
Lesson Plan

Cryptography

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In this module we will learn about the basics of cryptography. Our goal is not to teach the students about how it works and the mathematics behind it, but to teach them how it is used at a conceptual level.

Learning Objectives:

What is cryptography? What are the three principles of information security? How can asymmetric key cryptography be used to ensure Confidentiality, Integrity, and Authentication?

The recommended teaching format for this module is as follows:

1. Students watch the video lesson either in class or before class.
2. Lecturer guides the students through the Cryptography Game.

Included in this module are:

- Cryptography Basics: Video and lecture slides.
- Asymmetric Key Cryptography: Video and lecture slides.
- Cryptography Game: Instruction manual for the teacher.
- John The Ripper: Tutorial for brute forcing activity.

If the students are not technically inclined, we recommend you skip the brute force activity.



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