

UNIVERSITY OF MUNICH
Department "Institute for Informatics"
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Master Thesis

Web-Based Creator for Activity Sculptures

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Acknowledgements

Zusammenfassung

Kurzzusammenfassung der Arbeit, maximal 250 Wörter.

Abstract

Short abstract of the work, maximum of 250 words.

Task Definition

Kopie der Original-Aufgabenstellung

I confirm that I indepently prepared the thesis and that I used only the references and auxiliary means indicated in the thesis.

Munich, May 8, 2015

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Contents

1	Introduction	1
1.1	Motivation	1
1.2	Problem definition	1
1.3	Goals	1
1.4	Content overview	1
2	Related Work	3
2.1	Product Customization Software	3
2.1.1	Commercial Applications	3
2.1.2	Usability Aspects	3
2.1.3	Technological Limitations	3
2.2	Activity Sculptures	3
2.2.1	Quantified Self	3
2.2.2	Personal Data Visualization	3
2.3	Digital Visualization and Fabrication Workflow	3
3	Prototype Design	5
3.1	Data Sources	5
3.1.1	Fitness Trackers	5
3.1.2	Mobile Applications	5
4	Implementation	7
5	User Study	9
5.1	Study Design	9
5.2	Questionnaire	9
5.3	Participants	9
5.4	Procedure	9
5.5	Limitations	9
5.6	Results	9
6	Conclusion	11
7	Future Work	13

1 INTRODUCTION

Introduction

1 Introduction

1.1 Motivation

1.2 Problem definition

1.3 Goals

1.4 Content overview

2 RELATED WORK

Background & Related Work

2 Related Work

2.1 Product Customization Software

2.1.1 Commercial Applications

2.1.2 Usability Aspects

2.1.3 Technological Limitations

2.2 Activity Sculptures

2.2.1 Quantified Self

2.2.2 Personal Data Visualization

2.3 Digital Visualization and Fabrication Workflow

3 PROTOTYPE DESIGN

Prototype Design

3 Prototype Design

3.1 Data Sources

3.1.1 Fitness Trackers

3.1.2 Mobile Applications

4 IMPLEMENTATION

Implementation

4 Implementation

5 USER STUDY

User Study

5 User Study

5.1 Study Design

5.2 Questionnaire

5.3 Participants

5.4 Procedure

5.5 Limitations

5.6 Results

6 CONCLUSION

Conclusion

6 Conclusion

7 FUTURE WORK

Future Work

7 Future Work

Contents of the enclosed CD

Thesis

- L^AT_EX Document
- PDF File

Presentations

- Initial presentation
- Final presentation

Activity Sculpture Web Configurator

- Prototype sketches
- Source code
- Gitlab and Github mirrors
- Instructions for deployment
- Login Data

Sculptures

- Prototype sketches
- .stl 3D print ready example files

User Study

- Questionnaire
- Results
- Heat map images

References