# *Systems III (420-E31-HR)*

# *Assignment 1 – Project Management*

Date assigned: Wednesday, September 13, 2017

Date due: **Wednesday, September 27, 2017, 7:50am**

**Learning Objectives**

Upon successful completion of this assignment, the student will be able to:

* Identify project risk factors
* Create a Microsoft Project Plan
* Perform an effort estimate on an assignment

To do:

**Part A: Project Plans**

1. Using Microsoft Project, create a project plan for completing the third year of the Computer Science Program, using the following guidelines:
   1. Name the plan **YourUserName E31\_A01.mpp**.
   2. The start date is August 24, 2017.
   3. The tasks should be all the courses in the third year of the program, even if you are not taking them all as scheduled. The program profile is available on the Computer Science web site: <http://www.cegep-heritage.qc.ca/Programs/Computer_Science/Computer_Science_Profile.htm>
   4. Set the tasks as fixed duration of 75 days. **Note**: The duration for all the tasks can be set at once, by selecting all of them and selecting the task information icon in the Toolbar
   5. Modify the calendar to include non-working time, such as holidays and breaks (e.g. Labour Day, Thanksgiving Day, Christmas Holidays, March Break, etc.). Refer to the Academic Calendar in the Academic Services public folder for the specific dates.
   6. Include appropriate summary tasks and intertask dependencies (dependencies for the tasks based on the course prerequisites). The prerequisite information is available on the same Computer Science web site: <http://www.cegep-heritage.qc.ca/Programs/Computer_Science/Computer_Science_Profile.htm>
   7. Add yourself as a resource.
   8. Assign yourself as a resource to all the tasks. Determine the % spent on the course, based on the number of courses you are taking that semester. For example, if you are taking 6 courses, you would be assigned 1/6 (or 16.6%) to work on each one.
   9. Change the Gantt chart to use Half Years as the major time scale and Months as the minor time scale.
   10. Save the baseline plan.
   11. Update the project plan to record the progress you have made to date.

**Part B: Estimation**

1. Break down Assignment #1 for 420-C50 into tasks, and for each task estimate the effort to complete the task in hours.

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| --- | --- |
| **PART A** |  |
| Open the clients.xml file and use jQuery get to read in the list of clients and the name of the corresponding invoice file. | **1** |
| Create and display a drop down list that allows the user to select a client from the clients in the clients.xml file | **.5** |
| Use jQuery get to read the appropriate XML file depending on the client selected and the value in the clients.xml file. | **1** |
| Display the client and invoice information on the screen including the client’s discount. | **.5** |
| Display the first work record from the appropriate invoice file. | **0** |
| Provide buttons/labels/links for the user to navigate forward and backward in the file one work record at a time. Provide functionality that loops back to the beginning when the end is reached and to the end when the start of the file is reached. | **2** |
| When the user changes the customer, read in the other customer’s invoice file and display it. | **.5** |
| Sort the workRecords by workNumber | **0** |
| Provide a text box with a Search button that will search the XML file for a specific work number (include error checking so it is not blank). When the user enters a number and presses the search button search for and displays the record of the corresponding workNumber. If there is no matching workNumber display an error message. | **1** |
| **PART B** |  |
| When the program first starts, use an asynchronous request to the php program getUsers.php to display the first set of records. The number of records you display is up to you, but must be only slightly more than the size the screen will allow to a maximum of 50 records. | **1** |
| Set up event handler(s) on the scroll event to manage the person scrolling using the mouse OR FINGER through your list. When the person scrolls near the bottom of the list, (asynchronously) request the next set of records using getUser.php. If the user scrolls up the list, (asynchronously) request the previous set of records using getUser.php. With the exception of slow network response, the user should never have to pause their scrolling. | **2** |
| Display all the relevant information for each user (not the ID for example), nicely formatted. Remember this is a list, so you should not display one user at a time | **1** |
| **TOTAL:** | **10.5 hrs** |

**Part C: Project Management**

1. Describe the four main phases in project management, and explain the main tasks performed by a project manager in each phase.

* Project Planning
  + In this phase of management, a project manager must go about identifying the tasks required for the project, as well as noting and estimation of effort and cost required for each of the different tasks.
* Project scheduling
  + This is when the project manager must assign work to all of the team members and put it in a calendar to schedule deadlines.
* Project monitoring
  + This is throughout the course of the system development. The project manager must coordinate the project team’s workload while guiding and supervising the teams that work for them.
* Project Reporting
  + Project reporting is done throughout the entire process of the system development. The project manager sends out progress reports to the system owners, the project team, and their management.

1. Consider a project team you have been a part of, either as part of a student team or in your co-op job. Describe the organization of the team and describe in sufficient detail two aspects that worked well and two that did not work well.

In my coop job over the summer, I worked on a small team of software developers. There were only 3 full time developers, and one of them was also a project manager.

* One thing my project manager did well was because I was a student, he held one-on-one meetings with me on a weekly basis to make sure I was getting through everything without too much struggle and so he could help me through any rough patches.
* We held a meeting every two weeks for updates on how a third party development company was doing after each sprint on a piece of software that we had to write all of the back-end for. We always knew where they were at and made sure that our goals and deadlines were in time with theirs.
* One thing that I feel didn’t work well for me was because everyone on the team was working on entirely different thing, the only person I could ask questions to was my boss. He was the only person that ever knew what I was working on, and whenever I needed to ask for help from someone else, I needed to explain the entire project to them for them to really be able to understand what I was doing sometimes.
* While there were some nice things about it, I didn’t enjoy not working on one larger system throughout the summer. It meant I didn’t know the other software developers on my team, and even after 4 months of working with them, I feel like I didn’t really know any of them, which if we did have to work more closely would lead to a very awkward team dynamic.

**Marking Scheme**

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| --- | --- |
|  | Marks |
| Part A – Project Plan | 35 |
| Part B – Estimation | 15 |
| Part C – Question 1 | 8 |
| Part C – Project team analysis | 4 |
| Organization/English | 4 |
| Total | 66 |

**To submit**

When you have completed the assignment, upload the following documents to Moodle:

* **YourUserName\_E31\_A01\_ProjectManagement.docx**
* **YourUserName E31\_A01.mpp**