

# Smart Contracts Exercise 09: Vulnerabilities Detection

## 1 Introduction

This exercise focuses on general vulnerability detection in smart contracts. We will explore static code analysis tools such as Mythril and Slither to identify vulnerabilities in contracts from previous exercises. The exercise will also cover the implementation of unit tests, stateless fuzzing tests, and stateful fuzzing tests with invariants. We will introduce the Foundry development environment (new only for students who previously used Hardhat). The primary task involves writing tests for a simple PiggyBank contract and then applying this knowledge to develop more tests for the SimpleDEX contract from earlier exercises.