Program Listing for File executor.hpp

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/* * SPDX-FileCopyrightText: Copyright (c) 2022-2024 NVIDIA CORPORATION & AFFILIATES. All rights reserved. * SPDX-License-Identifier: Apache-2.0 * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ #ifndef HOLOSCAN_CORE_EXECUTORS_EXECUTOR_HPP #define HOLOSCAN_CORE_EXECUTORS_EXECUTOR_HPP #include <cstdint> #include <functional> #include <future> #include <memory> #include <set> #include <string> #include <unordered_map> #include <vector> #include "./common.hpp" #include "./extension_manager.hpp" #include "./graph.hpp" #include "./operator.hpp" namespace holoscan { class Executor { public: Executor() = delete; explicit Executor(Fragment* fragment) : fragment_(fragment) {} virtual ~Executor() = default; virtual void run(OperatorGraph& graph) { (void)graph; } virtual std::future<void> run_async(OperatorGraph& graph) { (void)graph; return {}; } virtual void interrupt() {} void fragment(Fragment* fragment) { fragment_ = fragment; } Fragment* fragment() { return fragment_; } virtual void context(void* context) { context_ = context; } void* context() { return context_; } *// add uint64_t context getters/setters for Python API* void context_uint64(uint64_t context) { context_ = reinterpret_cast<void*>(context); } uint64_t context_uint64() { return reinterpret_cast<uint64_t>(context_); } virtual std::shared_ptr<ExtensionManager> extension_manager() { return extension_manager_; } void exception(const std::exception_ptr& e) { exception_ = e; } const std::exception_ptr& exception() { return exception_; } protected: friend class Fragment; *// make Fragment a friend class to access protected members of // Executor (add_receivers()).* friend class Operator; *// make Operator a friend class to access protected members of // Executor (initialize_operator()).* friend class Scheduler; *// make Scheduler a friend class to access protected members of // Executor (initialize_scheduler()).* friend class NetworkContext; *// make NetworkContext a friend class to access protected members // of Executor (initialize_network_context()).* virtual bool initialize_fragment() { return false; } virtual

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bool initialize_operator(Operator* op) { (void)op; return false; } virtual bool
initialize_scheduler(Scheduler* sch) { (void)sch; return false; } virtual bool
initialize_network_context(NetworkContext* network_context) {
(void)network_context; return false; } virtual bool add_receivers(const
std::shared_ptr<Operator>& op, const std::string& receivers_name,
std::vector<std::string>& new_input_labels, std::vector<holoscan::IOSpec*>&
iospec_vector) { (void)op; (void)receivers_name; (void)new_input_labels;
(void)iospec_vector; return false; } Fragment* fragment_ = nullptr; void* context_ =
nullptr; std::shared_ptr<ExtensionManager> extension_manager_;
std::exception_ptr exception_; }; } // namespace holoscan #endif/*
HOLOSCAN_CORE_EXECUTORS_EXECUTOR_HPP */
```