Use Cases and Design of Decentralized Financial Web Applications

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Advisor:

DI Martin Harrer

Declaration

I hereby declare and confirm that this thesis is entirely the result of my own original work. Where other sources of information have been used, they have been indicated as such and properly acknowledged. I further declare that this or similar work has not been submitted for credit elsewhere. This printed copy is identical to the submitted electronic version.

Hagenberg, February 1, 2021

Johannes Hüsers

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Abstract

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Kurzfassung

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Chapter 1

Introduction

1.1 Motivation

1.2 Goals

1.3 Structure of the Thesis

Chapter 2

Introduction to Decentralized Finance

* definition of technical terms (e.g. DeFi, Blockchain, Smart Contracts, Security Tokens, ...) * explanation of fundamental concepts (e.g. Decentralization, Ethereum Network, Gas Price, Proof of Stake, Proof of Work...) * State of the Art (current applications, relevance on the market, technologies, ...)

Chapter 3

Use Cases of Decentralized Finance

3.1 Store of Value

3.2 Payments

3.3 Lending

3.4 Exchanging

3.5 Investing

Chapter 4

Design of Decentralized Financial Web Applications

4.1 Store of Value

Bitcoin + other possibilities

4.2 Payments

Stablecoins

4.3 Lending

4.4 Exchanging

4.5 Investing

Chapter 5

Closing Remarks

critics

Appendix A

Technical Details

Appendix B

Supplementary Materials

List of supplementary data submitted to the degree-granting institution for archival storage (in ZIP format).

B.1 PDF Files

Path: /

thesis.pdf . . . . . Master/Bachelor thesis (complete document)

B.2 Media Files

Path: /media

*.ai, *.pdf . . . . . Adobe Illustrator files
*.jpg, *.png . . . . . raster images
*.mp3 . . . . . audio files
*.mp4 . . . . . video files

B.3 Online Sources (PDF Captures)

Path: /online-sources

Reliquienschrein-Wikipedia.pdf [1]

References

Online sources

[1] *Reliquienschrein*. Sept. 2018. URL: https://de.wikipedia.org/wiki/Reliquienschrein (visited on 02/28/2019).

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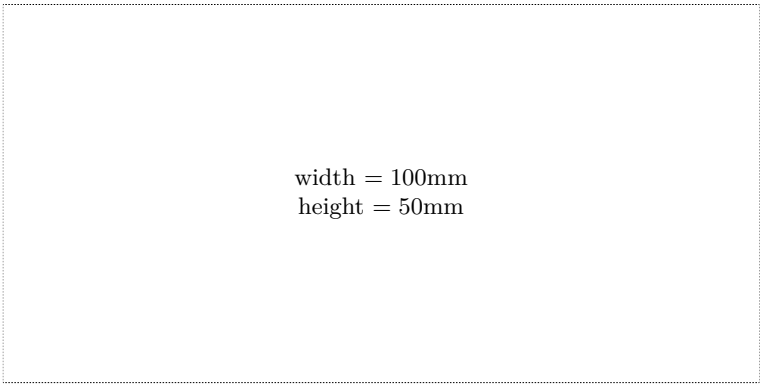

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