

It was late. Sally Fukuyama, assistant director of marketing, knocked on the slightly open door of Jim Watanabe's office. Jim was the project director for the "No Customer Escapes" customer loyalty system for Petrie Electronics.

"Yeah, come in," Jim called.

"Hi, Jim," Sally said, pushing the door open further. "Are you getting ready to leave?"

"Well, I was thinking about it, but something tells me that I'm probably not leaving any time soon. What's up?"

"I just got an e-mail from John [John Smith, the head of marketing at Petrie]. He has a whole bunch of reports he wants this system to generate," Sally replied. She took the stuffed manila folder in her hand and dropped it on Jim's desk.

"What is all this?" he moaned.

"John says all of these reports are absolutely essential. He says you should be able to generate all of the necessary data from the new customer loyalty system."

"It will take forever to work out the specific designs on all of these reports," Jim said. "I'm going to need a lot of help on this." Jim dropped the folder on his desk.

"Sorry, Jim," Sally said. "I'll help you tomorrow, but I really need to go."

"OK, bye," Jim said, as Sally left his office.

He opened the folder and started to look at what was there. Some of the report requirements were more complete than others. One of the reports near the top of the heap focused on listing the best customers, based on how much they had spent in a particular month. "I'll start with this one," Jim thought. "I think I'll do a quick design in Excel."

Jim worked on the report design for 15 minutes. His first cut is shows below, followed by the high-level summary report, which lists only the names of the customers, where they are from, and the total they spent during a given month. The last example shows the details of what each customer bought.

Petrie's Best Customers by Monthly Purchases					
March 2017					
Customer					Grand
Customer Name	Customer ID	Home City	State	Total	
Francesca Jones	43218765-991	New Orleans	LA	3327.65	
Ahmad Walgreens	12345678-990	Yuba City	CA	2134.35	
Wilma Sanchez	45645699-990	Lamoni	IA	2038.75	
Sylvia Pollock		Los Angeles	CA	1988.94	
William Peace		Tampa	FL	1645.87	
Jose Gonzalez		Atlanta	GA	1543.34	
D'Andre Martinez		New York	NY	1109.15	
John Smith		Las Vegas	NV	1065.34	

Petrie's Best Customers by Monthly Purchases									
March 2017									
Customer					Purchases			Grand	
Customer Name	Customer ID	Home City	State	Quantity	SKU	Description	Amount	Total	Total
Francesca Jones	43218765-991	New Orleans	LA	2	67890	50" Panasonic 3D TV	1398.95	2797.90	3327.65
				4	98000	8' HDVI cables	69.95	279.80	
				1	44441	Flat screen TV stand	249.95	249.95	
Ahmad Walgreens	12345678-990	Yuba City	CA	1	34567	19" computer monitor	99.99	99.99	2134.35
				1	34447	Dell desktop	345.56	345.56	
				1	34889	HP laser printer P1102w	149.95	149.95	
				1	67890	50" Panasonic 3D TV	1398.95	1398.95	
				2	98000	8' HDVI cables	69.95	139.90	
Wilma Sanchez	45645699-990	Lamoni	IA	1	67890	50" Panasonic 3D TV	1398.95	1398.95	2038.75
				1	44441	Flat screen TV stand	249.95	249.95	
				1	67888	Petrie's 7.1 surround sound set	249.95	249.95	
				2	98000	8' HDVI cables	69.95	139.90	

**Case Questions:**

1. How would you make these reports look better?
2. Brainstorm at least two other reports that would be useful for this system, and create a simple design.
3. Using our text and any other materials you can find, make a list of the 10 most important things to consider when designing reports.
4. Are you, or one of your friends/family the member of a customer loyalty program (such as airline frequent flyer, hotels, etc)? Find an example of a summary sent to customers that shows their loyalty status (such as points, miles, etc), and identify all of the data elements needed to create the report and use that information to create a simple E-R diagram.