Test Plans – Testing Lab.js experiment

Remember that the csv can be accessed within the experiment by clicking on the button with three lines in the lower right corner of the screen. Most metrics will save after a pin attempt is fully made. The full csv file can be downloaded after the experiment is over

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| Test no. | Metric | Description of Metric | How to Perform Test | Expected Result | Metric name in csv | Test Data | Actual Result | Actions Required |
| 1 | Correct PIN | The randomly generated PIN that the participant is supposed to be entering | Start the experiment, check the PIN given. Enter this PIN into the pinpad and verify it is correct | When the correct PIN is entered, the user is given the next PIN | N/A |  |  | Add what the correct PIN is to csv |
| 2 | Current Digit | The digit of the current PIN that the participant is supposed to be entering | Start the experiment, click on a digit on the pinpad, confirm that the digit you pressed is the same as the console is returning | The digit the user enters is printed to the console. It is starred out on the number box | N/A |  |  |  |
| 3 | Current Pad | The current pad style being shown to the participant this will be one of three styles: 3x3, horizontal, rotary | Start the experiment, check the format of the pad. The first pad should be the 3x3, the second horizontal, the third rotary | The screen shown is the same screen reported in the csv | sender |  |  |  |
| 4 | Total Experiment Time | Total time including PIN displaying that it took for participants to complete the experiment portion of the | Start experiment, run through all three pin pads, timing as you go. Compare with the time given in the csv. Only time for when you are on the pinpads, do not include the questionnaire | At the final screen, it tells how much time was taken by the participant in milliseconds | time\_end for row Fullscreen |  |  |  |
| 5 | Total Questionnaire Time | Total time taken by the participants to answer the questionnaire at the end | Go through the experiment, when you get to the questionnaire start timing. Compare the time given by the csv to your recorded time. | The amount of time taken by the participant in milliseconds | Duration for Demographics row |  |  |  |
| 6 | Total Time | Total time taken by the participants to finish the experimentation and the questionnaire at the end | Run through the whole experiment, timing as you go. Compare with the final time given in the csv | Total time in milliseconds | time\_end for Exit |  |  |  |
| 7 | Pin Attempt Entry Time | The total time taken to complete the entry of an entire PIN. This applies whether or not the PIN entered is correct. This may also include participant using backspaces. | Start the experiment. Start timing once given the pin, stop timing once a pin attempt is done. Compare with the time given in the csv | The amount of time in milliseconds it took for each pin attempt. An attempt is when the user has put in the max number of pin digits (either 4 or 6) | Attemptime. Each row is for each screen, every pin attempt time is separated with a comma |  |  |  |
| 8 | PIN Attempt correctness | Boolean value. Whether or not the entered PIN matches the correct PIN | At a given pin, type the pin incorrectly some amount of times, then type the pin correctly. Compare with the csv. The number of nos should be the same as the incorrect attempts and the yes with the correct. | Yes if pin is correct, no if not | Pincorrect, each pin attempt separated by a comma |  |  |  |
| 9 | Number of PIN attempts made per PIN | Number of submitted PIN attempts made for a single correct PIN | Once given a pin, count how many times it takes until you enter the pin correctly. Compare with the number given in the csv | Number of times until a correct PIN is put in. Num of attempts is 1 if the participant gets it right on the first try | Numattempts. Each pin is separated by a comma |  |  |  |
| 10 | Time for key press | Time taken from the selection of the past key press to the next key pressed. This applies whether or not the selected key is correct, or whether it is a digit or a backspace | Start a new pin, timing as you go. Record the time of every keypress. Compare with the csv | Time between key presses in milliseconds | Timeforkeypress. Each key press time is separated by a comma |  |  |  |
| 11 | Total Time Taken for Correct PIN | Time taken for an individual to correctly input the desired PIN. This includes redos for any mistakes made | Start a new pin, time until you type in the correct pin. Compare this time with the csv | Time taken until a correct PIN is entered in milliseconds | Timeforcorrectpin, Each PIN is separated by a comma |  |  |  |
| 12 | Time Taken per pad | The total time taken to enter the desired PINs on a particular style of pad. This does not include time to show the PIN to participants, but does include the time for any errors made | Start the experiment, go through all three pin pads, and record individually how long it takes to get through each one. Compare with the csv | Total time taken per each screen in milliseconds | duration |  |  |  |
| 13 | Num Errors per correct PIN Entry | The total number of errors made when entering a particular PIN. This includes two types of errors: backspace errors, and PIN attempts | Start the experiment and let it give you a pin, type the pin in counting how many times you press the backspace and how many time you enter the pin incorrectly. Compare to the csv | A combination of the backspace errors and the incorrect pin attempts. Number is saved once a correct PIN is entered | totalerror, pins separated by commas |  |  |  |
| 14 | Individual PIN digit errors | Number of errors within an individual pin attempt. For example, if the correct pin is “1234” and the user puts in “1333” there would be two errors. | Do a whole experiment. Make sure to have incorrect pin entries while you are running through it. In the csv, count the number of incorrect digits in an incorrect attempt. | Compare the correct PIN to the incorrect ones | Done in post-processing |  |  |  |
| 15 | Num of Backspace Errors per PIN attempt | These are errors the user makes and then self corrects by deleting the incorrect digit (or possibly more of the PIN). A backspace error can be counted by the number of non-consecutive times that the backspace key is pressed | Start an experiment. Do a pin entry where you press the del button x amount of times. Count this number of times. Then enter a full pin attempt. Compare the value you counted to the csv | Record the times the backspace is pressed | numbackspace |  |  |  |
| 16 | Number of incorrect PIN attempts | These are errors where the user does not correct the error they made (they might not have noticed, or they might have decided to continue anyway) for instance if the PIN was: 1234 and the user submitted: 1334 instead, this would get rejected by the system and count as an incorrect PIN attempt. This will also be the total number of PIN attempts for a particular PIN – 1, the correct PIN entry. | Start an experiment. Enter in the pin given incorrectly x amount of times. Keep track of this amount of times, then once a correct attempt is made, compare with the csv. | Record number of attempts until a correct one is made | numincorrect |  |  |  |