CS 200: Final Deliverables Rubric (Final Paper, Presentation, Software)

	Target (full credit)	**Needs improvement** (partial credit)	**Unacceptable** (no credit)
Final Paper			
Title [2 pt]	The title clearly describes the project.	The title describes the project.	The title is missing or seems to have no connection to the project.
Formatting [2 pts]	The page is formatting correctly according to the provided template.	The page is mostly formatted correctly according to the provided template, with minor spacing/formatting errors.	The template is not used or there are major formatting discrepancies.
Language conventions [2 pts]	There are no spelling, grammatical, nor punctuation errors.	There are a few spelling, grammatical, or punctuational errors.	There are many spelling, grammatical, and/or punctuational errors. You are required to consult the Writing Center for future assignments.
Contribution [4 pts]	The theoretical topic was framed within a larger context (big-picture). The deliverable included motivation and thorough analysis and description of the topic. All objectives are clearly identified and met.

The deliverable clearly describes the software and expected behavior/functionality. Possible future work is identified. | The topic was adequately described. The deliverable lacked motivation or framing the work within a larger context. All objectives are identified and appear to be met, but there is some ambiguity.

The deliverable specifies the organization of the software, but some expected behavior/functionality is unclear. Future work is not identified. | The topic is poorly or insufficiently described. The deliverable does not include motivation or thorough details, providing only brief or superficial information. Objectives are not clearly described.

The deliverable does not discuss the software. |
| **Composition** [4 pts] | The deliverable was well organized and clearly written. The underlying logic was clearly articulated and easy to follow. Words were chosen that precisely expressed the intended meaning and supported reader comprehension. Diagrams or analyses enhanced and clarified presentation of ideas. Sentences were grammatical and free from errors. | The deliverable was organized and clearly written for the most part. In some areas the logic and/or flow of ideas were difficult to follow. Words were well chosen with some minor expectations. Diagrams were consistent with the text. Sentences were mostly grammatical and/or only a few spelling errors were present, but they did not hinder the reader. | The deliverable lacked overall organization. The reader had to make considerable effort to understand the underlying logic and flow of ideas. Diagrams were absent or inconsistent with the text. Grammatical and spelling errors made it difficult for the reader to interpret the text in places. Uses long, rambling, or run-on sentences. |
| **Subject Knowledge** [4 pts] | The deliverable demonstrated knowledge of the course content by integrating major and minor concepts into the response. The deliverable also demonstrated evidence of extensive research effort and a depth of thinking about the topic.

All relevant information was obtained and information sources were valid. Analysis and design considerations were well supported by the information. | The deliverable demonstrated knowledge of the course content by integrating major concepts into the response. The deliverable also demonstrated evidence of limited research effort and/or initial of thinking about the topic.

Sufficient information was obtained and most sources were valid. Analysis and design considerations were mostly supported by the information. | The deliverable did not demonstrate knowledge of the course content, evidence of the research effort or depth of thinking about the topic.

Insufficient information was obtained and/or sources lack validity. Analysis and design considerations were not supported by the information collected. |
| **Citations** [2 pts] | All sources are present and correctly cited. | Most sources are present and correctly cited. | Most sources are missing or incorrectly cited. |

Paper Total:

	Oral Presentation		
	Target (full credit)	**Needs improvement** (partial credit)	**Unacceptable** (no credit)
Title Slide [2 pt]	The title clearly describes the project. The student's name is clearly visible.	The title describes the project. The student's name is missing.	The title is missing or seems to have no connection to the project. The student's name is missing.
Delivery Mechanics [4 pt]	Holds attention of the entire audience with use of direct eye contact over the entire room, seldom looking at notes. Presentation is audible to all. Energetically communicates enthusiasm. No excess verbiage. Presentation is within +/- 2 minutes of the time requirements.	Minimal eye contact with audience, while reading mostly from the notes. Presentation is audible to some. Some energy and enthusiasm. Occasional excess verbiage; does not detract from presentation. Presentation is within +/- 4 minutes of the time requirements.	Holds no eye contact with audience; entire presentation is read from notes. Speaks in low volume, monotonous tone, or mumbling, which causes audience to disengage. Excess or off-topic verbiage. Presentation is more than 4 minutes over/under the time requirements.
Visual Elements [4 pts]	Excellent choice of visual elements. Graphics and content are clear and easily viewed, and effectively enhances and adds impact to the presentation. Slides support the speaker's message without being distracting; they are simple yet striking. Good balance of text and graphics. There are no spelling, grammatical, nor punctuation errors.	Adequate choice of visual elements. Some graphics or content are difficult to view. Visual elements are used in a way that occasionally detracts from the quality of the presentation Some slides have too much text (e.g., paragraphs) or too little text (e.g., a couple bullet points). There are some spelling, grammatical, or punctuation errors.	Poor choice of visual elements. Much of the content is difficult to view. Non-use or ineffective use of visual elements consistently detracts from the quality of the presentation. Slides are too complex or busy, distracting audience from speaker's words. Most slides have too much text or too little text. There are many spelling, grammatical, and/or punctuation errors.
Organization [2 pts]	Organization is clear and easy to follow. Transitions or flow between ideas is excellent.	Organization is somewhat unclear and sometimes difficult to follow. Transitions or flow between ideas can be rough.	Organization is unclear and difficult to follow. Transitions or flow between ideas is non-existent.
Contribution [4 pts]	The theoretical topic was framed within a larger context (big-picture). The deliverable included motivation and thorough analysis and description of the topic. All objectives are clearly identified and met. The deliverable clearly describes the software and expected behavior/functionality. Possible future work is identified.	The topic was adequately described. The deliverable lacked motivation or framing the work within a larger context. All objectives are identified and appear to be met, but there is some ambiguity. The deliverable specifies the organization of the software, but some expected behavior/functionality is unclear. Future work is not identified.	The topic is poorly or insufficiently described. The deliverable does not include motivation or thorough details, providing only brief or superficial information. Objectives are not clearly described. The deliverable does not discuss the software.
Subject Knowledge [4 pts]	The deliverable demonstrated knowledge of the course content by integrating major and minor concepts into the response. The deliverable also demonstrated evidence of extensive research effort and a depth of thinking about the topic.	The deliverable demonstrated knowledge of the course content by integrating major concepts into the response. The deliverable also demonstrated evidence of limited research effort and/or initial of thinking about the topic.	The deliverable did not demonstrate knowledge of the content, evidence of the research effort or depth of thinking about the topic.

Presentation Total:

Your code <u>must</u> produce a working program (compiles, runs, and produces output) to earn *any* points.

	Final Software		
	Target (full credit)	**Needs improvement** (partial credit)	**Unacceptable** (no credit)
Documentation [4 pt]	Code is well-documented. Concise descriptive comments appear immediately before function definitions, class declarations, and code chunks. The README file clearly describes the project, installation requirements, usage, and overall structure. A future programmer could use the README to understand the software.	Code is somewhat well-documented. Most functions, classes, and code chunks have comments. Some comments are either too vague or are simply repetitive of the code itself (e.g., "string name; // a name"). The README file describes the project, installation requirements, usage, and overall structure; some details are missing.	Code is not well-documented. Several functions, classes, and code chunks are missing comments. Comments are either too vague or are simply repetitive of the code itself (e.g., "string name; // a name"). The README file is missing or does not describe the project, installation requirements, usage, and overall structure.
Naming conventions [2 pts]	All names (for functions, classes, files, variables) are appropriately and meaningfully named. There are no single letter variable names unless it is an index within a for loop.	The majority of names (for functions, classes, files, variables) are appropriately and meaningfully named. Occasional use of single letter variable names.	There are many poorly named functions, classes, files, or variables. Frequent use of single letter variable names.
Logical blocks [2 pts]	Consistent use of whitespace to logically separate code.	Whitespace is used inconsistently. Lines of code are occasionally separated by whitespace.	There is no effort to use whitespace to logically separate lines of code. Lines of code have no whitespace or are written as if double-spaced.
Correctness [6 pts]	The solution produces the correct results and gracefully handles exceptional cases. The codebase has been rigorously tested.	The solution produces correct results in the most common use cases, but produces incorrect results in some exceptional cases. Basic functionality is thoroughly tested.	The solution runs, but crashes or produces incorrect results in many cases. Basic functionality is only minimally tested.
Solution Design [6 pts]	Functions are used to encourage code reuse and eliminate duplication. Global variable use is only used when essential. Each function has a single and well-defined responsibility or purpose. Code follows appropriate paradigm usage (OOP, functional, etc.). For example, if using object-oriented programming: classes use encapsulation to isolate data and behavior. Each class has a well-defined responsibility in the system. Best practice software design principles and OOP techniques are used to promote high cohesion within a class and low coupling. Programming paradigm matches with the language and domain application.	Functions are used with occasional instances of duplicate code. Global variables are used to solve design issues. Functions generally have multiple responsibilities. Code tends to follow appropriate paradigm usage (OOP, functional, etc.), with some exceptions. For example, if using object-oriented programming: adequate class design. Encapsulation is present, but classes have multiple responsibilities. OOP techniques are used occasionally resulting in lower cohesion and higher coupling. Instances of exposing private members as public present.	Functions are not used. Global variables are used as a primary means of maintaining state. Code is frequently duplicated. Logical constructs are frequently misused resulting in redundant, incorrect, or unreachable code. Code does not follow paradigm usage. For example, if it should use object-oriented programming: code does not follow any OOP principles. If classes are present, they are simply a container for arbitrary state and functional behavior. Result is code that would be unmaintainable outside of the present assignment. Programming paradigm does not match with the language and domain application.

Software Total:

Future steps (circle all that apply): Apart from general feedback above, please consider the following actions as you continue your pursuits (in this or other topics) for your Senior IS.

- If you wish to continue this topic for your senior IS, additional work may include:
    - Investigate any other packages, frameworks, or libraries that could be used.
    - The software component is too small; add more features/functionality.
    - The topic / future work is too broad; narrow the scope to a few select ideas.
    - The topic / future work is too narrow; broaden the scope to include additional related topics.
    - Add and/or clarify the "stretch" goals of your project which will occur if time permits.
    - Add more details to the theoretical portion of your paper so that is a comprehensive overview.
    - Add more details about how your software works.
- Schedule regular (every few weeks) appointments with the Writing Center next year. You might specifically focus on:
    - Organization and clarity of writing
    - Spelling/grammar
    - Writing in a formal manner for a technical research document (less conversationally)
    - Synthesizing information from provided sources, articulated in your own words
    - Citations/sources
- There may be some issues regarding your citations/sources, or formatting.
    - Do not use Wikipedia as a cited source. It may give you an idea of where to find primary sources, but it is not a primary source.
    - There are not enough reputable sources which are peer-reviewed, such as journal articles, conference papers, or textbooks.
    - In-line citations are incorrectly formatted. Refer to guidelines.
    - Some references are incorrectly formatted, such as incorrect capitalization, inconsistent details (e.g., some citations provide a month and year and others only specify a year), or missing details (e.g., year, author, title).
- Some existing professional work habits are detrimental to your academic/professional success. Please work on
    - Regular attendance - e.g., punctual meetings with your senior IS advisor
    - Consistency in submitting work - e.g., have some deliverable (writing, code, summary of reviewed literature) each week
    - Project timeline – e.g., setting realistic intermediate writing and software deadlines. An important aspect of IS is learning how to break down a large project into smaller manageable pieces.
    -
- Other: