

Experiment Setup

MAXIMILIAN DAVID

s1madavi 1349951

maximilian.david@uni-bayreuth.de

January 18, 2023

The experiments for the LEGO haptics study are planned the following way: The participants will begin by filling out the first set of questions. These aim to gain insight into the participants' levels of experience regarding LEGO and VR. Next, the participants will begin by completing a timed assembly, either in the VR Clone or in real life, followed by the NASA TLX questions for that specific setting. After performing the assembly with the VR Clone, the participants will execute the assembly with the Assisted VR, again followed by the NASA TLX questions.

After completing all timed assemblies, the participants will get 5 minutes for free building in every setting. The settings will have the same order as in the timed assemblies to investigate whether the order of the settings has any effect on the participants' subjective experience. After every 5 minutes of free building, the participants will answer a small set of questions, asking about fun levels as well as naturalness.

With all assemblies - timed and free - completed, the participants will fill out a few final questions that are more open and qualitative than the questions from the sections before. These will mainly focus on what setting the participants favor and why, as well as changes they would wish for, and some general comments on the assemblies.

This summarizes the experiment's procedure. The questionnaire can be found under the following link: [LEGO haptics questionnaire](#)