**Case Study: Develop Business Software Application – IT Projects**

**Project Requirements:**   
The Class/Team project involves a generic case study. This case study is a representative scenario of a work situation involving a typical IT projects. For each key chapter covered in the textbook, there are tasks that are required to be completed.

As a team, you are to:

1. Completely read and understand the entire document and the tasks that are required to be completed.
2. Agree on roles and responsibilities (i.e. PM, Business Analysts, Software Engineer, OA Engineer, Technical Writer, etc.)
   1. If you can’t agree on the PM role, assign a temporary PM to get the project off the ground.
   2. I recommend that you rotate these roles every 1-2 weeks so that each person on your team is able to experience what is involved in each role. The person assigned as the project manager for that week should lead the team activities for that week (related to tasks that are listed below).
3. Meet with your team and agree on the fictional business software application you want to develop:
   1. i.e. payroll, procurement, customer relationship management, manufacturing, café shop, fast food restaurant, etc.
4. Agree on high-level functional and non-functional specs (more on this later).
5. Agree on collaboration tools (Google Drive and Apps, OneDrive and MS Online apps, Dropbox and MS Office apps, etc.)
6. Agree on meeting days/time, physical location, if virtual meeting, agree on conferencing tool (Google Hangout, Skype, etc.).
7. Complete all of the tasks listed in each key section below. These should be completed in the order listed.
8. Create a cloud project folder (Google Drive, OneDrive, Drop Box, etc.) that will contain the various project management artifacts/documents that are described as part of the tasks listed below. When completed, give all Internet users or just [rizkz@linnbenton.edu](mailto:rizkz@linnbenton.edu) read/view access and submit the project folder URL/link into Moodle.
   1. If the team did not use a cloud project folder, zip the folder with all project artifacts, and upload the zipped file into Moodle.
   2. NOTE: Only a single member from each team needs to submit the URL/link. (see syllabus for due date).
9. Present the findings of your project to the class - 15-minute (see syllabus for due date). Create the slides you plan to use in the same project folder. Due date for this submission in listed in the course syllabus.   
   This presentation should include the following:
   1. Short description of the business application.
   2. Description of what your team learned during the completion of the various tasks and your experiences within the different team roles.
   3. Retrospective analysis – What you learned from the project including what went well, what did **not** go so well, and what you would do differently next time.
   4. What advice you would give to next year’s CS 244 class on how to best succeed on their class/group project.

*NOTE:* There are manty Project Management template files available on the Internet – I provide one link in Moodle. Finding and using these various template files will help you create some of the artifacts for the project. Tasks based on this case study are explained in the Tasks sections below. These tasks build on work done in previous chapters.

**Project Initiation Tasks (Chapter 7):**

1. Prepare a business case for your business application project. Assume the project will take six months to complete and cost about $200,000. Ziko is the project sponsor. Use a business case template.
2. Prepare a project charter for your business application project. Assume that the project will take six months to complete and cost about $200,000. Use a project charter template**.**

**Project Planning Tasks (Chapters 8 & 9):**

1. Document your approach for collecting requirements for the project. Include at least five requirements in a requirements traceability matrix.
2. Develop a project scope statement for the project. Be as specific as possible in describing product characteristics and requirements, as well as all of the project's deliverables. Be sure to include testing and training as part of the project scope. Use a template.
3. Develop a work breakdown structure for the project. Break down the work to Level 3 or Level 4, as appropriate. Be sure the WBS is based on the project charter, the project scope statement, and other relevant information.

**Project Schedule Tasks (Chapters 10 & 11):**

1. Identify at least eight milestones for your project. Write a short paper describing each milestone using the SMART criteria. Discuss how determining these milestones might add activities or tasks to the Gantt chart. Remember that milestones normally have no duration, so you must have tasks that will lead to completing the milestone.
2. Develop the project Gantt chart/timeline, include all tasks and the milestones, using Project 2013/2016. Make sure to estimate the task durations and enter dependencies as appropriate. Remember that your schedule goal for the project is six months.

**Project Cost Tasks (Chapter 12:**

1. Prepare a one-page cost model for the project. Use the already created WBS, and be sure to document your assumptions in preparing the cost model. Assume a labor rate of $100/hour for the project manager and $60/hour for other project team members. Assume that none of the work is outsourced, labor costs for users are not included, and there are no additional hardware costs. The total estimate should be $200,000.

2. Using the cost model you created, prepare a cost baseline by allocating the costs by WBS for each month of the project.

**Project Quality Tasks (Chapter 14):**

1. Determine what the quality objectives for your project should be.
2. Develop a quality management plan.

**Project Communications Tasks (Chapter 15):**

1. Develop a communications management plan to address the project communication needs.
2. Develop a communication template(s) and sample of a good weekly progress report that could be used for this project.

**Project Risk Tasks (Chapter 16):**

1. Develop a risk management plan. For each risk, provide a short description, probability of occurrence, impact, and proposed response.

**Project Implementation Tasks (Chapter 17):**

1. Develop a change management process. Be creative!

**Project Retrospective (A.K.A Post project evaluation) Tasks (Chapter 18):**

1. After the project is complete, conduct a project retrospective and capture the following:
   1. What worked well
   2. What did not work well
   3. What could the team have done differently/better.