CMIS 330 SDP Project

Scenario
You have been asked to lead a software development team to build a system fulfilling the Statement of Need specified in project 1. Your team is employed by a small company. The customer wants a project that balances reasonable development cost, timely delivery, software quality, and functionality.

In this project, you will develop the tool for planning, managing and controlling all your software development efforts on the B&B project. *Note that typically this is the first document that you produce not the last as we do in class. But we had to produce the other documents first to develop an appreciation of what a project plan entails and requires*.

Completing this project will require that you produce a software development plan (SDP) document for the system. An SDP must also develop project reporting and team communication mechanisms.

SDP Templates
Please develop your SDP using the ***IEEE Standard for Software Project Management Plans,*** standard 1058-1998, posted in the ***Reserved Readings*** section on the ***Class Menu.*** Read page 4 of the standard to review the outline. *Follow the outline in Figure 1 but omit the following sections from your SDP: 1.1.4 (budget summary), 1.2, 5.1, 5.2.4, 5.3, 5.5, 6.3, 6.4, all of 7, all of 8, Annexes.*

The assignment
1. Complete the template as best as you can. Pay special attention to the bulletized points below. Make any reasonable assumptions based on your understanding of the problem that allow you to address as many sections of the SDP template as possible. (Please read the "project descriptions" in the project description section of the syllabus for additional context and information on course projects).

2. Pay special attention to the following. The bulk of your grade will be decided on how well you address these issues.

- **Project schedule (Timeline):** Develop a schedule for the entire project.
- **Project task set:** Perform a work breakdown.
- **Risk Management**: Assess and rank the project and technical risks on the project. Explain the risk mitigation steps for these identified risks.
- **Software Configuration Management**: Includes Software quality assurance and software configuration management (SCM) procedures.

3. **Hints and suggestions**

- Project schedule (Timeline): Use the Waterfall or Gantt Chart format but you may choose another format if it communicates equivalent information.
- Activities/tasks: Organize these according to the software development tasks of; analysis, design, code, and test. Decompose these high-level tasks into at least one additional lower-level sub-task, e.g.,
    - Design Task
    - Module and Interface Design Sub-task
    - Data Design Sub-task

- Project risks (section 5.4): Identify the risks that will jeopardize the successful completion of the project. You must quantify and rank risks based on their severity. You do this by estimating the risks cost to the project, typically in dollars, and the probability that the risk will occur, an estimate between 0 and 1. Use the example in the Module Commentary to compute a "weighted" risk which can be used to compare risks for criticality. For the most critical risk, propose a mitigation strategy, in other words, how to avoid or minimize the consequences if the risk were to occur.
- Software development process (section 6.1): specify one for your project, i.e., Linear-Sequential (Waterfall) or one of the concurrent/iterative processes. Which process you choose should be reflected in our Project Schedule.
- Project Duration: Estimate Lines of Code or Function Points. Use these to compute project duration and effort. Project duration should be consistent with the time-line of your Schedule. Knowing project duration and effort permits the computation of staff size, i.e., the number of software engineers required (divide effort by duration to yield staff size). I want to see the computation for effort and staff size in the relevant template Section (section 5.2.3).

4. Document is well-organized, contains minimal spelling and grammatical errors.

   You should name the file yournameSDP.docx (or yournameSDP.pdf). So if my name was Julie Smith, I would name my document juliesmithSDP.docx.

   Your name, and other team members should be clearly listed on the first page along with the class/section, professor and due date.

   Your document should contain page numbers at the bottom of each page. Single or double space line formatting is acceptable. All references used for your report should be included in APA style format. See the following APA reference guide for details on how to cite your references:

   http://www.umuc.edu/library/libhow/apa_examples.cfm

   Your charts, illustrations and diagrams can be done using any word processing, drawing, and/or software CASE drawing tool (or by hand) as long as it is neat and organized.

   Embed or scan any diagrams that you create in your STS document—do not upload them separately.

Grading Rubric

Attribute	Meets	Does not meet
SDP template use	**10 points** SDP template was used to model required sections in the document. Specifies a development life cycle process. Computes project duration and effort.	**0 points** SDP template was not used to model required sections in the document. Does not specify a development life cycle process. Does not compute project duration and effort.
Project schedule (Timeline)	**20 points** Develops a schedule for the entire project. Uses the Waterfall or Gantt Chart or another format to effectively communicate the timeline.	**0 points** Does not develop a schedule for the entire project. Does not use the Waterfall or Gantt Chart or another format to effectively communicate the timeline.
Project task set	**20 points** Performs a work breakdown**.** Organizes tasks according to the software development tasks of; analysis, design, code, and test. Decomposes these high-level tasks into at least one additional lower-level sub-task.	**0 points** Does not perform a work breakdown**.** Does not organize tasks according to the software development tasks of; analysis, design, code, and test. Does not decompose the high-level tasks into at least one additional lower-level sub-task.
Risk Management	**20 points** Assesses and ranks the project and technical risks on the project. Explains the risk mitigation steps for these identified risks. Identifies the risks that will jeopardize the successful completion of the project. Quantifies and ranks risks based on their severity. Proposes a mitigation strategy for the most critical risks.	**0 points** Does not assess and rank the project and technical risks on the project. Does not explain the risk mitigation steps for these identified risks. Does not Identify the risks that will jeopardize the successful completion of the project. Does not quantify and rank risks based on their severity.

		Does not propose a mitigation strategy for the most critical risks.
Software Configuration Management	**10 points** Includes Software quality assurance and software configuration management (SCM) procedures.	**0 points** Does not include Software quality assurance and software configuration management (SCM) procedures.
Documentation	**20 points** Document is well-organized, and contains minimal spelling and grammar errors. The student's name is clearly listed on the first page along with the class/section, professor and due date. The document contains page numbers at the bottom of each page. Single or double space line formatting is used. APA style format is used for references. Diagrams are embedded or scanned into the document.	**0 points** Document is not well-organized, and contains minimal spelling and grammar errors. The student's name is not clearly listed on the first page along with the class/section, professor and due date. The document does not contain page numbers at the bottom of each page. Single or double space line formatting is not used. APA style format is not used for references. Diagrams are not embedded or scanned into the document.