

# Contents

<b>Preface</b>	<b>i</b>
<b>Summary</b>	<b>i</b>
<b>1 Introduction</b>	<b>1</b>
<b>2 Problem Analysis</b>	<b>1</b>
2.1 Context of our Grading Tool . . . . .	1
2.2 Problem Statement and Project Goals . . . . .	1
2.3 Research on Existing Products (LMS) . . . . .	1
<b>3 Requirements</b>	<b>2</b>
3.1 Requirements Elicitation . . . . .	2
3.2 Crowd-Based Requirements Engineering . . . . .	2
3.3 MoSCoW Methodology . . . . .	3
<b>4 Product Design in regards to Ethical Implications</b>	<b>3</b>
<b>5 Feasibility Study</b>	<b>3</b>
5.1 Technical, Operational and Time Feasibility . . . . .	3
5.2 Summary of Feasibility . . . . .	3
<b>6 Risk Analysis</b>	<b>4</b>
6.1 Sensitive Data . . . . .	4
6.2 GDPR Compliance . . . . .	4
<b>7 Implementation</b>	<b>4</b>
7.1 Backend: PHP/Laravel . . . . .	4
7.2 Database: MySQL . . . . .	4
7.3 Frontend: Bootstrap/NodeJs/Vue . . . . .	4
7.4 Development Process . . . . .	4
<b>8 Development in the Future and Suggestions</b>	<b>5</b>
<b>9 Conclusions</b>	<b>5</b>
<b>References</b>	<b>6</b>
<b>A Appendix: Survey</b>	<b>7</b>
A.1 Questions for Head TA/TA and Teachers . . . . .	7
A.2 Responses from Head TA/TA and Teachers . . . . .	8
<b>B Appendix: Use cases</b>	<b>9</b>
B.1 Teacher/lecturer (TL) use cases . . . . .	9
B.2 Teaching assistant (TA) use cases . . . . .	9
<b>C Appendix: Requirements</b>	<b>10</b>
C.1 Must haves . . . . .	10
C.2 Should haves . . . . .	10
C.3 Could haves . . . . .	11
C.4 Won't haves . . . . .	11
C.5 Non-Functional . . . . .	11