

UNIVERSITY OF NORTH CAROLINA WILMINGTON
MIS419/MIS576 – INFORMATION TECHNOLOGY PROJECT MGT

Exercise #3
Project Tracking and Quality Management

You should complete all work in one Excel spreadsheet with a ‘separate sheet / tab’ for each part of the assignment.

Part A: (Name the tab: 3A)

Recreation and Wellness Project Cost Baseline
Month

	1	2	3	4	5	6	Total
WBS Items							
1. Project Management							\$ -
Project manager*	\$5,333	\$5,333	\$5,333	\$5,333	\$5,333	\$5,333	\$ 32,000
Project team members	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$ 12,000
2. Requirements Definition	\$8,000	\$1,000					\$ 9,000
3. Web Site Design							
3.1 Registration for recreational programs		\$6,000	\$3,000				\$ 9,000
3.2 Registration for classes and programs		\$6,000	\$3,000				\$ 9,000
3.3 Tracking system			\$ 9,000				\$ 9,000
3.4 Incentive system			\$ 5,000	\$ 4,000			\$ 9,000
4. Web Site Development							\$ -
4.1 Registration for recreational programs			\$3,000	\$ 15,000			\$ 18,000
4.2 Registration for classes and programs			\$3,000	\$ 15,000			\$ 18,000
4.3 Tracking system				\$8,000	\$10,000		\$ 18,000
4.4 Incentive system					\$18,000		\$ 18,000
5. Testing					\$ 15,000		\$ 15,000
6. Training, Roll Out, and Support						\$ 24,000	\$ 24,000
Total project cost estimate	\$15,333	\$20,333	\$33,333	\$49,333	\$50,333	\$31,333	\$ 200,000

* The PM also assisted in other areas, but all of his costs are included in the project management category.

The above is a sample worksheet of the costs / month for designing a website, **after three months**:

Planned Value (PV) =69,000
 Actual Cost (AC) = 75,000
 Earned Value (EV) = 60,000

1. Use the numbers above to solve the following questions. Show your work on Tab (3A) – rename one of the sheet tabs.
 - a. What is the CPI and SPI for the project at the three month point?

- b. How is the project doing? Is it ahead of schedule or behind? Is it over/under the budget (type your response into the spreadsheet).
- c. Use CPI to calculate the ETC and EAC for this project (assume that these are **typical** variances going forward). What do these two calculations tell us about the project?
- d. Use the SPI to estimate how long it will take to finish this project.

Bonus (5 points): On the same sheet in Excel create a chart comparing the planned value (PV), actual cost (AC) and earned value (EV). Assume the AC was 20,000 (month 1), 25,000 (month 2), 30,000 (month 3) and the EV was 15,000 (Month 1), 25,000 (Month 2), 20,000 (month 3) for the first 3 months of the project.

Part B: (Name the tab: 3B)

1. Create a Pareto chart based on the information in the following table

<u>Defect Type</u>	<u>Occurrence</u>
Connection	40
Software	21
Transformer	20
Firmware	16
Solder	11
CPU	9

First, create a spreadsheet in Excel, using the data in the table. List the most frequent customer problems first. Use the Excel template

To help you get started -- here are the headings for the excel spreadsheet:

<u>Defect Type</u>	<u>Occurrence</u>	<u>Cumulative Total</u>	<u>Percentage</u>
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Your deliverable is the spreadsheet with the above headings and a bar chart on the same sheet based on the data you place in the above chart.

Part C: (Name the tab: 3C)

1. Create a run chart to track the number of defects found during the execution phase of a project. Use the information below to understand which part of the system is experiencing the most defects. Which part of the system needs the most attention and which appears to be levelling out?

<u>Month</u>	<u># of Defects</u>		
	<u>Website</u>	<u>Database</u>	<u>System</u>
Jan.	10	3	5
Feb.	9	5	4
Mar	9	2	5
Apr	8	7	5
May	7	1	4
Jun	7	5	6
Jul	7	6	8
Aug	6	4	10
Sep	6	8	11
Oct	5	4	11
Nov	5	7	12
Dec	5	5	14

Part D: (Name the tab: 3D)

1. Take the MBTI test and research information on this tool. There are several websites that have different versions of the test, such as www.humanmetrics.com and www.keirsey.com. Provide a description of your results in tab 3D. Do you feel these accurately reflect your personality? How do you think personality may impact a project team?