The effect of commen network problems on students academic performance in an elearning-Environment *

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Abstract. In the current light of the pandemic the worldwide use of eLearning-Software experienced an unpresented boom. We state the question how commen network problems influence the academic performance in an eLearning-Environment. To provide answers an online questionnaire with deliberate technical difficulties was constructed. Evaluating the performance of the test and controll group did not show any significant differences.

Keywords: eLearning · Online-Learning · academic performance.

1 Introduction

2 Materials and Methodes

2.1 Preperations

The experiment was conducted by creating a software implementing Fig. 1. This software allowed the tracking of *technical problems* introduced by the software itself as well as the points and answers scored by each participant. Additianaly a room with an adequat number of computers with a fiber-connection to the server are needed, to rule out uncontrolled network problems. Half of the cumputers are manipulated and simulate the network problems with the use of the software.

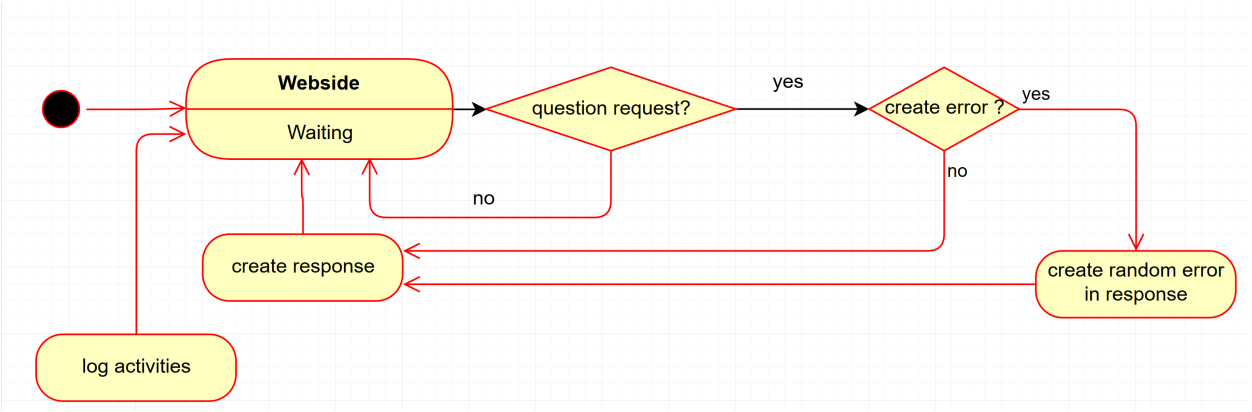

Fig. 1. A logic flow chart , representing how an implementation could operate. The black circle is the user interacting with the software. The webside would consist of two parts. A frontend handling user interaction and the creation of *bugs*. The backend responsible for saving the collected data and ensuring the frontend remains operationale.

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2.2 Participants

The participants are students of the 5 grade and consist of two groups the controll group [CG] and the test group [TG]. Each group is made up by 50 girls and 50 boys for a total of 200 participants. It should be ensured that both groups prior to the experiment perform academicly similar, if not a comparison post experiment will be difficult.

3 Results

4 Discussion

5 Conclusion

6 Refernces