AutoBench API

API Guide

APIs for Initialization

ADBInterface.init

init(folder_path: str): int

Initialize the testing platform, set the storage path for result files, and check the ADB environment

Parameters：

parameter_name	Type	Required	Description
folder_path	str	Y	Test result file storage path, such as the execution paths for successful and failed test cases

Return：

Type	Description
int	0: Initialization successful –1: ADB environment initialization failed –2: No permission for result file storage path –3: Failure due to other reasons

APIs for obtaining task information

ADBInterface.get_support_test_task

get_support_test_task(): Dict[str, List[str]]

obtain the supported test content of the platform, including app types and their associated business scenarios

Return：

Type	Description
Dict[str, List[str]]	Returns a dictionary where each key is the name of an app, and the corresponding value is a list of strings containing all test scenarios for that app

ADBInterface.set_test_task

set_test_task(test_content: Dict[str, List[str]]): void

Allow users to independently set the scope of testing, including app types and the business logic within each app

Parameters：

parameter_name	Type	Required	Description
test_content	Dict[str, List[str]]	Y	A dictionary where each key is the name of an app, and the corresponding value is a list of all user–planned test scenarios within that app

ADBInterface.get_curr_test_task

get_curr_test_task(): Dict[str, str]

Obtain information about the currently ongoing test tasks

Return：

Type	Description
Dict[str, str]	Returns the content currently being tested, containing two keys: • `"app_type"`： Represents the app type or name (e.g., 'AppName') • `"scenario"`： Represents the current test scenario (e.g., 'TestScenario')

APIs for obtaining the current app status

ADBInterface.get_device_layout

get_device_layout(): str

obtain the layout file of the currently displayed app page

Return：

Type	Description
str	Returns the layout of the current app page, with the content being the XML structure file of the page converted to a string

ADBInterface.get_device_screenshot

get_device_screenshot(): bytes

obtain the screenshot information of the currently displayed app page

Return：

Type	Description
bytes	Returns the screenshot information of the current app page, provided as a binary data stream in `bytes` format

APIs for performing operations

ADBInterface.execute_by_coordinates

execute_by_coordinates(x: int, y: int, operation_type: str, input_content(Optional): str): void

Manipulate the current app page based on the horizontal and vertical coordinates

Parameters：

parameter_name	Type	Required	Description
x	int	Y	Widget X-coordinate
y	int	Y	Widget Y-coordinate
operation_type	str	Y	Manipulation type, currently supported： "click", "input"

input_content	str	N	When the operation type is 'input', specify the content to be entered in this parameter

ADBInterface.execute_by_resource_id

execute_by_resource_id(resource_id: int, operation_type: str, input_content(Optional): str): void

Parameters：

parameter_name	Type	Required	Description
resource_id	int	Y	Widget resource ID
operation_type	str	Y	Manipulation type, currently supported： "click", "input"
input_content	str	N	When the operation type is 'input', specify the content to be entered in this parameter

ADBInterface.curr_scenario_finish

curr_scenario_finish(): void

Called when the large model determines that the current test scenario has ended and no further action is needed

APIs for obtaining execution results

ADBInterface.get_execute_result

get_execute_result(): Dict[str, str]

Obtain the execution result of the current step

Return：

Type	Description
Dict[str, str]	Returns a JSON-formatted string with the following elements： {"curr_task_finished": "True" or "False", "total_task_finished": "True" or "False", "curr_execution_result": "True" or "False", "fail_reason": "True" or "False"} • curr_task_finished： Whether the current test scenario end • total_task_finished： Whether all test scenarios have ended, i.e., all tasks mentioned in the nested_list above • curr_execution_result： The result of the current step execution • fail_reason： The failure reason if the current step execution fails

APIs for obtaining the total score

ADBInterface.get_final_score

get_final_score(): int

obtain the total score after completing all test tasks

Type	Description
int	Total test score