

Gurpreet Singh (# 250674134)
The University Of Western Ontario

Abstract

this is an example of an abstract.this is an ex-
ample of an abstract.this is an example of an
abstract.this is an example of an abstract.this
is an example of an abstract.this is an exam-
ple of an abstract.this is an example of an ab-
stract.this is an example of an abstract.this
is an example of an abstract.this is an exam-
ple of an abstract.this is an example of an
abstract.

1.1. Problem

Code quality post processing software is often used in production development environments to ensure good style choices. These checks are much less useful at this senior level than they would be at an educational level. If programming style can be judged on a submission,

This study will focus on proving that code quality can have an influence on code functionality, as well as which kinds of questions influence good or bad code styles.

Not only will this analysis benefit educational institutes but also companies and competitions that judge people on their code submissions.

2.1. CodeChef Dataset

The important features available for each question are:

- title
- link
- difficulty level
- question statement
- time limit

The important features available for each solution are:

- status (correct or wrong)
- time taken
- memory taken
- language written in
- solution url

2.2. Filtering by popular languages

The code submissions are written in many different programming languages and each language has it's own code analysis tool. Therefore, to make the process simpler and come up with higher quality results, the data will need to be filtered by the top languages used. Figure 1 shows that C++, Java, C and Python are the most popular submissions in this dataset. There are 4 versions of C++ but it should be possible to process them with one tool.

[languages.png] [Wang \(2017\)](#)

3. Plan for Analysis and Visualization

3.1. Description

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce porta mauris sit amet finibus lacinia. Nunc id pharetra tortor, quis scelerisque tellus. Nunc at est nec sapien tincidunt ultricies a quis mi. Curabitur sed sem vitae ipsum varius molestie. Integer sed arcu velit. Fusce ornare malesuada dolor, ut finibus arcu ornare ut. Nam tincidunt sem in tempor pellentesque. Integer efficitur, nisl vel euismod ultricies, nisl orci volutpat orci, nec ultrices nisi tortor id eros.

3.2. Technology Breakdown

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce porta mauris sit amet finibus lacinia. Nunc id pharetra tortor, quis scelerisque tellus. Nunc at est nec sapien tincidunt ultricies a quis mi. Curabitur sed sem vitae ipsum varius molestie. Integer sed arcu velit. Fusce ornare malesuada dolor, ut finibus arcu ornare ut. Nam tincidunt sem in tempor pellentesque. Integer efficitur, nisl vel euismod ultricies, nisl orci volutpat orci, nec ultrices nisi tortor id eros.

References

Justin Wang. Nlp and ml experiments, 2017.
URL <https://www.kaggle.com/justwjrlp-and-ml-experiments/notebook>.