ETH-Gathering Reverse Bug Bounty

Aleksander Kryukov, Uri Kirstein, Nurit Dor

Agenda

- Instructions
- Go over contact to verify
- Think about properties
  - Write a few rules together
  - Understand counter example
- How to check the spec

- Get help
  - Docs

    docs.certora.com
  - Tutorials

    https://github.com/Certora/Tutorials
  - Discord

    https://discord.gg/3tyNA6Bh
  - Booth

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Properties

Conditions that must hold on a given system

Six main types of properties:

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Properties

Conditions that must hold on a given system

Six main types of properties:

- Unit-test

The door can close

Auction ends only when time reached

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Properties

Conditions that must hold on a given system

Six main types of properties:

- Unit-test
- Variable Transitions

Floor number changes when a floor is reached

Highest bid only goes up

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Properties

Conditions that must hold on a given system

Six main types of properties:

- Unit-test
- Variable Transitions
- State Transitions

Not busy when stopped and no further calls

Once auction ended it is always ended

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Properties

Conditions that must hold on a given system

Six main types of properties:

- Unit-test
- Variable Transitions
- State Transitions
- Valid State

The door is close while in motion

Others' bids are less than the highest

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Properties

Conditions that must hold on a given system

Six main types of properties:

- Unit-test
- Variable Transitions
- State Transitions
- Valid State
- High-Level Properties

Every call is eventually attended

Something about the assets...

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Properties

Conditions that must hold on a given system

Six main types of properties:

- Unit-test
- Variable Transitions
- State Transitions
- Valid State
- High-Level Properties
- Risk Assessment

Every call is eventually attended

What would be devastating...

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YOUR GOAL: COVERAGE

More than one category per property

Same bug can be uncovered by different properties

Valid state, high level properties gives better coverage than unit test properties

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HOW TO TEST YOUR SPEC

--rule-sanity flag

Run on buggy version

Change the assert and look at “good” executions

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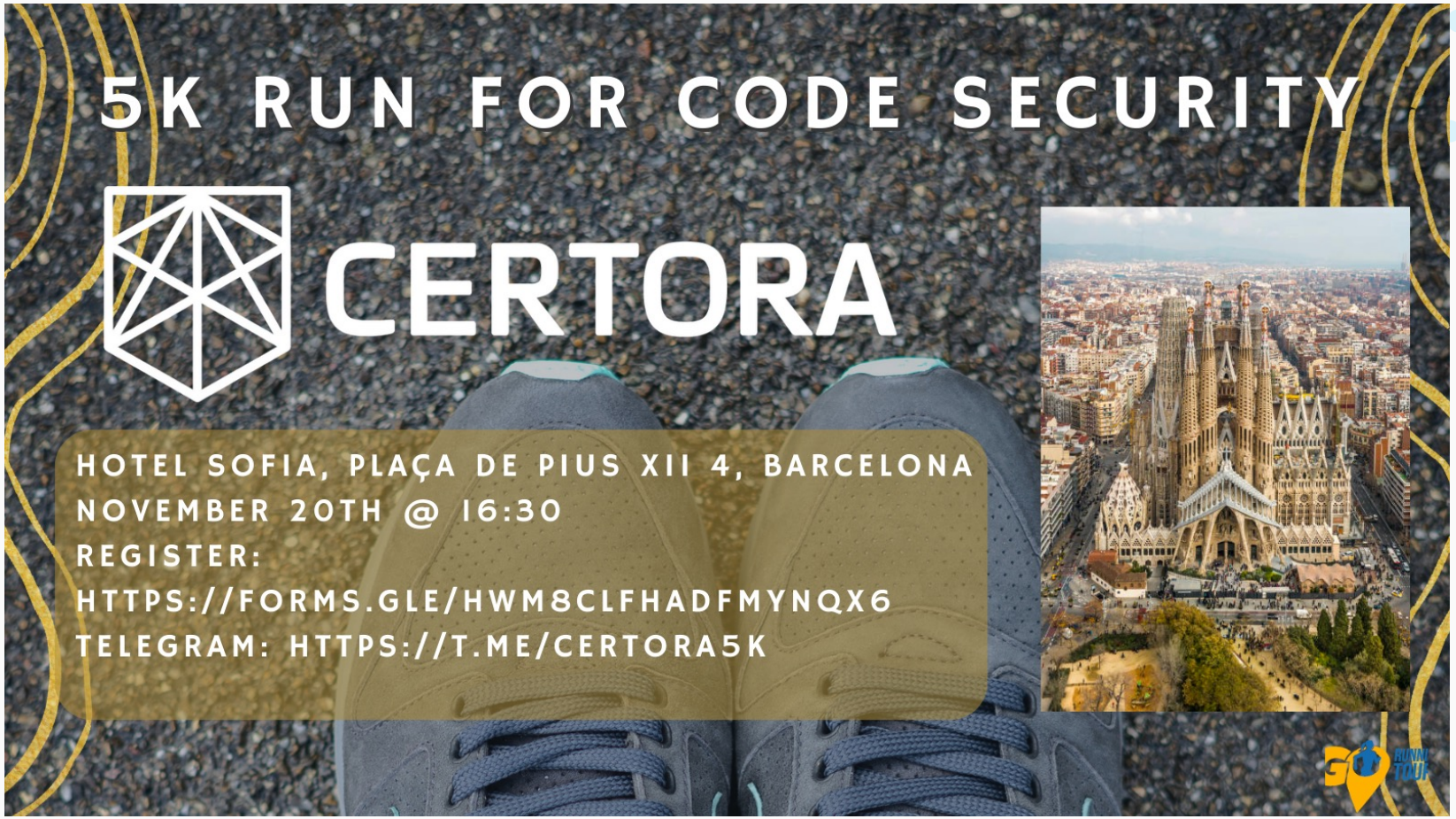
5K RUN FOR CODE SECURITY
CERTORA
HOTEL SOFIA, PLAÇA DE PIUS XII 4, BARCELONA
NOVEMBER 20TH @ 16:30
REGISTER:
HTTPS://FORMS.GLE/HWM8CLFHADFMYNQX6
TELEGRAM: HTTPS://T.ME/CERTORA5K

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