Forta Knight

Making the Blockchain a Safer Place

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What is The Blockchain?

Decentralized

Funds and protocols are not controlled by a centralized entity

Powerful

Anyone can design blockchain protocols and even create new tokens

High Risk for Abuse

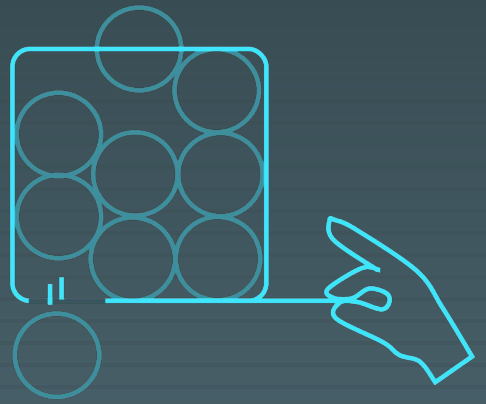
Limited regulations and safety practices to ensure the safety of users

Rug Pulls

Scammers create seemingly lucrative tokens to get users to invest

These tokens contain malicious functions to steal tokens from users or manipulate the token's price

This allows them to make money at the expense of other users



Why Should We Care?

From Sept-Dec 2022:

$11 Billion

Value of ETH withdrawn and deposited by scammers from centralized exchanges

> 200,000

Number of scam tokens deployed

99%

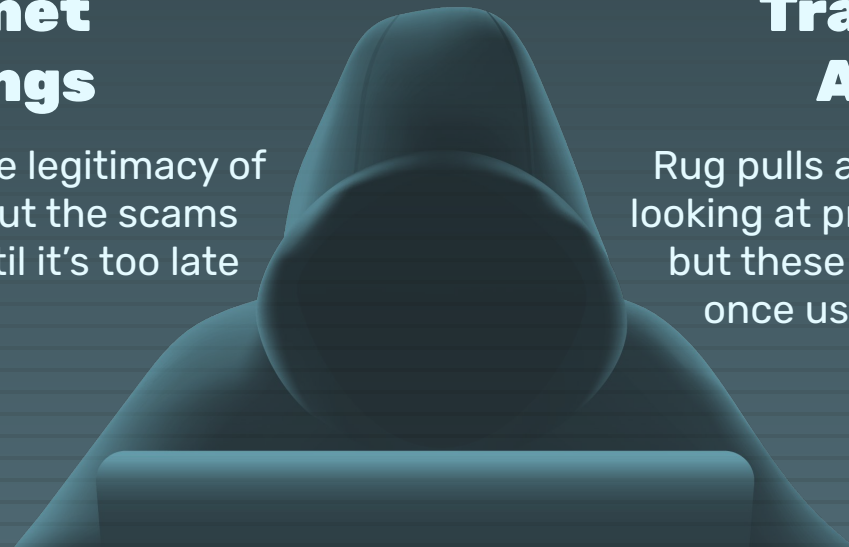
Scam tokens that are not detected using traditional approaches

Solidus Labs. “The 2022 Rug Pull Report.” *The Rug Pull Report*, Dec. 2022, p. 4.

Current Approaches

Internet Postings

Users research the legitimacy of a token online, but the scams aren't known until it's too late



Transaction Analysis

Rug pulls are usually identified by looking at price/transaction history, but these only reveal the scams once users have lost money

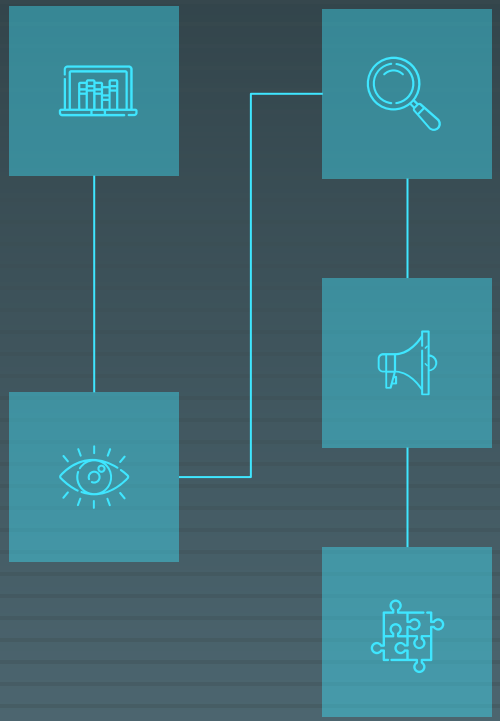
How We Can Help

Forta

Allows us to write a bot that monitors Blockchain transactions and alerts on suspicious activity

Forta Knight

Our bot looks for token deployments on the Ethereum and Polygon networks



Static Analysis

We analyze the source code of new tokens to look for malicious code

Alerts

We send out alerts to inform users about potentially malicious tokens

ZenGo Wallet Integration

Forta's integration with ZenGo wallet allows users to get warnings when interacting with suspicious contracts

Why Are We Better?

Speed

Static Analysis allows us to detect potential scams before they actually happen

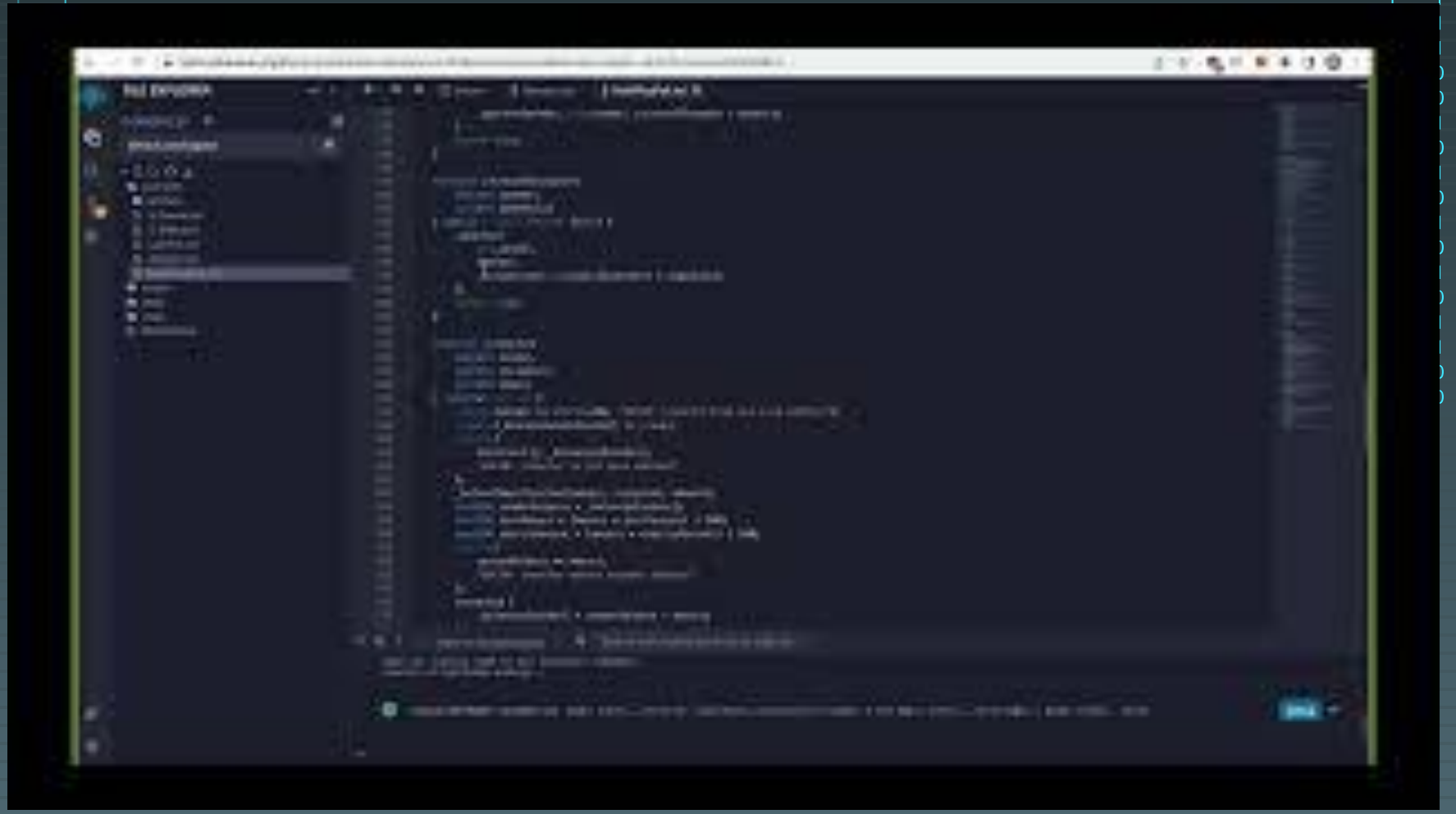
Ease of Use

Forta has integrations with the ZenGo wallet which can inform users about alerts when they interact with a scam contract

Our Detection Strategies

	Strategy	DESCRIPTION
01	Hidden Mint Detection	Hidden mints can be used to create additional tokens for the scammer.
02	Burn Function Detection	Hidden burn functions can be used to remove tokens from the circulation.
03	Self Destruct Detection	Self destruct functions can be used to steal all the money in a contract.

Demo Time!



Ideas For Further Development

- Improve static analysis detectors to include control flow and value flow analysis
- Use detector results as input to a machine learning model to improve precision of alerts
- Create more detectors to detect other rug pull strategies

Accomplishments

1.45s

Average time to run analysis on a token after its source code has been downloaded

Detector	Recall	False Positive Rate
Mint Function Detector	35/38	3/21
Burn Function Detector	29/32	0/12
Self Destruct Detector	3/3	0/46

Don't Get Scammed, use Forta Knight!

THANKS!

Any questions?

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