet answered a question, the question was marked as incorrect. By adding the nested if, I told the computer that if no answer had been selected, the computer shouldn't say anything

Autosum; The final score: To calculate the final score for the assessment, I had to add up the individual scores for each of the questions. Autosum allowed me to automatically add up these scores without much hassle.

# The formatting that I used:

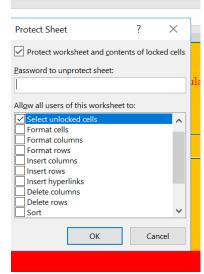
Data validation: This allowed me to create a list, and make the spreadsheet a multiple choice quiz. Without data validation, the participant would have to type in the answer. If they got the spelling wrong, or used capital letter differently from what was programmed, they would be marked as incorrect, even if their answer was right.

# **How I tested the quiz**

1. The tester would select the correct answers for each question: This would test the if function, which marks the answers. If the quiz said that they were correct, the if

function is working, because the quiz has recognized the right answer as correct. If the quiz says 'incorrect', the if function isn't working correctly because the quiz isn't accepting the right answer. This could be because I misspelled the right answer or made another mistake when writing the if formula.

- 2. The tester would enter an incorrect answer. If the quiz says 'incorrect', the if function is working.
- 2. The tester would leave a question blank: This would test the nested if function. If the quiz doesn't respond to the blank question, then it is working. If the quiz marks the unanswered question as correct or incorrect, then there is a problem with the nested if function. This would probably be because I made a mistake while writing it or simply forgot to add it.



3. Click on the question. This checks the sheet protect ion. This checks the sheet protection. I chose to use the 'protect sheet function' this doesn't allow the participant to select anything except certain cells, in the quiz these cells are the answer space. This prevents the participants from changing the way the quiz works, (if function, etc). If they are unable to select any of the cells that aren't part of the yellow answer space, the protect sheet function is working. If they can select cells that aren't the answer cells, the protect sheet function isn't working. This would probably either be because I forgot to turn on the function or because I didn't allow the user to select unlocked cells.



#### Quiz 2:

I have chosen T1D and research as my topic and my questions are:

- 1. What is T1D, (choose the correct definition): The correct answer is 'a disease in which the body destroys the islet cells'
- 2. What is the difference between T1D and T2D: The correct answer
- 3. What class of diseases is T1D in: The correct answer is 'auto-immune'
- 4. Is T1D genetic: The correct answer is 'yes'
- 5. Having T1D means that the body is unable to produce what: The correct answer is 'insulin and glucagon'
- 6. The patent for synthetic insulin was sold for what: The correct answer is '\$1'
- 7. Right now, the RRP for synthetic insulin is what: The correct answer is '\$100 per ml'
- 8. What is a CGM: The correct answer is 'constant glucose monitor'
- 9. What is the difference between an Omnipod and a Medtronic pump: The correct answer is 'the Omnipod is wireless and the Medtronic is connected to the cannula with a cord.

### The formulae that I used:

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## The formatting that I used:

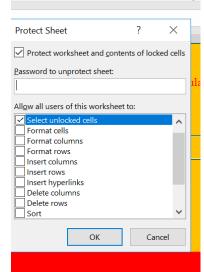
Data validation: This allowed me to create a list, and make the spreadsheet a multiple choice quiz. Without data validation, the participant would have to type in the answer. If they got the spelling wrong, or used capital letter differently from what was programmed, they would be marked as incorrect, even if their answer was right.

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the if function is working, because the quiz has recognized the right answer as correct. If the quiz says 'incorrect', the if function isn't working correctly because the quiz isn't accepting the right answer. This could be because I misspelled the right answer or made another mistake when writing the if formula.

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The quiz I prefer is the American politics quiz because it is more interesting, it looks better, and it's designed more effectively. I also find US politics more interesting than T1D.