Implementation of an ECC with M-511 CS448 - Introduction to IT Security

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Outline

- What goals have we had?
- What have we done?
- What have we learned?

understand the maths behind ECC

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- implement a library with M-511 with:
 - key generation
 - encryption and decryption
- signature and verification

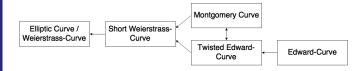
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Put it into practice!



How to generate a curve?

variety of elliptic curves



Architecture of our Implementation

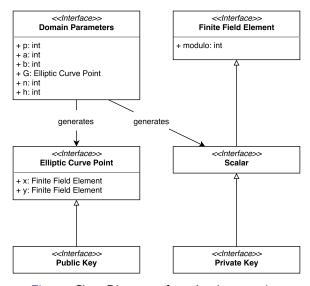


Figure: Class Diagram of our Implementation

Lessons Learned

