Requirements:
#944 A Generative and Mutational Approach for Synthesizing Bug-exposing Test Cases to Guide Compiler Fuzzing

This document outlines the software artifact's requirements, including hardware and software environment specifications. It also includes version information for specific components if applicable. Any deviations from standard environments must be adequately justified.

1 Hardware Environment Requirements

The software artifact has the following hardware environment requirements:

Storage: Adequate storage space should be available to accommodate the software and its associated data. 200GB of space is recommended.

GPU: One or more GPUs are required for generating JS functions or Java methods using our fine-tuned model. Notably, our system can still run without a GPU, but the execution time will significantly increase.

2 Software Environment Requirements

The software artifact has the following software environment requirements:

Operating System: The minimum supported operating system version is Ubuntu 18.04 or above.

Docker: The software must be compatible with Docker containerization technology. Make sure you have installed Nvidia-Docker2.0.

CUDA: The minimum required version of CUDA is 1.16 or above.

docker-compose: The minimum required version of docker-compose is 1.29.2 or above.

Please ensure that all the mentioned requirements are met for the successful deployment and functioning of the software artifact.