IS 475/675 Database Design and Implementation Project Part 2 : updated on 12/10/2019

What is the purpose of this part of the project?

The objectives of this part of the project are to (1) revise your logical model; and (2) validate that model through the implementation of a prototype database for Replica Toys. These parts of the project require you to:

- Evaluate and **revise** as necessary the logical data model submitted for part 1. An important final deliverable for this project is a complete logical data model in third normal form.
- Design a prototype physical data model that will generate the result tables listed in this document.
- Create a prototype physical data model using the SQL Server database management system. You do not have to include each of the attributes on your logical model on your prototype physical data model, but you do have to include all the attributes that are in the sample data provided in the Excel workbook "ReplicaToysData-f19.xlsx".
- Import the data provided in the Excel workbook entitled "ReplicaToysData-f19.xlsx". Put the data in the tables in your database so that the data is not redundant. I recommend using the SQL Server Import/Export utility to import the data into a single table. Then use the INSERT INTO/SELECT FROM statement to parse the data from the single table and input it into each of the tables in your database. A SQL Lab showing how to do this was completed in class on 11/26/2019. The lab is available on WebCampus for that date.
- Write SQL queries to generate the requested result tables.

What are the deliverables?

1. **A revised logical data model.** This deliverable is an ERD. If your logical data model (documented with an ERD) turned in for part 1 did not have any problems noted by me, then simply turn in that ERD. If you found you needed to modify the design to address my concerns then turn in a revised ERD. You must have a logical data model in third normal form as one of the deliverables for this part of the project.

2. **A copy of your original logical data model submitted for part 1.**

3. **An ERD for the prototype database.** This deliverable will be an ERD of the database implemented for the prototype. Since the prototype should include only those tables necessary to store the data in the Excel workbook (ReplicaToysData-f19.xlsx) and produce the required queries, this ERD will be a sub-set of the revised logical data model. The prototype ERD should look exactly like the tables you create for the project.

4. **A prototype database.** Create the tables necessary to store the data in the Excel workbook ReplicaToysData-f19.xlsx with minimal data redundancy. Make sure you create appropriate data types for all fields in all tables. Create appropriate constraints. Hint: There are 30 different problem reports and 56 different tests in the sample data set provided in the Excel workbook. There are 40 different people. "People" are not separated by the type of person in the workbook and do not have to be stored in separate entities in your database. You can create a "person" table and store all referenced people in the database.

Document this deliverable as follows:
CREATE TABLE statements. Turn in all SQL statements used to create tables.

SELECT * FROM each_tbl. Turn in the complete contents of all tables in the prototype database. Please do NOT turn in any SQL INSERT statements.

5. SQL Queries. Turn in the code and the output for the queries on the next page using the same format as used on the SQL homework assignments (HW#7, 8, 9). Please place the code before the output generated in the printed output for each requested query. Provide documentation/comments for all views and CTEs so that I understand the purpose of the views and/or CTEs in your code. Be sure to include the code for all views used for the queries! I will not have time to chase down the views and ask you to submit them!!

6. Electronic version of the SQL Queries. Upload a file (only one file, not separate files for each query!) with just the SQL code for your queries and no output. The file can be a Word document or txt file but make sure that they are not "pictures" of your SQL code. Do not turn in a .pdf file for this deliverable. I may want to test your queries with your database, so I need a copy of the SQL code for the queries that is run-able when copied to SQL Server.

7. **The name of the database where your test tables reside.** I have access to all databases on our server, so I don't need a login but I need to know the name of the database to look at your database and run your queries online.

What are the required SQL queries?

The SQL queries are designed to test the quality control part of your database – there are no queries required for the marketing, registration, survey questions or returned toys part of your database.

1. The sample data provided in ReplicaToysData-f19.xlsx maintains referential integrity, but there are always other types of data accuracy/integrity issues that are not validated through a referential integrity constraint. For example, are there any tests that were conducted BEFORE a problem report was created? It should be impossible to have a test conducted prior to when a problem report is created, but it is always possible that a person input the dates incorrectly. Check the dates in the problem report and test tables to see which problem reports or tests might have incorrect dates. Here is the full result table:

	ReportID	ReportDate	CompleteDate	ProblemDescription	TestID	TestDate
1	12	2019-11-12 00:00:00.000	NULL	On-board electronics include switch that interfe...	38	2019-10-03 00:00:00.000
2	20	2019-10-23 00:00:00.000	2019-11-02 00:00:00.000	Battery life is significantly shorter than expected.	39	2019-10-15 00:00:00.000
3	20	2019-10-23 00:00:00.000	2019-11-02 00:00:00.000	Battery life is significantly shorter than expected.	40	2019-10-15 00:00:00.000

2. Summarize the ProblemReport by ProblemTypeID. Be sure to include all the ProblemTypes possible in the ProblemType table, even if there are no problem reports for a given problemtypeID. Provide a count by problem type of the injury reports in the ProblemReport table. Here is the result table:

	ProblemTypeID	TypeDescription	CountOfReports	CountOfInjuryReports
1	1	Inadequate Finish - toy does not look good	5	0
2	2	Inadequate Operation - toy does not operate corr...	10	3
3	3	Poor Operation - toy tips over during use	1	0
4	4	Inadequate Operation Quality - toy broke during u...	6	0
5	5	Poor Operation Quality - toy hurt user	2	2
6	6	Inadadequte Quality - toy finish is inconsistent	6	1
7	7	Other	0	0

3. Which problem reports have a report date in October of the current year? Include the data as shown in the columns below. The DaysInSystem is the difference in date between the ReportDate and the CompleteDate. If the problem report is not complete, then it is the difference between the ReportDate and the current date. When I ran the query below, the current date was December 10, 2019. Your DaysInSystem should be calculated using the GETDATE() when you execute your query, so the DaysInSystem will be a little different than the ones shown for those problem reports that are not yet complete (have a null value for the CompleteDate). Sort the result table by ReportDate. The full result table is provided below:

	ReportDateOutput	ReportID	Serial#	CompleteDate	DaysInSystem	Model#	ModelName	ReporterName	ReporterType	ProblemType
1	Oct 02, 2019	14	1902386-01	Not Complete	69	CHVSUV	Chevy Truck SUV	Starrett, C.	Customer	Poor Operation - toy tips over during use
2	Oct 03, 2019	17	1902385-02	Not Complete	68	BMWSC9	BMW Sports Car Large	Lange, V.	Customer	Inadequate Operation - toy does not operate correctly
3	Oct 10, 2019	15	1902393-02	Oct 10, 2019	0	LXSED5	Lexus Sedan Large	Ferreira, L.	Distributor	Inadequate Finish - toy does not look good
4	Oct 11, 2019	18	1902385-02	Oct 11, 2019	0	BMWSC9	BMW Sports Car Large	Ferreira, L.	Distributor	Inadequate Finish - toy does not look good
5	Oct 18, 2019	19	1902393-02	Nov 03, 2019	16	LXSED5	Lexus Sedan Large	Kappel, Y.	Distributor	Inadequate Finish - toy does not look good
6	Oct 21, 2019	13	1902396-01	Oct 23, 2019	2	MASSUV	Maserati Levante	Dickman, A.	Distributor	Inadadequte Quality - toy finish is inconsistent
7	Oct 23, 2019	20	1902392-01	Nov 02, 2019	10	LXSED3	Lexus Sedan Medium	Arterberry, M.	Distributor	Inadequate Finish - toy does not look good
8	Oct 24, 2019	16	1902392-01	Oct 24, 2019	0	LXSED3	Lexus Sedan Medium	Lupo, H.	Distributor	Inadequate Finish - toy does not look good

4. Modify the report created for question #3 to remove the ProblemType description and include each of the tests that were performed for each problem report. The result table should still include only those problem reports with a report date in October of the current year. Include all of the problem reports displayed in question #3 whether or not a test has been completed for that problem report. The full result table is provided below. This report was also run on 12/10/2019.

	ReportDateOutput	ReportID	Serial#	CompleteDate	DaysInSystem	Model#	ModelName	ReporterName	ReporterType	TestDate	TestDescription	TesterName	TestComplete
1	Oct 02, 2019	14	1902386-01	Not Complete	69	CHVSUV	Chevy Truck SUV	Starrett, C.	Customer	Oct 02, 2019	Attempted to re-create by attempting a sharp turn w...	Patton, E.	Y
2	Oct 03, 2019	17	1902385-02	Not Complete	68	BMWSC9	BMW Sports Car Large	Lange, V.	Customer	Oct 08, 2019	Check electromagnetic brake for signs of failure.	Ibbott, N.	Y
3	Oct 03, 2019	17	1902385-02	Not Complete	68	BMWSC9	BMW Sports Car Large	Lange, V.	Customer	Oct 09, 2019	Check axle/wheel assembly for irregularities.	Ibbott, N.	Y
4	Oct 03, 2019	17	1902385-02	Not Complete	68	BMWSC9	BMW Sports Car Large	Lange, V.	Customer	Oct 09, 2019	Check onboard computer for any irregularities.	Ibbott, N.	Y
5	Oct 03, 2019	17	1902385-02	Not Complete	68	BMWSC9	BMW Sports Car Large	Lange, V.	Customer	Oct 10, 2019	Attempted to simulate error, but was too funny. Se...	Ibbott, N.	N
6	Oct 03, 2019	17	1902385-02	Not Complete	68	BMWSC9	BMW Sports Car Large	Lange, V.	Customer	Nov 15, 2019	Tested battery life	McCaig, P.	Y
7	Oct 10, 2019	15	1902393-02	Oct 10, 2019	0	LXSED5	Lexus Sedan Large	Ferreira, L.	Distributor	NULL	NULL	NULL	NULL
8	Oct 11, 2019	18	1902385-02	Oct 11, 2019	0	BMWSC9	BMW Sports Car Large	Ferreira, L.	Distributor	NULL	NULL	NULL	NULL
9	Oct 18, 2019	19	1902393-02	Nov 03, 2019	16	LXSED5	Lexus Sedan Large	Kappel, Y.	Distributor	NULL	NULL	NULL	NULL
10	Oct 21, 2019	13	1902396-01	Oct 23, 2019	2	MASSUV	Maserati Levante	Dickman, A.	Distributor	Oct 21, 2019	Contacted shipping regarding error.	Cavey, K.	Y
11	Oct 21, 2019	13	1902396-01	Oct 23, 2019	2	MASSUV	Maserati Levante	Dickman, A.	Distributor	Oct 21, 2019	Contacted production regarding error.	Cavey, K.	Y
12	Oct 21, 2019	13	1902396-01	Oct 23, 2019	2	MASSUV	Maserati Levante	Dickman, A.	Distributor	Oct 21, 2019	Contacted inventory regarding error.	Cavey, K.	Y
13	Oct 23, 2019	20	1902392-01	Nov 02, 2019	10	LXSED3	Lexus Sedan Medium	Arterberry, M.	Distributor	Oct 15, 2019	Tested battery for extra heat during normal use and...	McCaig, P.	N
14	Oct 23, 2019	20	1902392-01	Nov 02, 2019	10	LXSED3	Lexus Sedan Medium	Arterberry, M.	Distributor	Oct 15, 2019	Tested battery at high usage and extended exposu...	McCaig, P.	N
15	Oct 24, 2019	16	1902392-01	Oct 24, 2019	0	LXSED3	Lexus Sedan Medium	Lupo, H.	Distributor	NULL	NULL	NULL	NULL

5. Significantly modify the report for question #4 to remove the detailed information about each test and simply provide a count of the tests that were completed for each problem report in the database. This means you should also remove the condition looking for problem reports in October of the current year – we want to count the tests for all problem reports in the system. Remember that the column DaysInSystem is calculated based on the current date (as determined from the function GETDATE()). When I ran this report, GETDATE() = 12/10/2019, so some of your DaysInSystem will have a different value than mine shown below. The result table is shown below.

	ReportDateOutput	ReportID	Serial#	CompleteDate	DaysInSystem	Model#	ModelName	ReporterName	ReporterType	CountOfTests
1	Oct 12, 2018	26	1902394-01	Dec 15, 2018	64	MASGHI	Maserati Ghibli	Stasiuk, M.	Customer	3
2	Oct 15, 2018	22	1984677-01	Feb 12, 2019	120	LXSED3	Lexus Sedan Medium	Koenigsmann, V.	Customer	1
3	Oct 25, 2018	21	2152365-01	Jan 15, 2019	82	JSSLUX	Jaguar Sedan Luxury	Ventura, H.	Customer	5
4	Sep 14, 2019	30	1902393-03	Sep 25, 2019	11	LXSED5	Lexus Sedan Large	Arterberry, M.	Distributor	0
5	Sep 15, 2019	27	1984677-01	Oct 15, 2019	30	LXSED3	Lexus Sedan Medium	Koenigsmann, V.	Customer	0
6	Sep 22, 2019	28	1952166-02	Not Complete	79	MASGHI	Maserati Ghibli	Koenigsmann, V.	Customer	1
7	Sep 23, 2019	25	1984677-01	Not Complete	78	LXSED3	Lexus Sedan Medium	Koenigsmann, V.	Customer	0
8	Oct 02, 2019	14	1902386-01	Not Complete	69	CHVSUV	Chevy Truck SUV	Starrett, C.	Customer	1
9	Oct 03, 2019	17	1902385-02	Not Complete	68	BMWSC9	BMW Sports Car Large	Lange, V.	Customer	5
10	Oct 10, 2019	15	1902393-02	Oct 10, 2019	0	LXSED5	Lexus Sedan Large	Ferreira, L.	Distributor	0
11	Oct 11, 2019	18	1902385-02	Oct 11, 2019	0	BMWSC9	BMW Sports Car Large	Ferreira, L.	Distributor	0
12	Oct 18, 2019	19	1902393-02	Nov 03, 2019	16	LXSED5	Lexus Sedan Large	Kappel, Y.	Distributor	0
13	Oct 21, 2019	13	1902396-01	Oct 23, 2019	2	MASSUV	Maserati Levante	Dickman, A.	Distributor	3
14	Oct 23, 2019	20	1902392-01	Nov 02, 2019	10	LXSED3	Lexus Sedan Medium	Arterberry, M.	Distributor	2
15	Oct 24, 2019	16	1902392-01	Oct 24, 2019	0	LXSED3	Lexus Sedan Medium	Lupo, H.	Distributor	0
16	Nov 02, 2019	9	1902385-01	Nov 12, 2019	10	BMWSC9	BMW Sports Car Large	Lestrange, E.	Customer	3
17	Nov 02, 2019	10	1902389-02	Not Complete	38	JSSLUX	Jaguar Sedan Luxury	Medved, H.	Customer	4
18	Nov 02, 2019	1	1902389-02	Nov 10, 2019	8	JSSLUX	Jaguar Sedan Luxury	Arrigucci, T.	Customer	3
19	Nov 05, 2019	11	1902390-02	Not Complete	35	LAMHUR	Lamborghini Huracan	Ventura, H.	Customer	5
20	Nov 11, 2019	2	1902390-01	Nov 16, 2019	5	LAMHUR	Lamborghini Huracan	Medved, H.	Customer	1
21	Nov 11, 2019	29	1984677-01	Not Complete	29	LXSED3	Lexus Sedan Medium	Koenigsmann, V.	Customer	0
22	Nov 12, 2019	24	2182534-02	Not Complete	28	JSSLUX	Jaguar Sedan Luxury	Andres, B.	Customer	1
23	Nov 12, 2019	12	1902389-01	Not Complete	28	JSSLUX	Jaguar Sedan Luxury	Dunai, H.	Customer	3
24	Nov 16, 2019	3	1902393-02	Nov 22, 2019	6	LXSED5	Lexus Sedan Large	Comtois, J.	Customer	2
25	Nov 18, 2019	23	1932000-01	Nov 22, 2019	4	CHVSUV	Chevy Truck SUV	Nagi, C.	Customer	0
26	Nov 20, 2019	4	1902391-01	Nov 29, 2019	9	LXSED1	Lexus Sedan hybrid ...	Samuel, I.	Customer	4
27	Nov 26, 2019	5	1902394-01	Not Complete	14	MASGHI	Maserati Ghibli	Stasiuk, M.	Customer	1
28	Nov 30, 2019	6	1902391-01	Not Complete	10	LXSED1	Lexus Sedan hybrid ...	Heam, D.	Customer	5
29	Dec 10, 2019	7	1902393-03	Dec 10, 2019	0	LXSED5	Lexus Sedan Large	Arterberry, M.	Distributor	1
30	Dec 18, 2019	8	1902394-04	Not Complete	-8	MASGHI	Maserati Ghibli	Ventura, H.	Customer	2

6. Which problem report(s) that are not completed (have a complete date that is null) has/have the largest count of tests? Do not use the SELECT TOP option to determine the answer. Remember that the column DaysInSystem is calculated based on the current date (as determined from the function GETDATE()). When I ran this report, GETDATE() = 12/10/2019, so your DaysInSystem will have a different value than mine shown below.

	ReportDateOutput	ReportID	Serial#	CompleteDate	DaysInSystem	Model#	ModelName	ReporterName	ReporterType	CountOfTests
1	Oct 03, 2019	17	1902385-02	Not Complete	68	BMWSC9	BMW Sports Car Large	Lange, V.	Customer	5
2	Nov 05, 2019	11	1902390-02	Not Complete	35	LAMHUR	Lamborghini Huracan	Ventura, H.	Customer	5
3	Nov 30, 2019	6	1902391-01	Not Complete	10	LXSED1	Lexus Sedan hybrid design	Heam, D.	Customer	5

7. Time for a new query! Summarize problem reports issued for each model of vehicle in the database. Count the total number of problem reports and tests by model. Count the total number of injury reports for each model. Determine the earliest date that a problem was reported and the most recent date that a problem was reported for a given model. Count the tests for each model. Determine the earliest date that a test was done and the most recent date that a test was done for a given model. Include all models in the database, whether or not there is a problem report outstanding for that model. Result table:

	ModelNumber	ModelDescription	CountOfReports	CountofInjuryReports	MostRecentReportDate	EarliestReportDate	CountOfTests	MostRecentTestDate	EarliestTestDate
1	ARSTEL	Alpha Romeo Stelvio SUV low clearance sports	0	0	n/a	n/a	0	n/a	n/a
2	BMWSC3	BMW Small sports car 2 door petite seats	0	0	n/a	n/a	0	n/a	n/a
3	BMWSC8	BMW Medium sports car 2 door large seats	0	0	n/a	n/a	0	n/a	n/a
4	BMWSC9	BMW Large sports car 4 doors very low clearance	3	1	Nov 02, 2019	Oct 03, 2019	8	Nov 15, 2019	Oct 08, 2019
5	CHVSUV	High Clearance Chevy Truck 4 door Extended Body	2	0	Nov 18, 2019	Oct 02, 2019	1	Oct 02, 2019	Oct 02, 2019
6	FRDTRK	Ford High Clearance Truck 2 door Fog Lights	0	0	n/a	n/a	0	n/a	n/a
7	JCSUV7	Low clearance crossover SUV combination sports c...	0	0	n/a	n/a	0	n/a	n/a
8	JSSLUX	Jaguar Sedan 2 door medium clearance leather sea...	5	2	Nov 12, 2019	Oct 25, 2018	16	Nov 22, 2019	Oct 26, 2018
9	LAMHUR	Lamborghini Huracan sports car very low clearance	2	0	Nov 11, 2019	Nov 05, 2019	6	Nov 16, 2019	Nov 14, 2019
10	LXSED1	Lexus Sedan 2 door low clearance based on hybrid ...	2	2	Nov 30, 2019	Nov 20, 2019	9	Dec 03, 2019	Nov 21, 2019
11	LXSED3	Lexus Sedan 2 door medium clearance leather seats	6	1	Nov 11, 2019	Oct 15, 2018	3	Oct 15, 2019	Feb 10, 2019
12	LXSED5	Lexus Sedan 4 door medium clearance leather seat...	5	0	Dec 10, 2019	Sep 14, 2019	3	Dec 10, 2019	Nov 21, 2019
13	MASGHI	Maserati Ghibli Luxury Sedan Leather Seats	4	0	Dec 18, 2019	Oct 12, 2018	7	Dec 20, 2019	Oct 21, 2018
14	MASGRT	Maserati Gran Turismo Luxury Sedan Leather Seats	0	0	n/a	n/a	0	n/a	n/a
15	MASSUV	Maserati Levante SUV low clearance sports	1	0	Oct 21, 2019	Oct 21, 2019	3	Oct 21, 2019	Oct 21, 2019
16	RRVSUV	Range Rover medium clearance land rover style SUV	0	0	n/a	n/a	0	n/a	n/a

8. Which model(s) has/have the most problem reports associated with it? Do not use the SELECT TOP option to determine the answer because with other data sets, it might not be just one model as it is in our dataset.

	ModelNumber	ModelDescription	CountOfReports	CountofInjuryReports	MostRecentReportDate	EarliestReportDate	CountOfTests	MostRecentTestDate	EarliestTestDate
1	LXSED3	Lexus Sedan 2 door medium clearance leather seats	6	1	Nov 11, 2019	Oct 15, 2018	3	Oct 15, 2019	Feb 10, 2019

9. List all the tests for the model(s) that have a problem description with the word “battery” in it and also had an injury description. Sort the result table by report ID. The result table is displayed below.

	ReportID	ModelNumber	ModelName	ReportDate	ProblemDescription	TypeDescription	ReportingPerson	TestID	TestDate	TestDescription	TestingPerson
1	4	LXSED1	Lexus Sedan hybrid design	11/20/2019	While travelling down a hill, toy suffered brake fail...	Inadequate Operation - toy does not operate correctly	Samuel, I.	6	11/21/2019	Tested unit travelling down hill at high speed.	Comell, G.
2	4	LXSED1	Lexus Sedan hybrid design	11/20/2019	While travelling down a hill, toy suffered brake fail...	Inadequate Operation - toy does not operate correctly	Samuel, I.	7	11/21/2019	Added increased payload and retried unit travelling ...	Comell, G.
3	4	LXSED1	Lexus Sedan hybrid design	11/20/2019	While travelling down a hill, toy suffered brake fail...	Inadequate Operation - toy does not operate correctly	Samuel, I.	8	11/22/2019	Attempted simultaneous down-shifting and braking ...	Comell, G.
4	4	LXSED1	Lexus Sedan hybrid design	11/20/2019	While travelling down a hill, toy suffered brake fail...	Inadequate Operation - toy does not operate correctly	Samuel, I.	9	11/29/2019	Attempted identical test to previous using new brak...	Comell, G.
5	6	LXSED1	Lexus Sedan hybrid design	11/30/2019	Battery caught fire during use	Inadequate Operation - toy does not operate correctly	Heam, D.	11	11/30/2019	Tested battery for extra heat during normal use and...	Ibbott, N.
6	6	LXSED1	Lexus Sedan hybrid design	11/30/2019	Battery caught fire during use	Inadequate Operation - toy does not operate correctly	Heam, D.	12	11/30/2019	Tested battery for extra heat during normal use and...	Ibbott, N.
7	6	LXSED1	Lexus Sedan hybrid design	11/30/2019	Battery caught fire during use	Inadequate Operation - toy does not operate correctly	Heam, D.	13	12/01/2019	Tested battery for extra heat after extended period ...	Ibbott, N.
8	6	LXSED1	Lexus Sedan hybrid design	11/30/2019	Battery caught fire during use	Inadequate Operation - toy does not operate correctly	Heam, D.	14	12/02/2019	Tested battery at high usage and extended exposu...	Ibbott, N.
9	6	LXSED1	Lexus Sedan hybrid design	11/30/2019	Battery caught fire during use	Inadequate Operation - toy does not operate correctly	Heam, D.	56	12/03/2019	Tested battery for extra heat in high humidity condit...	Ibbott, N.
10	17	BMWSC9	BMW Sports Car Large	10/03/2019	Toy suddenly stopped while travelling at speed a...	Inadequate Operation - toy does not operate correctly	Lange, V.	30	10/08/2019	Check electromagnetic brake for signs of failure.	Ibbott, N.
11	17	BMWSC9	BMW Sports Car Large	10/03/2019	Toy suddenly stopped while travelling at speed a...	Inadequate Operation - toy does not operate correctly	Lange, V.	31	10/09/2019	Check axle/wheel assembly for irregularities.	Ibbott, N.
12	17	BMWSC9	BMW Sports Car Large	10/03/2019	Toy suddenly stopped while travelling at speed a...	Inadequate Operation - toy does not operate correctly	Lange, V.	32	10/09/2019	Check onboard computer for any irregularities.	Ibbott, N.
13	17	BMWSC9	BMW Sports Car Large	10/03/2019	Toy suddenly stopped while travelling at speed a...	Inadequate Operation - toy does not operate correctly	Lange, V.	33	10/10/2019	Attempted to simulate error, but was too funny. Se...	Ibbott, N.
14	17	BMWSC9	BMW Sports Car Large	10/03/2019	Toy suddenly stopped while travelling at speed a...	Inadequate Operation - toy does not operate correctly	Lange, V.	53	11/15/2019	Tested battery life	McCaig, P.

10. Which models have had no problem reports?

	ModelNumber	ModelName	ModelDescription	StandardPrice
1	ARSTEL	Alpha Romeo Stelvio	Alpha Romeo Stelvio SUV low clearance sports	1367.99
2	BMWSC3	BMW Sports Car Small	BMW Small sports car 2 door petite seats	675.55
3	BMWSC8	BMW Sports Car Medium	BMW Medium sports car 2 door large seats	788.99
4	FRDTRK	Ford Super Truck	Ford High Clearance Truck 2 door Fog Lights	855.99
5	JCSUV7	Jaguar Crossover SUV-7	Low clearance crossover SUV combination sports c...	695.99
6	MASGRT	Maserati Gran Turismo	Maserati Gran Turismo Luxury Sedan Leather Seats	1899.99
7	RRVSUV	Range Rover SUV	Range Rover medium clearance land rover style SUV	995.99