# Template / <your title goes here>

# Experiment Reproducibility Report - E-2-3-4

Security Experiments and Measurements

Vrije Universiteit 2022

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**Plagiarism statement**

| We hereby confirm that this assignment is our own work, is not copied from any other person's work (published or unpublished) and was not shared with any other person that could copy its contents. |
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Signatures:

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### Experiment Description

#### Intervention

*At the time of the experiment you didn’t know what was the difference between the intervention group and the control group. By the time you write this report you will know. You should describe here briefly what the intervention is and why this is interesting.*

<write your text here>

#### Metric(s) of Success(l)

*Explain how you would measure the success of the intervention using the data that would be given you. This is not the analysis which will happen later. Here you just explain why this is a good choice in your opinion.*

<write your text here>

#### Subjects & Process(l)

*Describe the background of the experiment subjects (who participated in the experiment). Describe the process that was used to perform the experiment in a replicable manner (pay attention to details, e.g. what were the exact steps, is randomization of steps present, etc.).*

***Explicitly mention the data on the past study and how this could impact your results.***

<write your text here>

#### Discussion and Limitations(y)

*Reflect on this experiment and describe what are the key criticalities and limitations of this particular experiment design. The discussed limitations and critical points must be specific to the experiment (e.g. identified co-founding variables), and not general limitations of experimentation.*

***Explicitly mention if the data on the past could impact your results.***

<write your text here>

### Ground Truth Decision

#### Definition(y)

*You have collected from the subjects some experimental artefacts and you should specify what makes the artefact measurable (for example correct or incorrect threats) or not qualified for evaluation of the success metrics (for example missing values or fields). If you have multiple measures of success (for example finding two types of vulnerabilities) the definition should be given for each measure.*

<write your text here>

#### Process and Guidelines(y)

*You might give both an automatic or a manual validation procedure. If you give an automatic procedure you should specify the algorithm and what are the possible errors that this might introduce in the measure of success. For a manual procedure you should start by assigning artefacts to different group members, start a preliminary evaluation, come to common scoring guidelines (reported), and then continue scoring.*

<write your text here>

#### Validation and Error Correction(y)

*If you do an automatic analysis you should select a random subset of artefact which you manually validate to determine the error rate of the automatic process.*

<write your text here>

### Analysis Description

#### Descriptive Statistics(y,l)

*Present key characteristics of the data you are analyzing using some basic descriptive statistics measures (e.g. mean, standard deviation of subjects or other metrics of the intervention). Add graphics is appropriate.* ***Explicitly mention if the data from the past has been merged or is analyzed separately.***

<write your text, figures, tables here>

#### Analysis Procedure and Results(y,l)

*Describe the statistical tests used, including the explanation of which hypothesis the test is addressing. The characteristics of the presented data (in Section 5) must be in line with the assumptions (about the sample) that the test requires. Present your dependent / independent variables, and describe the steps you took to perform the analysis. Add graphics if appropriate. Describe the final statistical results.*

***Explicitly mention how you decided to analyze the data (a replication from past study, a new analysis observing different measures or using different statistical tests).***

<write your text, figures, tables here>

### Summary of Experiments(l)

*End the report with your interpretation of the results and provide your main findings. Make sure that the main findings are in fact supported by the analysis described in Section 6 and explain how you derived those conclusions. Eventually, you will have to exercise your judgement in determining whether the effect is actually practically significant or just statistically significant or insignificant from all perspectives.*

***Compare your findings with the past study (did you find the same supporting evidence or does your analysis support a different explanation?).***

<write your text here>