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Thesis/Project Title

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Erklärung

Hiermit versichere ich, dass ich diese Arbeit selbstständig verfasst und keine anderen als die angegebenen Quellen und Hilfsmittel benutzt habe.

I hereby declare that I have created this work completely on my own and used no other sources or tools than the ones listed.

Frankfurt, October 8, 2019

Full Name

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Abstract

An abstract is a brief summary of a research article, thesis, review, conference proceeding, or any in-depth analysis of a particular subject and is often used to help the reader quickly ascertain the paper's purpose [2]. When used, an abstract always appears at the beginning of a manuscript or typescript, acting as the point-of-entry for any given academic paper or patent application. Abstracting and indexing services for various academic disciplines are aimed at compiling a body of literature for that particular subject.

It may also contain brief references, although some publications' standard style omits references from the abstract, reserving them for the article body (which, by definition, treats the same topics but in more depth).

Abstract length varies by discipline and publisher requirements. Typical length ranges from 100 to 500 words, but very rarely more than a page and occasionally just a few words [1]. An abstract may or may not have the section title of "abstract" explicitly listed as an antecedent to content.

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1 Introduction

This chapter starts by giving a brief overview regarding the history of xzy, how it has evolved and its importance in today's research and finally its challenges. It later presents the motivation behind this thesis topic. Last but not the least, it discusses the thesis outline briefly summarizing the contents of the subsequent chapters.

1.1 Background

In recent years, the field of learning and education

1.1.1 Subheading

Subheading.....

1.1.1.1 SubsubHeading

sub-subheading.....

- Bullet point 1
- Bullet point 2

1.2 New Section

New Section.....is shown in Figure 1.1.....



Figure 1.1: Educational Technologies [3]

Vel ex debitis accusam interpretaris, vis te dico accommodare. Vero verear vis cu. At alterum accusamus pri, qui an praesent efficiendi. Nobis sadipscing in eum, ne cetero appareat vim. Ea vide dicit pri, et adhuc omnesque scripserit est. Quo idque oratio facete cu, mazim doctus fabellas vim an, ea fugit expetendis ius.

1.3 Research Question

The research questions related with this thesis work are:

1. How.....?
2. What.....?

1.4 Outline

The remaining part of the thesis is organized as follows:

In the second chapter, we discuss the related work.....

2 Related Work

This section covers the related work of.....

2.1 Heading

Heading.....

2.1.1 Sample Equation

Sample Equation text.....

$$Jaccard(setA, setB) = |A \cap B| / |A \cup B|$$

$$x = \frac{1 + y}{1 + 2z^2}$$

$$F(x, y) = 0 \text{ and } \begin{vmatrix} F''_{xx} & F''_{xy} & F'_x \\ F''_{yx} & F''_{yy} & F'_y \\ F'_x & F'_y & 0 \end{vmatrix} = 0$$

$$\int_0^\infty e^{-x^2} dx = \frac{\sqrt{\pi}}{2}$$

$$\iint_{\mathbf{x} \in \mathbf{R}^2} \langle \mathbf{x}, \mathbf{y} \rangle d\mathbf{x}$$

2.2 Summary

In this chapter, I discussed various state of the art techniques used.....

3 Conceptual Approach

In this chapter we discuss.....

3.1 Application Overview

3.1.1 Coordinating System

3.1.2 Proposed System

3.2 Summary

This chapter detailed the conceptual solution of the proposed system.....

4 Implementation

In this chapter I provide a comprehensive look in the implementation process.....

4.1 Programming Environment

.....

4.1.1 Major Technologies

The technologies used in our system are briefly presented below:

- **MongoDB:**
- **AngularJS:**.....
- **Node.js:**
- **ExpressJS:**

The technologies used in the.....

4.1.2 Additional Technologies

There are other additional tools.....

- Bootstrap
- Moment.JS
- Gruntjs
- EmbeddedJs

4.2 User Management Roles

4.3 Project Structure

4.4 Application Workflow

4.5 Components

4.5.1 Component 1

4.5.2 Component 2

4.6 Modularity

According to Kevin J Sullivan et al. modularity is.....

4.7 Flexibility

Flexibility of our module is another.....

4.8 Summary

In a nutshell, in this chapter.....

5 Evaluation

This chapter presents the evaluation of the implemented system. We start this chapter by presenting a user guide that will provide insights on how to start using the system, and how this module is integrated.....

5.1 User Guide

5.2 Survey Results

The application was tested by a number of people to give their feedback about it. The audience were provided with the..... Once that was done, they were asked to complete a survey questionnaire (see Appendix 1: Survey Questions).

The following sections present the results of the survey.

5.2.1 Participants general information

5.2.2 System Usefulness Measurement

5.2.3 System Usability Scale

This section contains questions regarding System Usability Scale. These questions try to assess whether the implemented system is easy to use or not and the survey results are listed below:

- I think that I would like to use this system frequently.
- I thought the system was easy to use and understand.
- I would imagine that one would learn to use this system very quickly.
- I felt confident using the system.

Response to above listed questions show.....

5.3 Validity/Efficiency Measurement

During the evaluation.....

5.4 Summary

In this chapter,

6 Outlook

This chapter presents the conclusion of this study and its contribution towards the research goals. In the first section, I will close all the prior chapters by summarizing their important points. Subsequently, I will present the possible future works and suggestions that were not a part of this study.

6.1 Conclusion

6.2 Future Work

6.2.1 Future Work 1

6.2.2 Future Work 2...

List of Tables

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Bibliography

- [1] MV Berry et al. "Can apparent superluminal neutrino speeds be explained as a quantum weak measurement?" In: *arXiv preprint arXiv:1110.2832* (2011).
- [2] Gary Blake and Robert W Bly. *The elements of technical writing*. Macmillan New York, NY, 1993.
- [3] Serhat Kurt. "Educational Technologies". In: (2016). URL: <https://images.app.goo.gl/tKGaTZYbbXHwy5Sq5>.

Appendices

Appendix 1: Survey Questions

User Background

* Required

1. Gender *

Mark only one oval.

☐ Female

☐ Male

2. Age *

Mark only one oval.

☐ < 25

☐ 25 – 40

☐ > 40

3. Occupation *

Mark only one oval.

☐ Studying

☐ Working

4. Field of Occupation/Study *

5. Nationality *

User Expectation

6. As a teacher, I want to see the student solutions in visual form to provide me an overview. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

7. As a teacher, I want to see the student results in visualization. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

8. As a teacher, I find the comparison of documents through word clouds a useful feature. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

9. As a teacher, I find the word clouds useful. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

10. As a teacher, I find the similar words highlighted in the word clouds as a useful approach. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

11. As a teacher, I find the approach of using four statistical methods useful instead of using one method. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

17. As a teacher, I find the peer reverse reviews a useful feature. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

18. As a teacher, overall I find the visual peer assessment useful. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

System Usability Scale

19. I think that I would like to use this system frequently. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

20. I found the system unnecessarily complex. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

21. I thought the system was easy to use. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

22. I think that I would need the support of a technical person to be able to use this system. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

23. I found the various functions in this system were well integrated. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

24. I thought there was too much inconsistency in this system. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

25. I would imagine that most people would learn to use this system very quickly. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

26. I felt very confident using the system. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

27. I needed to learn a lot of things before I could get going with this system. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

28. I am able to understand the statistical assessment results provided in visualizations. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

29. I am able to understand the visualization of peer reviews similarity report. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

30. The reverse review feature help me to understand the review quality of a particular user. *

Mark only one oval.

	1	2	3	4	5	
Strongly disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly agree

31. Suggestions for Improvement.
