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# XGrammar: Efficient, Flexible and Portable Structured Generation

[ GitHub ](https://github.com/mlc-ai/xgrammar) [ Documentation ](https://xgrammar.mlc.ai/docs/)

## Overview

XGrammar is open-source solution for flexible, portable, and fast structured generations, aiming at bring flexible zero-overhead structure generation everywhere. It supports general context-free grammar to enable a broad range of structures while bringing careful system optimizations to enable fast executions. XGrammar features a minimal and portable C++ backend that can be easily integrated into multiple environments and frameworks, and is codesigned with the LLM inference engine and enables zero-overhead structured generation in LLM inference.

## Get Started

Please visit our [documentation](https://xgrammar.mlc.ai/docs/) to get started with XGrammar.

- \* [Installation](https://xgrammar.mlc.ai/docs/start/install)
- \* [Quick start](https://xgrammar.mlc.ai/docs/start/quick\_start)

## Links

\* [XGrammar Github](https://github.com/mlc-ai/xgrammar)