**Zksync Local Deploy**

In this lesson, we are going to deploy the contract SimpleStorage.sol on a **ZKsync local chain**.

We start by verifying that the Forge version we are using is correct. By running the forge --version command it confirms that we are on version 0.2: this indicates we are using the right Foundry ZKsync edition.

Next, we proceed with creating a SimpleStorage contract using the command:

forge create src/SimpleStorage.sol:SimpleStorage --rpc\_url <RPC\_URL> --private\_key <PRIVATE\_KEY> --legacy --zksync

Here, <RPC\_URL> represents ZKsync node address, such as http://127.0.0.1:8011.

👀❗**IMPORTANT**  
Including private keys directly in commands is not a safe practice.

This command instructs Foundry to locate the SimpleStorage contract in the src/SimpleStorage.sol file and deploy it. Upon execution, the contract compiles and deploys successfully. The output will display details such as the deployer, the deployed contract address, and the transaction hash.

Using the --legacy flag is recommended for deploying simple contracts, while more complex codebases may require different approaches. Attempting to deploy without the --legacy flag might result in errors like failed to serialize transaction, address to address is null, which will be covered in future lessons.

Once you are finished, you can close Docker Desktop and revert to the Vanilla Foundry environment using the foundryup command.