Module Interaction Diagram

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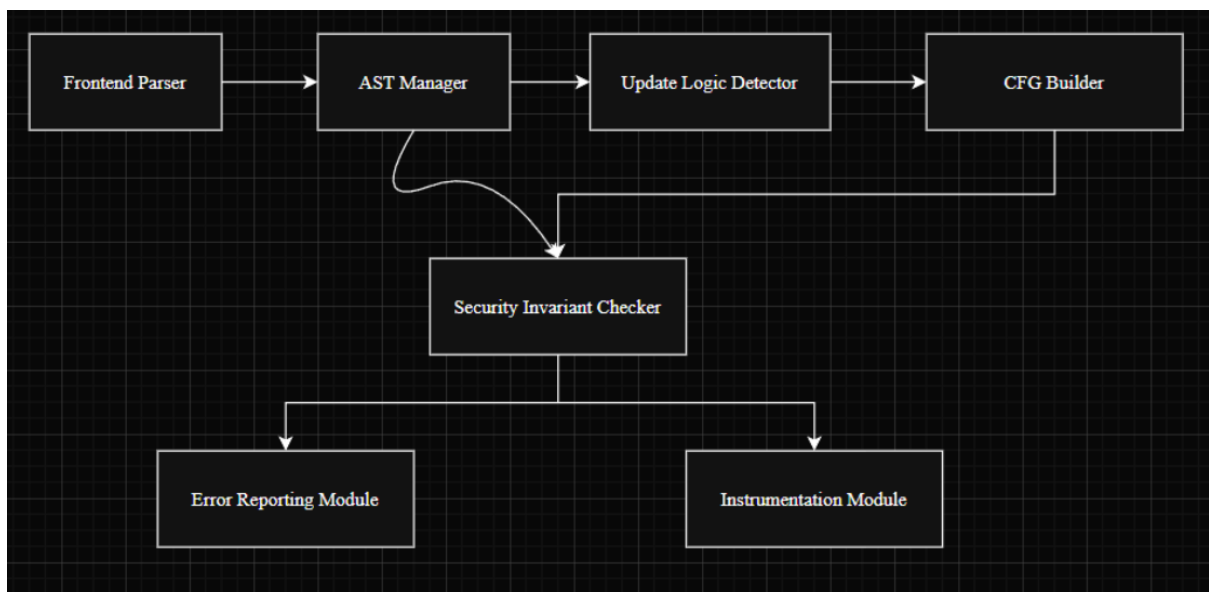
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CSE - A

Q119 - Secure OTA Update Compiler

Overview

The module interaction diagram illustrates how major compiler components communicate while analyzing and enforcing firmware update security invariants.

Description

The frontend parser generates the AST, which is analyzed by the update logic detector and CFG builder. The security invariant checker evaluates all execution paths and communicates violations to the error reporting module or forwards validated logic to the instrumentation module.