Solver Documentation

Attributes

- riddle_solvers: a dictionary contains four keys, each representing a type of riddle: cipher, captcha, pcap, and server. The corresponding values are the solver functions for each riddle type: cipher_solver, captcha_solver, pcap_solver, and server_solver. For example, *`riddle_solvers['cipher'](question)`* will call the cipher solver function.
- agent_id: the id provided to you via email.
- manager: initializes a MazeManger class.
- env: returns the maze environment corresponding to your agent ID.

General Methods

These are used for both testing locally and submitting to the Hacktrick server.

- select_action(state): receives the state and selects an action based on your solution.

The following functions can be found in the riddle_solvers.py file, imported by the solver file(s):

- cipher_solver(question): receives the **cipher** riddle question, implements the solver and returns the solution.
- captcha_solver(question): receives the **captcha** riddle question, implements the solver and returns the solution.
- pcap_solver(question): receives the **pcap** riddle question, implements the solver and returns the solution.
- server_solver(question): receives the **server** riddle question, implements the solver and returns the solution.

These functions are place holders and you will need to implement your solution

Local testing methods

These are the methods used only when testing locally.

- local_inference(): tries to solve the maze and riddles **locally** for testing purposes.

Server submission methods

These are the methods used only when submitting to the Hacktrick server.

- move(agent_id, action): takes an agent ID and a selected action as inputs, and sends them to the server to move the agent.
- solve(agent_id, riddle_type, solution): takes an agent ID, a riddle type, and a riddle solution as inputs, and sends them to the server to solve the riddle.
- get_obv_from_response(response): receives the server response and parses it for an observation “obv” that includes directions, distances and position.

- submission_inference(): tries to solve the maze and riddles on the **Hacktrick server**, which will be counted as an attempt.