WHO checked WHAT, and HOW?

- Mansi and Pradeep checked whether the output generated by the target group matches with that of the original paper. They knitted the paper.rmd provided in the target group's repository and verified the output produced.
- Anirudh and Pradeep worked on checking whether the data, the Rmarkdown, and the word documents confirm to the open format standards.
- Sreeja and Mayur checked whether the software dependencies and suitable licenses are updated by the target group in the Readme file. They ran the r code and markdown files provided and verified if the session information matches with the content in readme.
- Anirudh and Mansi evaluated whether there is any difference between the original paper and the replicated paper. The result generated by the target group exactly matched the original paper.
- Sreeja and Mayur checked whether the data and software are fair. The readability, code quality and interoperability are verified to be good and meeting general standards.

Do the generated outputs match the ones in the paper in the target group's repo?

- The target group has replicated their research paper using Python. In order to successfully run the target group's paper.rmd, we had to hardcode the directory address in the code so it could locate the data files. We understand that similar functionality is available in R with 'here' package but since the target group's code is in Python, therefore a Python-substitute of 'here' package might not have been available.
- Once we made all the necessary changes, we were able to exactly reproduce the word document from paper.rmd as present in the target group's repo.

Are the differences relevant or not?

- The generated word document contained mainly two figures, a) original paper's figures and b) target group's replication figure. The output generated matched the target output document and also, there was no difference in figures generated by us and the target group's paper.docx.
- O In comparison to the original paper's output, there were few changes that we observed. There were differences in the keywords selected for the 25 topics in the target group's paper and the original paper. Due to this, we found variation in the output of original paper and replicated figure. We understand that this difference might be due to the contrast in the working of R and Python packages used in the original paper and target project respectively.

Are used pieces of software and data properly CITED and with suitable LICENSES?

- The paper they have referenced their study on is properly cited in the reference.bib file and there is also a hyperlink in the main README.md mentioning the website where the complete paper can be found.
- The 'Dependencies' section under the README.md contains details about the OS requirement and the package versions required.
- o The License information has been included in the repository.

Are open formats (text-based) included?

 All the files required to generate the word document: readme.md, paper.rmd and data files are mentioned in the repository. These files are. rmd and .csv files and can be easily accessed.

Is data and software FAIR?

The data and software files are findable through the detailed process layout on GitHub repository. They are accessible via the paper.rmd code and can be downloaded without any issues. Thirdly, they are interoperable as has been depicted by the .rmd code and the clear step-by-step process explained in the documentation paper.docx. Lastly, with the addition of license it is reusable. We believe that inclusion of all three factors: code of conduct, project guidelines and license makes the work completely reusable. We do understand that this was not a mandatory requirement at the time of submission.