

# Software Testing

(Continuation)

# Testing vs Testability

Testable means it can be tested in a automated fashion.

Pure functions - result depends only on args and has not side effects

Examples of successful systems that have no automated tests

# Testing in different Programming Languages

- C/C++ (gtest, doctest)
- Java (JUnit, TestNG)
- Python (pytest)

# Testing coverage

```
$ pip install pytest-cov
```

```
$ pytest --cov . test_something.py
```

# Where does TDD fall apart

- Scripts
- At the beginning of a software project (prototyping stage)
- When it is unclear what exactly is to be implemented (exploration, brainstorming, proof of concept)
- Microservices
- Coverage driven development
- UI
- Video Games