#### Current Topics in Software Engineering

Software Evolution/Reengineering - Project 2019

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November 26, 2019



Abstract

The aim of this project is the analysis, reverse engineering and refactoring of an existing application.

The C# solution under consideration fits the basic project requirements:

- 19K lines of code (LOC)
- open source, hosted on github with MIT License
- not extremely complex (but further from trivial)
- builds and runs without troubles
- $\bullet$  test cases and working examples

The application is called **bc-xml-security** [1] and is an implementation of some XML Security Standards using **Bouncy Castle** [3].

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## Introduction

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# Reverse Engineering

Reverse Engineering

## Code Smells

Code Smells

## OO Violations

OO Violations

## Conclusions

Conclusions

# Bibliography

- $[1] \ \ \mathbf{bc\text{-}xml\text{-}security}. \ \ \mathrm{https://github.com/kmvi/bc\text{-}xml\text{-}security}.$
- [3] Bouncy Castle. http://www.bouncycastle.org/csharp/.

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