



MASTER OF SCIENCE
IN ENGINEERING

Master of Science HES-SO in Engineering
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CH-1007 Lausanne

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Haute Ecole Spécialisée
de Suisse occidentale

Fachhochschule Westschweiz

University of Applied Sciences and Arts
Western Switzerland

Master of Science HES-SO in Engineering

Orientation: Computer Science (CS)

CRYPTOCURRENCY TOKEN FOR INTERNATIONAL SETTLEMENTS

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Declaration of honor

I, undersigned, Luca Srdjenovic, hereby declare that the work submitted is the result of a personal work. I certify that I have not resorted to plagiarism or other forms of fraud. All sources of information used and the author quotes were clearly mentioned.

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Signature: _____

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, , Main expert

Place, date: _____

Prof. Ninoslav Marina

Advisor

Dean, HES-SO//Master

Acknowledgments

Preface

A preface is not mandatory. It would typically be written by some other person (eg your thesis director).

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Lausanne, 12 Mars 2011

T. D.

Abstract

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Key words: Crypto-currencies, ETHEREUM, Cryptography, ERC20

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1 | Introduction

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This chapter shows example of picture and also serves to populate the different lists: list of figures, list of tables, bibliography, and glossary.

1.1 Tables

This section contains an examples of table: Table 2.1

Bitcoin is a decentralized peer-to-peer currency that allows users to pay for things electronically. Thousands of other cryptocurrencies exist, but only some of them are really interesting from a political, economical or technical point of view. Bitcoin was created by a pseudonymous software developer going by the name of Satoshi Nakamoto in 2008, as an electronic payment system based on mathematical proof. The idea was to produce a means of exchange, independent of any central authority and censorship-resistant, which could be transferred electronically in a secure, verifiable and immutable way. The blockchain is the output of this secure, verifiable and immutable mathematical proof.

2 | Analysis

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This chapter shows example of picture and also serves to populate the different lists: list of figures, list of tables, bibliography, and glossary.

2.1 Tables

This section contains an examples of table: Table 2.1

name	weight	food
mouse	10 g	cheese
cat	1 kg	mice
dog	10 kg	cats
t-rex	10 Mg	dogs

Table 2.1 A floating table.

2.2 Figures

This section contains examples of figures: Figure 2.1, Figure 2.2a, Figure 2.2b, Figure 2.2c, Figure 2.2d

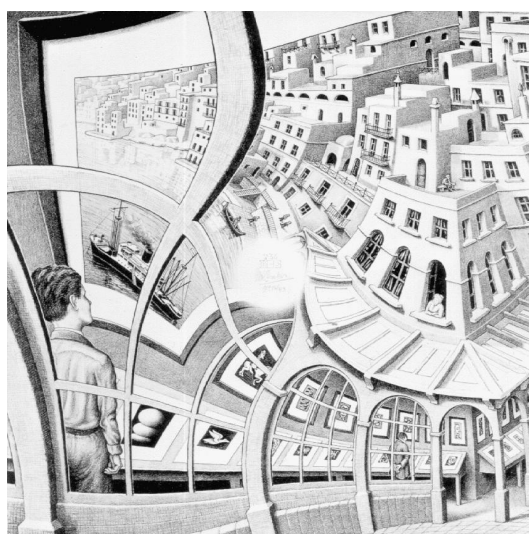


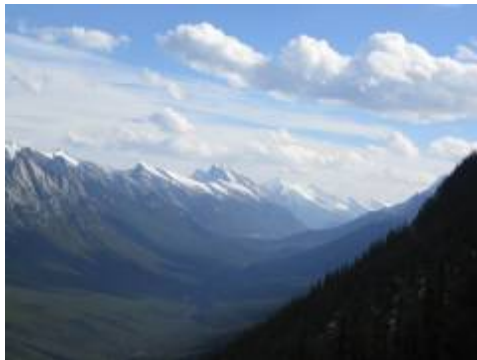
Figure 2.1 A floating figure: the lithograph Galleria di stampe, of M. Escher
Source: <http://www.mcescher.com/>



(a) *A gull*



(b) *A tiger*



(c) *A mouse*



(d) *A mouse*

Figure 2.2 *Example subcaption*

2.3 Code

Listing 2.1 shows an example of Java code rendered with minted.

```
/**
 * The HelloWorldApp class implements an application that
 * simply prints "Hello World!" to standard output.
 */
class HelloWorldApp {
    public static void main(String[] args) {
        System.out.println("Hello World!"); // Display the string.
    }
}
```

Listing 2.1 *Example of listing using the minted package*

2.4 Other features

Term (glossaries): NoSQL

Acronym (glossaries): Structured Query Language (SQL)

Citation (biblatex): [1]

2.5 Conclusion

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

3 | Design

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3.1 Short lists

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

1. First item in a list
2. Second item in a list
3. Third item in a list
4. Fourth item in a list
5. Fifth item in a list

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

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First item in a list

Second item in a list

Third item in a list

Fourth item in a list

Fifth item in a list

3.2 Long lists

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Third item in a list Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Fourth item in a list Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Fifth item in a list Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

3.3 Multi-level lists

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some

nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

- First item in a list
 - First item in a list
 - * First item in a list
 - * Second item in a list
 - * Third item in a list
 - * Fourth item in a list
 - * Fifth item in a list
 - Second item in a list
 - Third item in a list
 - Fourth item in a list
 - Fifth item in a list

- Second item in a list
- Third item in a list
- Fourth item in a list
- Fifth item in a list

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

1. First item in a list
 - (a) First item in a list

- i. First item in a list
- ii. Second item in a list
- iii. Third item in a list
- iv. Fourth item in a list
- v. Fifth item in a list

- (b) Second item in a list
- (c) Third item in a list
- (d) Fourth item in a list
- (e) Fifth item in a list

- 2. Second item in a list
- 3. Third item in a list
- 4. Fourth item in a list
- 5. Fifth item in a list

3.4 Conclusion

Suspendisse vel felis. Ut lorem lorem, interdum eu, tincidunt sit amet, laoreet vitae, arcu. Aenean faucibus pede eu ante. Praesent enim elit, rutrum at, molestie non, nonummy vel, nisl. Ut lectus eros, malesuada sit amet, fermentum eu, sodales cursus, magna. Donec eu purus. Quisque vehicula, urna sed ultricies auctor, pede lorem egestas dui, et convallis elit erat sed nulla. Donec luctus. Curabitur et nunc. Aliquam dolor odio, commodo pretium, ultricies non, pharetra in, velit. Integer arcu est, nonummy in, fermentum faucibus, egestas vel, odio.

Sed commodo posuere pede. Mauris ut est. Ut quis purus. Sed ac odio. Sed vehicula hendrerit sem. Duis non odio. Morbi ut dui. Sed accumsan risus eget odio. In hac habitasse platea dictumst. Pellentesque non elit. Fusce sed justo eu urna porta tincidunt. Mauris felis odio, sollicitudin sed, volutpat a, ornare ac, erat. Morbi quis dolor. Donec pellentesque, erat ac sagittis semper, nunc dui lobortis purus, quis congue purus metus ultricies tellus. Proin et quam. Class aptent taciti sociosqu ad litora torquent per conubia nostra, per inceptos hymenaeos. Praesent sapien turpis, fermentum vel, eleifend faucibus, vehicula eu, lacus.

4 | Implementation

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4.1 Section 1

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4.2 Section 2

4.3 Conclusion

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5.1 Section 1

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5.3 Conclusion

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6 | Conclusions

- 6.1 Project summary
- 6.2 Comparison with the initial objectives
- 6.3 Encountered difficulties
- 6.4 Future perspectives

A | An appendix

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Glossary

NoSQL Database not using the relational model and the SQL language. 6

SQL Structured Query Language. 6