

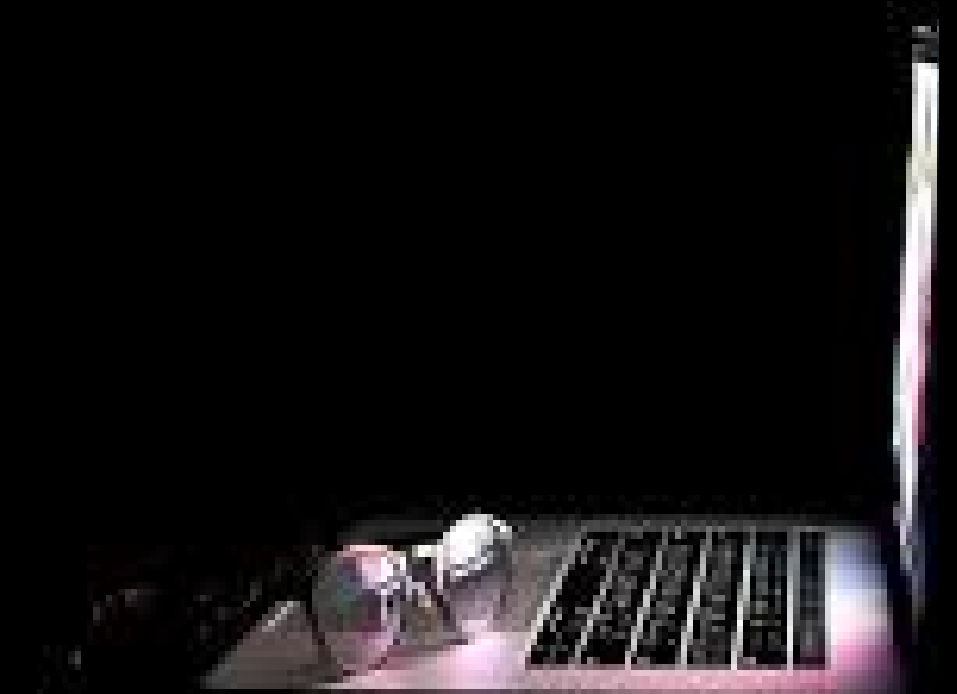
Harmonize

Team 10



Problem Statement

Software developers spend most of their life on the internet. They may face constant harassment or bullying online which may lead to depression, anxiety and even loss of life in extreme cases. This tool attempts to prevent it.



Proposed Solution

- Identifying toxic comments in G-mail and GitHub in real-time and blurring them out.
- Providing better and non-toxic suggestions to users attempting to post toxic replies and encouraging them to replace it.
- Providing a toxicity scale for each comment and labelling them as toxic or non-toxic.

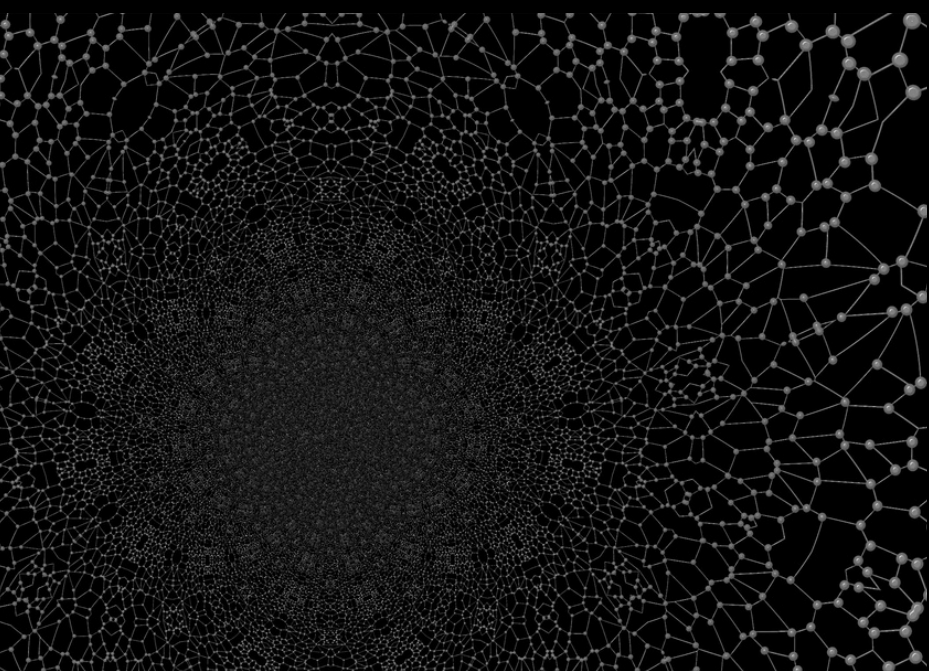
Technical Details

- SE specific dataset–ToxiCR for identifying toxic comments
- BERT model fine-tuned on ToxiCR
- Gemini API for suggestions
- Flask framework
- WSGI server
- Libraries – TensorFlow, Transformers, Keras, PyTorch



Plan for Release II

- Checking the GitHub repository and giving a toxicity score for the repo.
- Improving User-interface.
- Extending it to other applications.



Contributions

CS21B013

Preprocessing the dataset, Fine-tuning the BERT model, Bug fixing.

CS21B043

Dataset exploration, API Integration with the BERT model, Integration with ToxiCheck, Report

CS21B045

Detoxification suggestion using Gemini API and Integration with tool,

CS21B047

Explored about automatic reporting, Readme, Backend

CS21B053

Analyzed the tool ToxiCheck, Backend, Bug-fixing

Thank
you!