

APPENDIX D

Criteria for Evaluation of Literature Reviews

Criteria and Qualities	Deficient 2	Undeveloped 4	Average 6	Developed 8	Exemplary 10	Grade
Content						
1. Historical and theoretical background. Seminal literature.	No theoretical literature or historical depth demonstrated. No reference to seminal studies.	Brief reference to theoretical or historical literature. Brief reference to seminal studies.	Some reference to key historical literature and theoretical material. Some reference to seminal studies.	Adequate to good reference to key historical and theoretical literature. Adequate to good reference to seminal studies.	Explicit and thorough reference to key historical literature and theoretical material. Thorough reference to most important seminal studies.	
2. Breadth of subtopics.	No subtopics present.	Narrow focus. Subtopics too specific or too broad. Literature supporting subtopics is inadequate.	Several subtopics examined. Most subtopics are appropriate. Literature supporting subtopics is inadequate.	Adequate to good presentation of subtopics inherent in research. Adequate supporting literature.	Inherent subtopics thoroughly and appropriately presented through relevant and sufficient literature.	
3. Quality of literature.	No research-based literature.	Overemphasis upon popular and non-research literature. Little research-based literature.	Equal mix of non-research and research -based literature. Importance of studies not established.	Adequate to good emphasis upon important research studies. Importance of studies partially established.	Thorough reference to most important research studies. Little or no reference to popular literature. Importance of studies established.	
4. Relevance of published studies to current topic.	Relevance of published studies to current topic not addressed.	Brief mention of relationship of literature to current topic; explanation lacking.	Some explanation of relationship of literature to current topic provided.	Adequate to good explanation of literature's relationship to current topic provided.	Explicit relationship between relevant literature and current topic demonstrated.	
5. Relevance of published studies to each other.	Relevance of published studies to each other not addressed.	Brief mention of relationships among some published studies; explanation lacking.	Some explanation of relationships among published studies provided.	Adequate to good explanation of relationships among published studies.	Thorough development of relationships among published studies.	

APPENDIX D

Criteria and Qualities	Deficient 2	Undeveloped 4	Average 6	Developed 8	Exemplary 10	Grade
Presentation						
6. Organization	Inconsistent or confusing to reader.	Organization present but not outlined. Subtopics are not clearly established or are inappropriate.	Organization outlined. Subtopics do not follow logical sequence or are inappropriate.	Organization clearly outlined. Most subtopics are appropriate and follow logical sequence.	Organization clearly outlined and followed. Literature discussion organized into appropriate subtopics which follow logical sequence.	
7. Transitions	No apparent transition between sentences, between paragraphs, or between sections.	Despite transitional devices, structural sequence is unclear.	Basic sentence, paragraph, section sequences are demonstrated. Some sentences, paragraphs, sections do not follow logical order.	Clear, logical transitions throughout. Paragraphs are not consistently presented as coherent units.	Clear, logical, appropriate transitions and coherent paragraphs facilitate chapter organization.	
8. Current study rationale and contribution	Rationale for current study not stated. Contribution of current study to body of knowledge not stated.	Stated rationale is unclear or follows poor logic. Contribution of current study not stated.	Rationale stated but not supported by discussion of the literature. Contribution of current study not clarified.	Rationale stated and marginally supported by discussion of the literature. Contribution of current study not clarified or not supported by the literature.	Clear, logical explanations for rationale and for contribution of current study established. Rationale and contributions are supported by the literature.	
Writing/Format						
9. Clarity of writing and interpretation of literature	Writing does not clearly express interpretation of literature. Grammatical and spelling errors present. Inconsistent voice.	Writing occasionally expresses interpretation of literature. Grammatical and spelling errors are present. Inconsistent voice.	Writing is generally clear. Adequate understanding of research literature not demonstrated. Occasional grammatical or spelling errors present. Inconsistent voice.	Writing is clear and free of grammatical and spelling errors, and expresses single voice. Analysis and understanding of research literature are partially demonstrated.	Writing is free of grammatical and spelling errors, and expresses single voice. Writing is evaluative, interpretive, and clear. Understanding of research literature thoroughly demonstrated.	
10. Bibliographic format	Text and bibliography citations missing.	Text and bibliography citations are occasionally present. Format is inconsistent or incorrect.	Citations within text and bibliography present with frequent inconsistencies or errors.	Citations within text and bibliography present. Few inconsistencies or errors.	All citations present and correctly formatted.	
					Total grade	

Appendix E

Grading Rubric - *Software Requirements Specification (SRS)*

Achievement		Minimal	Limited	Satisfactory	Exemplary	Grade
Content	5	Section(s) missing, not useful, inconsistent, or wrong. (1)	Serious omissions or problems with content. (2)	Some problems with completeness or details of content (4)	Provides all relevant information correctly and with appropriate detail (5)	
Introduction	10	Minimal details <i>See criteria in exemplary (2)</i>	Limited details <i>See criteria in exemplary (4)</i>	Satisfactory details <i>See criteria in exemplary (8)</i>	All details (scope of product, references, definitions, acronyms, abbreviations) are given (10)	
Users and Functions	10	Minimal details <i>See criteria in exemplary (2)</i>	Limited details <i>See criteria in exemplary (4)</i>	Satisfactory details <i>See criteria in exemplary (8)</i>	All details (Stakeholders, Product Perspective, Features, User Characteristics/ Use Cases) are given (10)	
Constraints, Assumptions and Dependencies	10	Perspective is inaccurate, weak description of existing system, constraints, dependencies and assumptions(2)	Perspective is limitedly accurate, partially describes existing system, constraints, dependencies and assumptions (4)	Perspective is moderately accurate, mostly describes existing system, constraints, dependencies and assumptions (8)	Perspective is complete and accurate, describes existing system, gives real-life constraints, dependencies and assumptions (10)	
Functional Requirements	25	Minimal details <i>See criteria in exemplary (5)</i>	Limited details <i>See criteria in exemplary (9)</i>	Satisfactory details <i>See criteria in exemplary (21)</i>	All requirements are complete, accurate, not repeated, and placed in the appropriate section; Requirements are traceable, testable, consistent, clear, unambiguous, and precise. (25)	
Nonfunctional Requirements	10	Minimal details <i>See criteria in exemplary (2)</i>	Limited details <i>See criteria in exemplary (5)</i>	Satisfactory details <i>See criteria in exemplary (7)</i>	Performance, security, reliability, maintainability, usability etc. are addressed (10)	
Grammar and Spelling	10	Many serious mistakes in grammar or spelling (2)	Several large issues or many smaller ones (4)	Some small grammar or spelling issues (8)	Grammar, punctuation, and spelling all correct (10)	
Expression	10	Very difficult to understand (1)	Hard to follow or poor word choices (2)	Mostly easy to read and understand (4)	Clear and concise. A pleasure to read (5)	
Tone		Tone not appropriate for technical writing (1)	Tone somewhat unprofessional (2)	Mostly professional tone (4)	Tone is consistently professional (5)	
Organization	10	Very hard to find information (1)	Information difficult to locate (2)	Can find information with slight effort (4)	All information is easy to find and important points stand out (5)	
Layout		Layout makes it harder to understand and use the document (1)	Layout is inconsistent or not visually appealing or supportive (2)	Layout is reasonable, consistent and generally helpful (4)	Layout is attractive, consistent, and helps guide the reader (5)	
Total	100	(Total:20)	(Total:40)	(Total:80)	(Total:100)	

APPENDIX F

CENG 407 / 408 Project Website Evaluation Rubric				
Unsatisfactory	Partially Proficient	Proficient	Exemplary	Grade
Authority and Affiliation (%10 of total score) (0-3 pts)				
No information available about team members and company (0 pt)	Only names of team members and company are given. (1 pt)	Proficient information about team members and company are given. (2 pts)	Team members, project proposer and company are fully introduced. (3 pts)	
Navigation (10% of total score) (0-3 pts)				
Navigating the site is confusing and information cannot be found easily. (0 pt)	Navigating the site is sometimes inconsistent and there are some broken/missing links. (1 pt)	Navigation works without problem. Minor problems about accessing information. (2 pts)	The site is well-organized and easy to navigate. Visitors can clearly understand where they are and where to go next. (3 pts)	
Content (50% of total score) (0-3 pts)				
No documentation available about the project. (0 pt)	Documentation (SRS, SDD and Project Report) is available. (1 pt)	Documentation (SRS, SDD and Project Report) is available and updated. Project roadmap and stages are introduced. (2 pts)	Full documentation and forms are available and updated. Project is well introduced. Project plan and schedule are provided. Final product and demo video are available. (3 pts)	
Design (30% of total score) (0-3 pts)				
No graphic elements, bad layout and/or the colors and text interfere with the readability. (0 pt)	Few graphic elements, poor layout, colors and text readability. (1 pt)	Some graphic elements and limited variation in layout. Design elements partially assist visitors in understanding concepts and ideas. (2 pts)	Good utilization of graphic elements and variation in layout. Design elements assist visitors in understanding concepts and ideas. (3 pts)	
				Overall

Appendix G

Grading Rubric - *Software Design Description (SDD)*

Achievement		Minimal	Limited	Satisfactory	Exemplary	Grade
Content	5	Section(s) missing, not useful, inconsistent, or wrong. (1)	Serious omissions or problems with content. (2)	Some problems with completeness or details of content (4)	Provides all relevant information correctly and with appropriate detail (5)	
Introduction	10	Minimal details <i>See criteria in exemplary (2)</i>	Limited details <i>See criteria in exemplary (4)</i>	Satisfactory details <i>See criteria in exemplary (8)</i>	All details (scope of product, references, definitions, acronyms, abbreviations) are given (10)	
Architectural Description	10	Minimal details <i>See criteria in exemplary (2)</i>	Limited details <i>See criteria in exemplary (4)</i>	Satisfactory details <i>See criteria in exemplary (8)</i>	Good architectural design (super-classes/sub-classes, attributes and correct notation) (10)	
UI Description	10	Insufficient user interface description, no details (2)	Limited user interface description, not supported by figures, screenshots, etc. (4)	Minor deficiencies in user interface description (8)	All user interfaces are well-described and supported by figures, screenshots etc. (10)	
Detailed Design	35	Very poor design, mostly irrelevant with SRS (7)	Deficient design not satisfying most requirements in SRS (e.g. insufficient modelling efforts) (14)	Partially satisfies SRS, minor problems with design (e.g. mostly accurate DB design, minor flows in modeling) (28)	Meets all requirements aforementioned in SRS, Database tables, ER and Workflow Diagrams are properly presented (35)	
Grammar and Spelling	10	Many serious mistakes in grammar or spelling (2)	Several large issues or many smaller ones (4)	Some small grammar or spelling issues (8)	Grammar, punctuation, and spelling all correct (10)	
Expression	10	Very difficult to understand (1)	Hard to follow or poor word choices (2)	Mostly easy to read and understand (4)	Clear and concise. A pleasure to read (5)	
Tone		Tone not appropriate for technical writing (1)	Tone somewhat unprofessional (2)	Mostly professional tone (4)	Tone is consistently professional (5)	
Organization	10	Very hard to find information (1)	Information difficult to locate (2)	Can find information with slight effort (4)	All information is easy to find and important points stand out (5)	
Layout		Layout makes it harder to understand and use the document (1)	Layout is inconsistent or not visually appealing or supportive (2)	Layout is reasonable, consistent and generally helpful (4)	Layout is attractive, consistent, and helps guide the reader (5)	
Total	100	(Total:20)	(Total:40)	(Total:80)	(Total:100)	

Appendix H

Grading Rubric – Project Report

This is the rubric outline the grading criteria for project report.

<i>Achievement</i>		<i>Minimal</i>	<i>Limited</i>	<i>Satisfactory</i>	<i>Exemplary</i>	<i>Grade</i>
Content	5	Section(s) missing, not useful, inconsistent, or wrong. (1)	Serious omissions or problems with content (2)	Some problems with completeness or details of content (4)	Provides all relevant information correctly and with appropriate detail (5)	
Introduction	10	Poor introduction (2)	Brief introduction, company not introduced (4)	Sufficient introduction of overall project process and company (8)	Full introduction of overall project process and company (10)	
Problem Definition	15	Problem not defined at all (3)	Insufficient detail on problem definition (6)	Problem is defined but some inadequacy (12)	Well defined problem in every detail (15)	
Description of the System	40	Very weak description of the system designed (8)	Description of the system designed with no detail (16)	Almost complete description but some minor drawbacks (32)	Full description with all details including charts, figures (40)	
Grammar and Spelling	10	Many serious mistakes in grammar or spelling (2)	Several large issues or many smaller ones (4)	Some small grammar or spelling issues (8)	Grammar, punctuation, and spelling all correct (10)	
Expression	10	Very difficult to understand (1)	Hard to follow or poor word choices (2)	Mostly easy to read and understand (4)	Clear and concise. A pleasure to read (5)	
Tone	10	Tone not appropriate for technical writing (1)	Tone somewhat unprofessional (2)	Mostly professional tone (4)	Tone is consistently professional (5)	
Organization	10	Very hard to find information (1)	Information difficult to locate (2)	Can find information with slight effort (4)	All information is easy to find and important points stand out (5)	
Layout	10	Layout makes it harder to understand and use the document (1)	Layout is inconsistent or not visually appealing or supportive (2)	Layout is reasonable, consistent and generally helpful (4)	Layout is attractive, consistent, and helps guide the reader (5)	
Total	100	(Total:20)	(Total:40)	(Total:80)	(Total:100)	

APPENDIX I



ÇANKAYA UNIVERSITY

Computer Engineering Department

CENG 407 Presentation Grading Rubric

This form should be used for CENG 407 for each jury member to determine the student's presentation grade.

Part I. Information of Evaluator

Name Surname	Signature
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Part II. Project Information

Project Title	
Student's Name and Surname	

Part III. Presentation Grading

No	Grading Component	Comments	Out of	Evaluation												
1	<ul style="list-style-type: none"> ● Presentation Flow and Quality <ul style="list-style-type: none"> ● Organization, misspelling errors, grammar ● Visuals, Figures, Tables, Paragraphs 	Jury	25													
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Eval</td> <td style="width: 16.6%;">Very Bad</td> <td style="width: 16.6%;">Bad</td> <td style="width: 16.6%;">Ave</td> <td style="width: 16.6%;">Good</td> <td style="width: 16.6%;">Very Good</td> </tr> <tr> <td>Grade</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	5	10	15	20	25
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	5	10	15	20	25											
2	<ul style="list-style-type: none"> ● Proper use of language <ul style="list-style-type: none"> ● Verbal skills, enthusiasm, voice 	Jury	25													
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Eval</td> <td style="width: 16.6%;">Very Bad</td> <td style="width: 16.6%;">Bad</td> <td style="width: 16.6%;">Ave</td> <td style="width: 16.6%;">Good</td> <td style="width: 16.6%;">Very Good</td> </tr> <tr> <td>Grade</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	5	10	15	20	25
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	5	10	15	20	25											
3	<ul style="list-style-type: none"> ● Timing utilization <ul style="list-style-type: none"> ● Duration length 	Jury	25													
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Eval</td> <td style="width: 16.6%;">Very Bad</td> <td style="width: 16.6%;">Bad</td> <td style="width: 16.6%;">Ave</td> <td style="width: 16.6%;">Good</td> <td style="width: 16.6%;">Very Good</td> </tr> <tr> <td>Grade</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	5	10	15	20	25
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	5	10	15	20	25											
4	<ul style="list-style-type: none"> ● Contextual integrity <ul style="list-style-type: none"> ● Creativity, Complexity ● Degree of innovation 	Jury	25													
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Eval</td> <td style="width: 16.6%;">Very Bad</td> <td style="width: 16.6%;">Bad</td> <td style="width: 16.6%;">Ave</td> <td style="width: 16.6%;">Good</td> <td style="width: 16.6%;">Very Good</td> </tr> <tr> <td>Grade</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	5	10	15	20	25
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	5	10	15	20	25											
TOTAL			100													

APPENDIX J

CENG 408 Midterm Demo Presentation Rubric

Project is on schedule for completion	Success of demo	Team effort and communication	Project is a candidate for R&D Market	Total
Grading: 0 unsatisfactory 1 satisfactory 2 excellent	Grading: 0 unsatisfactory 1 satisfactory 2 excellent	Grading: 0 unsatisfactory 1 satisfactory 2 excellent	Grading: 0 unsatisfactory 1 satisfactory 2 excellent	Over 8
0	0	0	0	0

APPENDIX K

CENG 408 Source Code Evaluation Rubric					
Grading (0-4)					Grade
Functionality/Specifications (50% of total score)					
The code is not functional, meeting no significant design specifications, or was not attempted. (0 pt)	The code is minimally functional with significant portions of the code missing or incomplete. The code is largely nonresponsive to most test cases and/or inputs. (1 pt)	The code is marginally functional with numerous errors. The code may respond correctly under certain circumstances, but there are significant errors and/or incomplete code sections. (2 pts)	The program is mostly functional and responds correctly producing the correct outputs and or responses under most test cases. There are minor problems with the program implementation. (3 pts)	The code is completely functional and responds correctly producing the correct outputs and or responses under all test Cases. (4 pts)	0
Readability (20% of total score)					
The code is readable only by the author or someone extremely knowledgeable with its layout and purpose. (0 pt)	The code is poorly organized and difficult to read. There is little to no consistency in formatting. (1 pt)	The code is readable only with significant effort. There is little to no proper formatting. (2 pts)	The code is reasonably easy to read. There are minor formatting problems. (3 pts)	The code is extremely well organized, properly formatted, and easy to follow. (4 pts)	0
Documentation in Project Report (20% of total score)					
The code is not documented. (0 pt)	The code is poorly documented. There are minimal comments and/or the comments are incorrect. (1 pt)	The code is marginally documented. There are significant portions of the code that are not documented or documented incorrectly. There are a significant number of spelling and/or grammar errors that detract from the documentation. (2 pts)	The code is reasonably well documented. There are minor formatting omissions that would have improved user understanding of code purpose. There may be limited grammar or spelling errors. (3 pts)	The code is extremely well documented. Comments are completely consistent with the associated code. The lines of code and modules are reported well. There are no grammar or spelling errors. (4 pts)	0
Efficiency (10% of total score)					
The code is inappropriately long and appears to be patched together. (0 pt)	The code is a brute force implementation and unnecessarily long. (1 pt)	The code is marginally efficient. There are a significant number of cases where use of different language constructs should have been considered. The approach used in implementing the code leads to inefficiencies. (2 pts)	The code is mostly efficient without sacrificing readability and understanding. Some improvements could be made through a better choice of language constructs where appropriate. (3 pts)	The code is extremely efficient without sacrificing readability and understanding. (4 pts)	0
Overall					0

APPENDIX L



ÇANKAYA UNIVERSITY Computer Engineering Department

CENG 408 Presentation & End Product Grading Rubric

This form should be used for CENG 408 for each jury member to determine the student's presentation and end product grade.

Part I. Information of Evaluator

Name Surname		Signature	
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Part II. Project Information

Project Title	
Student's Name and Surname	

Part III. Presentation Grading

No	Grading Component	Comments	Out of	Evaluation												
1	<ul style="list-style-type: none"> • Presentation Flow and Quality <ul style="list-style-type: none"> • Organization, misspelling errors, grammar • Visuals, Figures, Tables, Paragraphs 	Jury	25													
	<table border="1"> <tr> <td>Eval</td> <td>Very Bad</td> <td>Bad</td> <td>Ave</td> <td>Good</td> <td>Very Good</td> </tr> <tr> <td>Grade</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	5	10	15	20	25
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	5	10	15	20	25											
2	<ul style="list-style-type: none"> • Proper use of language <ul style="list-style-type: none"> • Verbal skills, enthusiasm, voice 	Jury	25													
	<table border="1"> <tr> <td>Eval</td> <td>Very Bad</td> <td>Bad</td> <td>Ave</td> <td>Good</td> <td>Very Good</td> </tr> <tr> <td>Grade</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	5	10	15	20	25
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	5	10	15	20	25											
3	<ul style="list-style-type: none"> • Timing utilization <ul style="list-style-type: none"> • Duration length 	Jury	25													
	<table border="1"> <tr> <td>Eval</td> <td>Very Bad</td> <td>Bad</td> <td>Ave</td> <td>Good</td> <td>Very Good</td> </tr> <tr> <td>Grade</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	5	10	15	20	25
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	5	10	15	20	25											
4	<ul style="list-style-type: none"> • Complexity and originality <ul style="list-style-type: none"> • Creativity • Degree of innovation 	Jury	25													
	<table border="1"> <tr> <td>Eval</td> <td>Very Bad</td> <td>Bad</td> <td>Ave</td> <td>Good</td> <td>Very Good</td> </tr> <tr> <td>Grade</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	5	10	15	20	25
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	5	10	15	20	25											
TOTAL			100													

Part IV. End Product Grading

No	Grading Component	Comments	Out of	Evaluation												
1	<ul style="list-style-type: none"> • Availability of fully functional product 	Jury	50													
	<table border="1"> <tr> <td>Eval</td> <td>Very Bad</td> <td>Bad</td> <td>Ave</td> <td>Good</td> <td>Very Good</td> </tr> <tr> <td>Grade</td> <td>10</td> <td>20</td> <td>30</td> <td>40</td> <td>50</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	10	20	30	40	50
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	10	20	30	40	50											
2	<ul style="list-style-type: none"> • Successful Demo 	Jury	50													
	<table border="1"> <tr> <td>Eval</td> <td>Very Bad</td> <td>Bad</td> <td>Ave</td> <td>Good</td> <td>Very Good</td> </tr> <tr> <td>Grade</td> <td>10</td> <td>20</td> <td>30</td> <td>40</td> <td>50</td> </tr> </table>				Eval	Very Bad	Bad	Ave	Good	Very Good	Grade	10	20	30	40	50
	Eval				Very Bad	Bad	Ave	Good	Very Good							
Grade	10	20	30	40	50											
TOTAL			100													