

# SANTALYTICS 2020 Submission

**Project :** Mrs Claus's Order list maker and Toys catalogue creator

**How does it helps ?** Creates an orders list based on selection and maintains inventory.

**Datasource :** Toys dataset from the sample datasets

<https://community.alteryx.com/t5/Santalytics-2020/Sample-Data-Sets-and-Ideas/ta-p/668870>

**Description :** This is a set of 1 data prep workflow and 2 analytics apps

**1.Workflow :** For cleaning the data and bring in necessary information into columns and change datatypes

**2.Orders list maker (App) :** The app will let Mrs Claus select an age group and number of kids to gift. The will look into the available stock, sort the product based on Age, Rating, No of review, low cost and creates the order list for the requested number of gifts. And each time the order list is made it updated the inventory with depleted stock. Elves can take the order list and process it

**3.Toys catalogue (App):** the app lets Mrs Claus/Elves to select an age and it will give you a catalogue with information about toys.

## Orders list maker (Demo snapshots)

**App:**

Alteryx Designer x64 Analytic App - 2.Order List Maker

Questions

Select Age group of Kids (Byrs-16yrs)

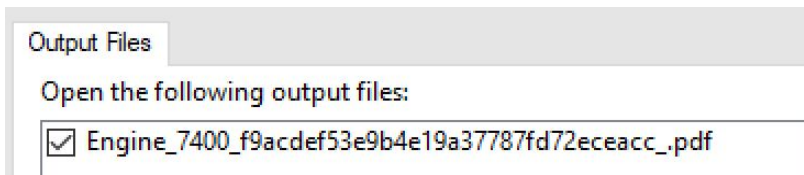
5

Select number of Kids on Nice list

100

< Back Continue Cancel Help

On run it creates a temp pdf:



**Pdf:** pdf can be printed and given to an elf to place orders. CatalogueID is used for reference.

## Mrs. Claus's Orders List

Age	Order	Stock	Comment
6	100	100	All fulfilled :)



CatalogueID	Product Name	Rating	Age	Order	Cost
11	The Pokemon Company Pokemon Trading Card Game XY 7 Ancient Origins Booster Display (Pack of 36)	5	6	8	80
13	Golden Wedding 50th Anniversary Holographic Plastic Banner	5	6	14	1
19	Lego Friends Graphite Pencils (Pack of 8)	5	6	6	5
39	Paul Lamond Dragon 3D Puzzle Vase (160 Pieces)	5	6	10	13
44	My Clippy Bags of Style	5	6	7	18
99	4 x HALF FACE MASK, PAINT MASK DECORATE PLAIN MASKS white mask	5	6	2	9
122	Teenage Mutant Ninja Turtles Control RC Shellraiser with Manhole Cover Cannon	5	6	12	48
123	LEGO Indiana Jones 7624: Jungle Duel	5	6	6	50
137	Quilling Papers 3mm, Pack of 100 - Assorted Yellows	5	6	2	3
147	Wasgij Junior Mystery Scrooge's Surprise Jigsaw Puzzle (100 Pieces)	5	6	30	6
177	Rory Story Cubes Bundle III Dice Mix (Pack of 3)	5	6	3	12

Each time the order list is created it is depleted from the stock.

## Mrs. Claus's Orders List

Age	Order	Stock	Comment
3	10,000	2,600	All not fulfilled :(



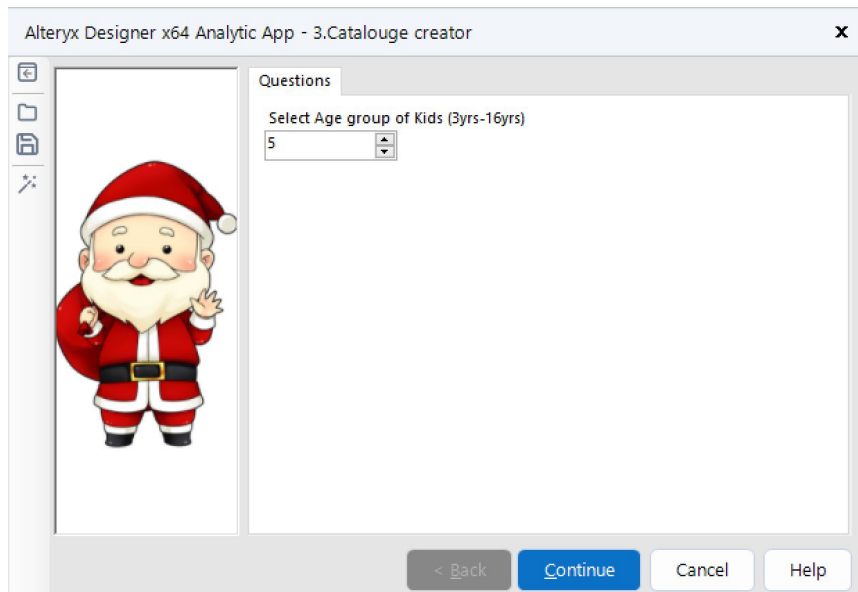
CatalogueID	Product Name	Rating	Age	Order	Cost
4,667	Kinetic Sand, 1lb (454g) Metallic Gold	4	3	17	12
4,668	TY Beanie Baby - SCRAT the Squirrel from Ice Age - plush toy	4	3	3	20
4,669	Le Toy Van TV442 Construction Set	4	3	11	20
4,671	King Horse Cool waterproof and Black Dragon Tattoo sticker for men	4	3	5	2
4,677	niceeshop(TM) Cute 10pcs Velvet Animal Style Finger Puppets Set + Cable Tie	4	3	2	3
4,678	Bullyland Rafiki with Simba Figurine	4	3	18	5
4,680	John Adams Leisure 45-inch Sunset Glow Pool	4	3	17	11
4,681	Flashing Tambourine	4	3	3	11
4,683	Air Fill Only Balloons - Age 4	4	3	6	2
4,685	Dinosaur Train Conductor with Train Car	4	3	16	5

If stock is less then order then it will show not fulfilled (fulfill remaining and go out of stock)

And the app is chained with itself. I.e it will prompt you to place orders until you close the app.

## Toys catalogue (Demo snapshots)

App:



On run it creates a temp pdf:

*Toys Catalogue* age:5

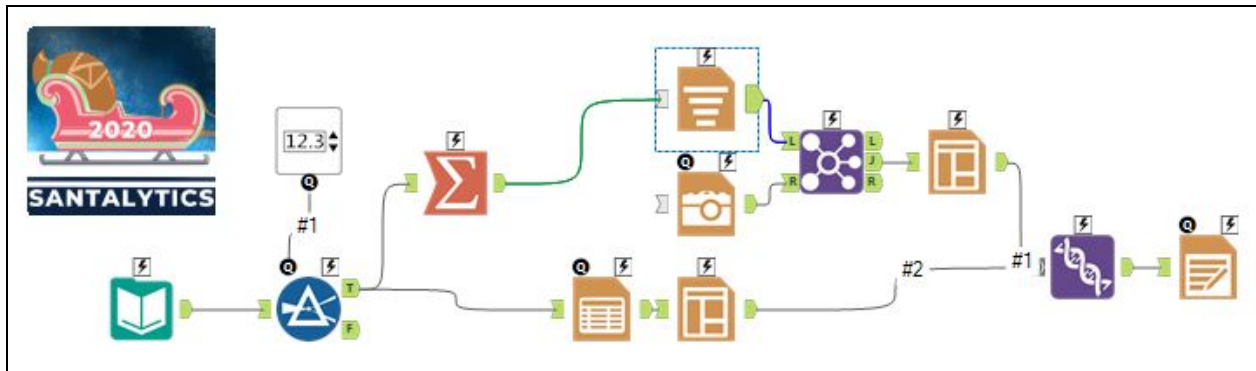


CatalogueID	Product Name	Manufacturer	Product Description	Product Information	Age	Rating
7	Paul Lamond Games Find It Glitz and Glamour Playing Cards	Paul Lamond Games	Product Description Spin it, twist it, shake it, find it! How many of the hidden treasures can you find in this fabulous tube of delights? The Find It Game is a 'Contained Adventure', a family-friendly treasure hunt in a clear, pink-capped, indestructibl	Technical Details Item Weight640 g Product Dimensions26.8 x 9.8 x 9.2 cm Manufacturer recommended age:5 - 3 years Item model numberBOX-39121 Main Language(s)English Number of Game Players1+ Number of Puzzle Pieces29 Batteries Required?No Batteries Includ	5	5
36	LEGO Minifigures Series 9 BATTLEMECH (opened packet)	LEGO	LEGO Collectable Minifigures: Battle Mech Minifigure (Series 9)	Technical Details Item Weight9 g Product Dimensions2.6 x 1 x 4.1 cm Manufacturer recommended age:5 years and up Manufacturer	5	5

And the app is chained with itself. I.e it will prompt you to place orders until you close the app.



### 3. Toys catalogue



Files:

- 1.Data Prep.yxmd
- 2.Order List Maker.yxwz
- 3.Catalogue creator.yxwz
- amazon\_co-ecommerce\_sample.csv
- catalogue.yxdb
- Inventory.yxdb

Working files link

[https://drive.google.com/drive/folders/1lqcvL8Y7Kwa9Yu3yejuPYS\\_Bg4\\_c9z70?usp=sharing](https://drive.google.com/drive/folders/1lqcvL8Y7Kwa9Yu3yejuPYS_Bg4_c9z70?usp=sharing)

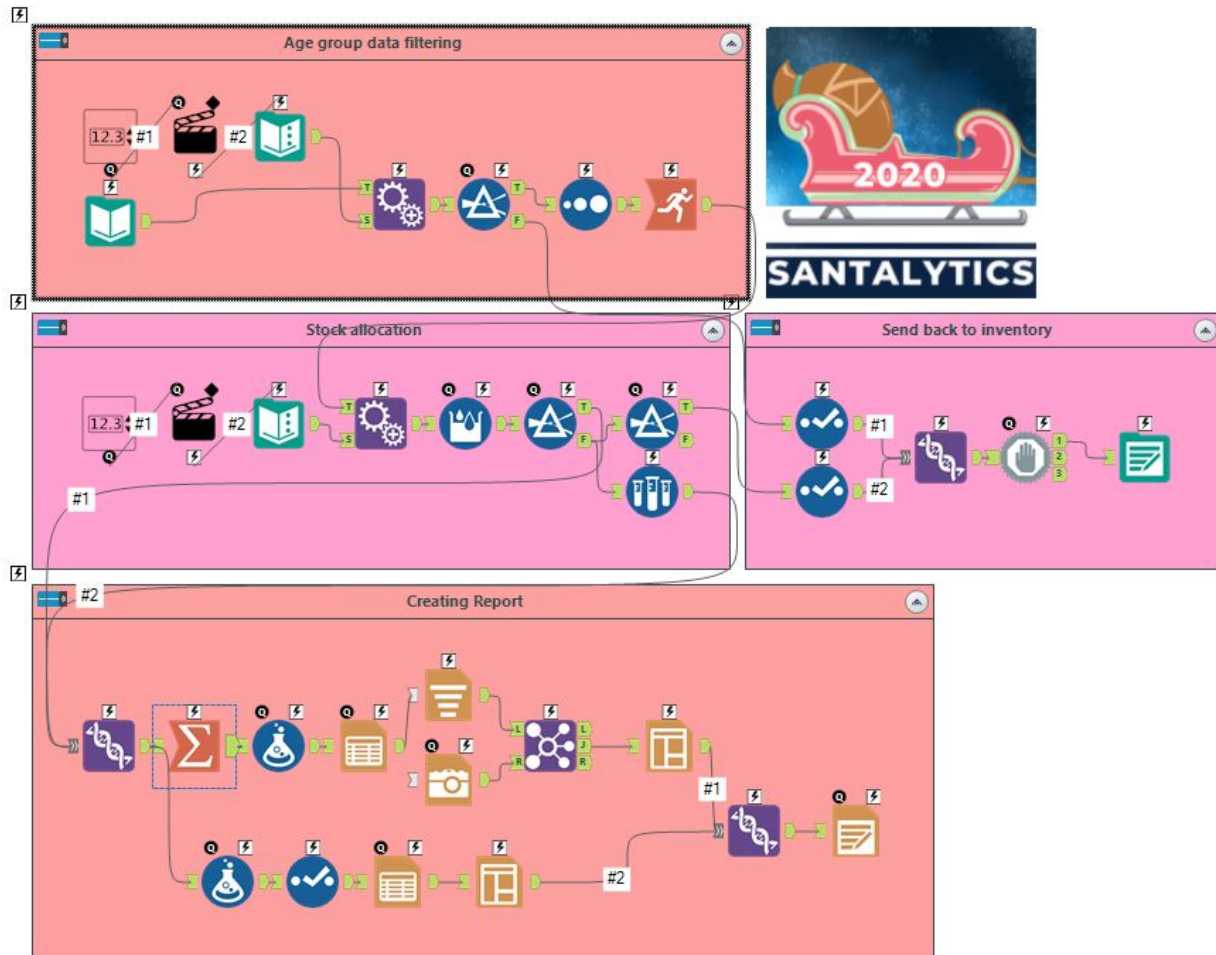
# Explanation Walkthrough

## 1. Workflow for data cleaning



1. **Input Tool:** loading the file
2. **Select Tool:** renaming few columns
3. **Formula Tool:** removing “Â”, “£” and commas from field which will be converted numeric
4. **Filter Tool:**  
`!IsEmpty([price]) // should have price`  
`and !IsEmpty([number_available_in_stock]) //should be in stock`  
`and Contains([product_information], " age") //should have age in information`  
`and Contains([number_available_in_stock], "new") // should be a new toy not used ones`  
`and !IsEmpty([average_review_rating]) // should have a rating`
5. **Formula Tool:** converting price and ratings to number
6. **Regex Tool:** extracting stock number and stock type from raw string
7. **Regex Tool:** extracting age from product\_information raw string
8. **Select Tool:** renaming few columns
9. **Filter Tool:** considering only age is or below 16
10. **RecordID Tool:** setting catalogue id to reference later
11. **Select Tool and Output Tool:** selecting required columns data as Inventory data
12. **Select Tool and Output Tool:** selecting required columns data as catalog data

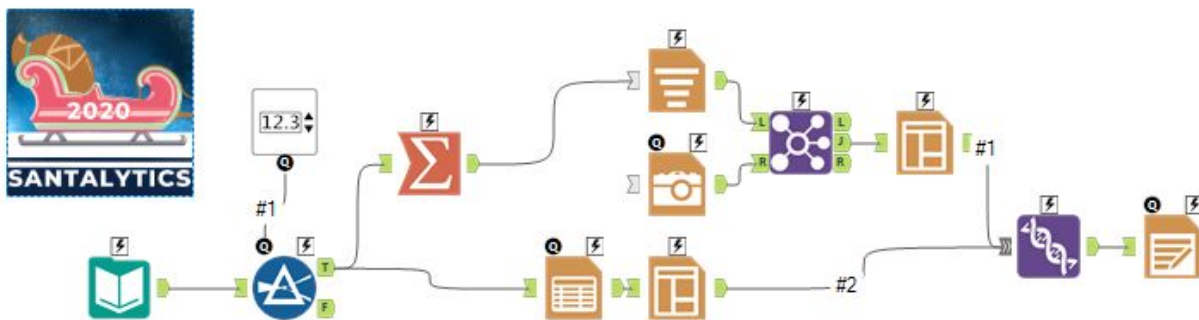
## 2. Order list maker



1. **Input Tool:** loading inventory data
2. **Interface Tools:** to let user select Age group
3. **Append Tool:** appending Selected Age group to the data
4. **Filter Tool(T):** Since toys are marked as age+ usage. Toys recommended for the selected age is age till 3 ages below.
5. **Filter Tool(F):** send back to inventory
6. **Sort Tool:** Nested sort  
Age | descending | nearest age  
Rating | descending | highest rating  
No fo reviews | descending | toys with more reviews  
Cost | Ascending | lowest cost first
7. **Running Total Tool:** add up stock
8. **Interface Tools:** to let user select number of orders
9. **Append Tool:** appending Selected number of orders to the data
10. **Multirow Formula Tool:** depleting stock for orders with taking running total as reference
11. **Filter Tool (T):** push to orders list
12. **Filter Tool (F):** sending back to inventory and writing to inventory db

13. **Sample Tool and Filter Tool:** handling scenario where a product has fulfilled orders and still has stock left.
14. **Send back to inventory block:** selecting required columns and writing the left out inventory back to inventory db
15. **Creating Report block:** used for creating the necessary tables, merging them to create the report of orders list. Formula tool checks whether stock is the same as order and adds a comment.
16. **Interface Designer:** The app is set to chain itself. I.e once you have generated the order list it will let you to generate more order list till you exit

### 3. Toys catalogue



1. Input Tool: loading data catalogue dat
2. Filter Tool: lets you select an Age group
3. Rest of the workflow: used for creating the necessary tables, merging them to create the report of toys catalogue
4. Interface Designer: The app is set to chain itself. I.e once you have generated the toys catalogue it will let you to generate more toys catalogue till you exit.
- 5.

For any suggestion/clarification feel free to reach out at [atcodedog05.discussions@gmail.com](mailto:atcodedog05.discussions@gmail.com)

Looking forward for others solution : )

