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Course: **Human-Computer Interaction**

Topic: **Statistical data analysis in HCI research**

Resource: **A mock-up case (student assignment)**

The aim of the experiment was to investigate whether working in the developed web application is faster and more pleasant when it is used in a desktop browser (on a PC) or in a mobile browser (on a smartphone).

40 participants took part in the controlled experiment. During the test, they had to complete a cycle of 10 tasks within the said web application using both a desktop browser and a browser on a smartphone. The mean value of the execution of all 10 tasks in the cycle was used as a quantitative efficiency indicator. At the end of the test, the participants completed a simple questionnaire in which they gave their subjective assessment of the level of satisfaction when working with the web application (1 - lowest level of satisfaction, 11 - highest level of satisfaction). The mean values of the task execution time and the results of the questionnaire are available in an Excel file (below).

Carry out a statistical analysis of the available data and draw appropriate conclusions.

DATA

CASE 05	Desktop	Mobile	Desktop	Mobile
	Task execution time (AVG, seconds)		Level of satisfaction [1 - 11]	
Participant 01	19.02	22.95	9	8
Participant 02	19.72	19.22	9	10
Participant 03	19.69	13.61	10	9
Participant 04	19.40	10.88	9	8
Participant 05	16.95	26.57	10	10
Participant 06	20.18	16.58	9	4
Participant 07	16.33	9.54	9	9

Participant 08	14.07	19.14	9	8
Participant 09	15.04	24.58	8	5
Participant 10	18.93	22.47	8	7
Participant 11	17.75	22.19	6	10
Participant 12	15.58	16.08	10	9
Participant 13	18.84	15.93	8	8
Participant 14	17.88	22.93	7	8
Participant 15	18.61	13.78	9	7
Participant 16	16.48	16.65	7	6
Participant 17	19.69	13.88	8	8
Participant 18	18.52	25.36	9	6
Participant 19	14.82	15.61	7	7
Participant 20	23.93	14.28	10	8
Participant 21	21.35	15.91	6	9
Participant 22	18.06	22.49	6	10
Participant 23	14.67	18.7	11	8
Participant 24	16.39	15.12	9	8
Participant 25	13.02	18.8	10	5
Participant 26	16.99	19.1	9	9
Participant 27	18.4	20.43	9	7
Participant 28	21.47	9.56	10	6
Participant 29	12.3	19.5	10	8
Participant 30	18.5	13.21	9	9
Participant 31	15.68	15.49	9	9
Participant 32	16.84	9.46	7	9
Participant 33	19.87	18.29	9	6
Participant 34	18.36	21.94	10	6
Participant 35	18.61	10.58	9	10
Participant 36	18.21	18.7	10	7
Participant 37	16.1	8.64	8	9
Participant 38	19.26	24.78	8	9
Participant 39	16.36	22.4	9	8
Participant 40	13.17	10.79	10	8