1. Introduction

• Statement of the problem

• Why it is important to conduct research about the problem, motivation, purpose

*Since its public release in November 2019, GHA has become the most dominant CI/CD service, only 18 months after its introduction [8]. Its Marketplace of reusable actions has been growing exponentially ever since, reaching 12K reusable actions in February 2022. It is therefore fair to say that GHA has become a software ecosystem of its own, comparable to ecosystems of reusable software libraries (such as npm, RubyGems, CRAN, Maven, and PyPI) that have been empirically studied by many researchers in recent years (e.g., [9]–[14]).*

*The emerging GHA ecosystem is worthy of being empirically studied since it is likely to suffer from the same issues related to dependency management, security vulnerabilities, outdated or obsolete components, backward compatibility, and so on.*

• Key existing literature about the problem and why the problem is not solved or more

work is needed.

• For the above three items, a minimum of 4 trustworthy references (in total) must be

used in the introduction when describing the problem, why it is important etc.

• In the introduction, describe briefly what the methodology will be and give a few

details on how the study will be conducted. Are there participants? Who are they

and why are they suitable for the study?

• State the research questions (RQ(s)) and link them to the motivation.

– State clear and concise research questions that will be investigated

– State at least two research questions (main or sub research questions)

2. Related Work

• Describes the results of other studies that are closely related to the study being

proposed

• Include the 4 references from the introduction, but add additional references, a minimum of 4 in addition.

• Describes related literature in enough detail to understand why they are included in

the section, but not in too much detail to distract from the key message.

• Consider the use of sub-sections to organize the literature into topics.

• This section could contain both related work – work closely related to your topic –

and background – work that the reader needs to understand your topic. If both are

present, differentiate between the two.

• It should be clear why this work needs to be done, how does the existing literature,

either individually or in groups, not sufficiently solve your problem of focus.

3. Acknowledgement

• Write who is responsible for what part of the report

4. References

• A list of references