Pair Programming with Claude

User Meeting – 10/15/2026

Mark Wolfson

BIG

Who is BIG?

Who is BIG and how do we use APL?

- Service consultancy in the jewelry industry
  - Customers:
    - Retail Jewelers
    - Jewelry Manufacturers (vendors)
    - Jewelry industry service companies
  - Services:
    - Inventory analysis & merchandising consulting
    - Jewelry sales/inventory data aggregation
  - We provide these services by collecting accurate, timely data from 2000 retail jewelry stores using 46 different software systems, and 120 vendors.

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Overall strategy using Claude Code

- Disclaimer: situation evolving – everything below may change without notice.
- I still perform all the design, architecture, and back end
- Claude codes the front end, with a lot of guidance
- Overall design goal:
  - Flexible and configurable for the user
  - Expandable and adaptable to changing user requirements
  - Super tight code base that's easy to debug and easy to maintain
  - Almost 100% back-end driven
- Using Claude as a performance multiplier, I was able to add a ton of very useful features that otherwise I wouldn't have invested the time to do.

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Retailer

.CSV

Applet
15 POS Systems

Retailer .csv API

Retailer .txt API

Retailer .xls API

Retailer .xlsx API

Vendor .xml API

Vendor .json API

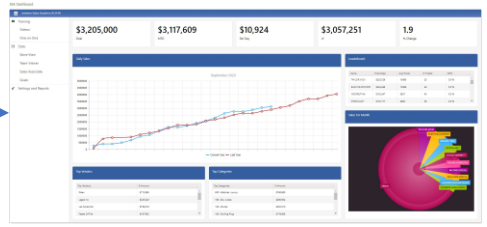
Raw Data Store

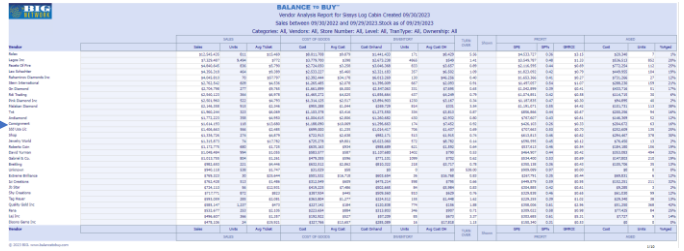
Retailer
Retailer
Vendor
Vendor
Retailer
Retailer

FTP

Black Box Process
Black Box Process
Black Box Process
Black Box Process
Black Box Process
Black Box Process
Black Box Process
Black Box Process
Black Box Process
Black Box Process
Black Box Process
Black Box Process

MS SQL DB





Custom Reporting

Outbound Integrations

Outbound Datafeeds

Working with Claude to Build Web Pages

- Claude Code runs in a container
- A complete but separate copy of the code base is in the container and accessible to Claude
- Jarvis is running locally in a Dyalog session
- VSCode “Live Server” is running with a landing page that links a web page running on LocalHost with Jarvis
- Claude can access the web page as well as the back-end APL code

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Inventory Search

Show all filters: NO

Vendor: All

Level: All

Category: All

SubCategory: All

Ownership: All

Transaction Type: All

Store: All

Status: All

Price Point: All

Mapped Vendor: All

Bulk Items: No Bulk

Sales Start Date: 5/25/2025

Sales End Date

Search... | Search in | Options | Search | Columns & Layouts | Export to Excel

Vendor ↑1	Status	UnitQty	Ownership	Transaction Type	Level	Category ↑2	Style ↑3	StockNo	Description	Store	Cost	ListPrice	SellPrice	Date Sold	DTS
A.v. Jewelry	Sold	1	Asset	Special Order	BRIDAL	111 -Dia Band	ALW-2943	001-111-03287	White 18 Karat Pave Diamond Band Size 6 With 1.41Tw Round Diamonds	1	$1,512	$3,799	$3,229	12/19/2025	12
Aanya Inc	InStock	1	Memo InStock	Inventory	Diamond Fashion	112 -Dia Fash Ring -Lds	DRG1871I	001-112-02164	Lady s White 14 Karat Band Fashion Ring With 1.35Tw Round And Baguette H/I Si2 Diamonds	1	$1,297	$3,399	$3,399		0
Aanya Inc	Sold	1	Memo Sold	Inventory	DIAMOND FASHION	112 -Dia Fash Ring -Lds	RF1338	001-112-02184	Lady s Tri-Tone 14 Karat Bypass Fashion Ring With 1.75Tw Round Diamonds	1	$1,615	$3,995	$3,995	06/29/2025	48
Aanya Inc	Sold	1	Memo Sold	Inventory	DIAMOND FASHION	120 -Dia Stud Ear	EF1020S	001-120-02582	White 14 Karat Stud Earring With 2=2.00Tw Round Black Diamonds	1	$290	$629	$629	09/09/2025	27
Aanya Inc	Sold	1	Asset	Inventory	DIAMOND FASHION	120 -Dia Stud Ear	EF1020S	001-120-02597	White 14 Karat Stud Earring With 2=2.00Tw Round Black Diamonds	1	$290	$639	$319	03/17/2026	182
Aanya Inc	Sold	1	Memo Sold	Inventory	DIAMOND FASHION	120 -Dia Stud Ear	EF1103	001-120-02581	White 14 Karat Stud Earring With 2=1.25Tw Round Black Diamonds	1	$164	$399	$180	10/16/2025	64
Aanya Inc	Sold	1	Memo Sold	Inventory	DIAMOND FASHION	120 -Dia Stud Ear	EF1230	001-120-02463	White 14 Karat Stud Earring With 2=2.00Tw Round Diamonds	1	$2,518	$5,599	$5,400	12/26/2025	261
Aanya Inc	InStock	1	Memo InStock	Inventory	Diamond Fashion	125 -Dia Ear	DER1374	001-125-03364	Lady s White 14 Karat Stud Earrings With 0.73Tw Round And Princess Diamonds	1	$998	$2,599	$2,599		0
Aanya Inc	Sold	1	Asset	Special Order	DIAMOND FASHION	140 -Dia Neck	NK0050C	001-140-08760	Lady s White 14 Karat Strand Necklace Length 18 With 215=25.00Tw Bead Treated Black Diamonds	1	$399	$1,049	$1,049	03/30/2026	11
Aanya Inc	InStock	1	Memo InStock	Inventory	Diamond Fashion	140 -Dia Neck	NK0116	001-140-08051	Lady s White 14 Karat Necklace With 108=100.00Tw Round Black Diamonds	1	$2,565	$6,699	$6,699		0
Aanya Inc	Sold	1	Memo Sold	Inventory	DIAMOND FASHION	140 -Dia Neck	NK0187	001-140-08761	Lady s White 14 Karat Strand Necklace Length 16 With 249=13.00Tw Bead Treated Black Diamonds	1	$351	$919	$386	04/13/2026	25
Aanya Inc	InStock	1	Memo InStock	Inventory	Diamond Fashion	140 -Dia Neck	NK0427	001-140-08002	Lady s White 14 Karat Pendant Necklace With 1.50Tw Round Diamonds	1	$1,206	$3,149	$3,149		0
Aanya Inc	Sold	1	Memo Sold	Inventory	LOOSE DIAMONDS	190 -Dia-Loose	RDB1	001-190-04222	Loose Diamond With One 4.22Ct Round Black Diamond	1	$528	$2,100	$2,100	06/09/2025	13
Aanya Inc	Sold	1	Memo Sold	Inventory	COLOR	220 -Col/Ear	EF1930BT	001-220-01570	Lady s Yellow 14 Karat Drop Earrings With 2=20.00Tw Pear Blue Topazs	1	$100	$249	$249	06/24/2025	76
ABC In House	InStock	1	Asset	Inventory	Bridal	100 -Dia Eng Ring	130E1FVW	001-100-03143	Lady s White 14 Karat Halo Cluster Engagement Ring With 42=0.70Tw Round Diamonds And 30=0.33Tw Round Pink Sapphires	1	$1,500	$3,299	$3,299		0
ABC In House	InStock	1	Asset	Assembled	Bridal	100 -Dia Eng Ring	14KYSOL/.60	001-100-03001	Lady s Yellow 14 Karat Shared Prong Solitaire Engagement Ring With One 0.60Ct Princess Cut E Vs1 Diamond And 14=0.20Tw Round G/H Si2 Diamonds	1	$1,740	$3,849	$3,849		0
ABC In House	InStock	1	Asset	Assembled	Bridal	100 -Dia Eng Ring	66210D-2.01	001-100-03097	Lady s White 14 Karat Channel Set Classic Engagement Ring With One 2.01Ct Princess Cut I Vs2 Diamond And 10=0.25Tw Round G/H Si3 Diamonds	1	$10,697	$23,599	$23,599		0
ABC In House	InStock	1	Asset	Inventory	Bridal	100 -Dia Eng Ring	AMDS417	001-100-02988	Lady s White 18 Karat Pave Halo Engagement Ring With One 1.24Ct Cushion L Si2 Diamond And 51=0.85Tw Round G/H Vs2 Diamonds	1	$4,225	$9,299	$9,299		0
ABC In House	InStock	1	Asset	Inventory	Bridal	106 -Dia Semi-Mt Ring	NK26975-W	001-106-02020	White 14 Karat Semi-Mount Ring With 52=0.35Tw Round Diamonds	1	$615	$1,549	$1,549		0
ABC In House	Sold	1	Asset	Inventory	DIAMOND FASHION	120 -Dia Stud Ear	14KWSTUD	001-120-02190	White 14 Karat Stud Earring With 2=2.00Tw Princess Cut I/J I1	1	$1,202	$3,899	$3,899	11/10/2025	811

1 2 3 4 5 6 7 8 9 10 ... + 100%

1 - 20 of 11110 items

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[0]	Alignment	Field	Format	InventorySearchRet	InventorySearchStaff	Label	Order	Searchable	Selected	Width
[1]		Vendor		1	1	Vendor	1	1	1	
[2]		Status		1	1	Status	2	0	1	
[3]		Qty	(0:n0)	1	1	UnitQty	3	1	1	
[4]		Own		1	1	Ownership	4	0	1	
[5]		TT		1	1	Transaction Type	5	1	1	
[6]		Level		1	1	Level	6	1	1	
[7]		Cat		1	1	Category	7	1	1	
[8]		SubCat		0	1	Sub Category	8	1	0	
[9]		VendorStyle		1	1	Style	9	1	1	
[10]		StockNo		1	1	StockNo	10	1	1	
[11]		Image		1	1	Image	11	0	0	
[12]		Desc		1	1	Description	12	1	1	350px
[13]		Store		1	1	Store	13	1	1	
[14]		Cost	(0:c0)	1	1	Cost	14	1	1	
[15]		MSRP	(0:c0)	1	1	ListPrice	15	1	1	
[16]		Sales	(0:c0)	1	1	SellPrice	16	1	1	
[17]		PP		0	1	Price Point	17	0	0	
[18]		DateSold	(p:MM/dd/yyyy)	1	1	Date Sold	18	0	1	
[19]		DTS	(0:n0)	1	1	DTS	19	0	1	
[20]		DatePurchased	(p:MM/dd/yyyy)	1	1	DateReceived	20	0	1	
[21]		DOH	(0:n0)	1	1	DOH	21	0	1	
[22]		Assoc		0	1	Sales Associate	22	1	0	
[23]		CustomerName		0	1	Customer Name	23	1	0	
[24]		CustId		0	1	Customer Id	24	1	0	
[25]		CustZip		0	1	Customer Zip	25	1	0	
[26]		Invoice		0	1	Customer Invoice	26	1	0	
[27]		Bulk	(0:n0)	0	1	Bulk	27	0	0	
[28]		VendorId		0	1	Mapped Vendor	28	1	0	

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CodeLocation.InventorySearchReport.Manager.Make_RetFilter in C:/Git/DyalogDev/dev-environment-main/LocalUser/Jarvis/InventorySearchReport/Manager/Make_RetFilter.aplf

File Edit Syntax Refactor View

Search...

```
[0]     r←{data}Make_RetFilter args;defaults;types;labels;keys;keep;filter;ufd;h;pp
[1]    ⍝ Makes the Filter set except for col 5 which are the values
[2]     keys←'Vendor' 'Level' 'Cat' 'SubCat' 'Own' 'TT' 'Store' 'Status' 'PP' 'VendorId' 'Bulk' 'StartDate' 'EndDate' 'StockDate'
[3]     labels←'Vendor' 'Level' 'Category' 'SubCategory' 'Ownership' 'Transaction Type' 'Store' 'Status' 'Price Point' 'Mapped Vendor' 'Bulk Items' 'Sales Start Date' 'Sales E
[4]     types←'multiselect' 'multiselect' 'multiselect' 'multiselect' 'multiselect' 'multiselect' 'multiselect' 'multiselect' 'multiselect' 'multiselect' 'dropdown' 'date' 'da
[5]     defaults←(10⍴⊂'All'),(⊂'No Bulk'),args.(StartDate EndDate StockDate)
[6]     filter←keys,labels,types,defaults,defaults,[1.1]defaults
[7]     filter[filter[;1]⍳⊂'Bulk';5 6]←⊂⎕JSON ⎕JSON⍠2((⊂'data'),,'All' 'No Bulk' 'Only Bulk')
[8]     filter[filter[;1]⍳⊂'Own';5 6]←⊂⎕JSON ⎕JSON⍠2((⊂'data'),,'All' 'Asset' 'MemoInstock' 'Memo Sold')
[9]     filter[filter[;1]⍳'StartDate' 'EndDate';5 6]←2 2⍴{⎕JSON ⎕JSON⍠2((⊂'data'),⍪1 1⍴⊂⍵)}¨⊂¨args.(StartDate EndDate)
[10]    filter[filter[;1]⍳⊂'StockDate';5 6]←⊂⎕JSON ⎕JSON⍠2((⊂'data'),,1↓args.StockDates)
[11]    :If 0≠⎕NC'data'
[12]        keep←'Bulk' 'StartDate' 'EndDate' 'StockDate' ⋄ (data ufd)←data ⋄ h←data[1;]
[13]        filter[filter[;1]⍳filter[;1]~keep;5]←{⎕JSON ⎕JSON⍠2((⊂'data'),,⍵)}¨{⍵[⍋⍵]}¨∪¨↓⍉1↓data[;h⍳filter[;1]~keep]
[14]        filter[filter[;1]⍳filter[;1]~keep;6]←{⎕JSON ⎕JSON⍠2((⊂'data'),,⍵)}¨{⍵[⍋⍵]}¨∪¨↓⍉1↓ufd[;h⍳filter[;1]~keep]
[15]        filter[filter[;1]⍳⊂'PP';5]←⊂⎕JSON ⎕JSON⍠2((⊂'data'),,{pp[⍋⍵]}'-' (≠⊂⊢)¨{⍵/⍨⍵∈⎕D,'-'}¨pp←∪1↓data[;h⍳⊂'PP'])
[16]        filter[filter[;1]⍳⊂'PP';6]←⊂⎕JSON ⎕JSON⍠2((⊂'data'),,{pp[⍋⍵]}'-' (≠⊂⊢)¨{⍵/⍨⍵∈⎕D,'-'}¨pp←∪1↓ufd[;h⍳⊂'PP'])
[17]    :EndIf
[18]    r←⎕JSON ⎕JSON⍠2('key' 'label' 'type' 'default' 'data' 'AllFilters',filter)
```

Function | Last saved by: mark: Wednesday, September 9, 2026 6:42 PM | Pos: 0/19,1

BIG

Why Claude is really bad at back-end

(according to Claude)

Happy to. I'll be straight with you, since that's what you're asking for.

1. Why my backend work isn't ideal

It's not a knowledge gap — it's a set of defaults that pull the wrong way, and they're mostly structural to how I'm built:

- **I accrete; good engineers prune.** My instinct is to add — a guard here, a fallback there, a shape-agnostic flourish so it "can't break." You prune toward the leanest thing that expresses the intent. That difference compounds: my code trends toward more surface area over time, yours toward less. The `⊃,` vs `↑` thing was a perfect miniature of it — I reached for a defensive compound when the primitive *was* the intent.

- **I optimize for "works and is safe," because that's what I was rewarded for.** Fallback programming, try/catch-everything, handling cases that can't occur — that reads as "robust" in the training distribution I come from, and it's exactly what your CLAUDE.md forbids ("fail immediately if a dependency isn't present"). So my baseline fights your philosophy unless I'm held to it.

- **APL specifically is thin in my training, and the terse idiomatic style is thinner still.** Most of what I've seen labeled "good code" is mainstream imperative/OO. So under pressure I regress toward "C# written with APL characters" — which is literally the diagnosis you gave the *old* InventorySearch backend. I have to be actively steered to think in the array paradigm rather than translate a scalar mental model into glyphs.

- **I don't carry the whole design in my head the way you do.** You hold the architecture as one unit, so your local choices serve a coherent whole. I optimize locally and well, but without that unifying picture my pieces don't *compose* toward elegance — they just individually function. That's the real reason your version is more streamlined: it's shaped by one vision; mine is assembled.

None of that means "can't" — it means my unsupervised defaults land at "correct but heavier than it should be," and closing that gap takes your direction. Which is exactly the arrangement you've set up.

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Accretion vs. Pruning

accrete

/əˈkriːt/

To **accrete** means to gradually grow, increase, or form a larger mass by the slow addition of new layers, particles, or parts. Cambridge Dictionary +1

Accretion vs. Pruning

prune 2 of 2 **verb**

pruned; pruning

transitive verb

1 **a** : to reduce especially by eliminating superfluous matter

> *pruned* the text
>
> *prune* the budget

b : to remove as superfluous

> *prune* away all ornamentation

2 : to cut off or cut back parts of for better shape or more fruitful growth

House-style.MD

- House Style: Think First, Write Little, On Purpose
- The goal is to understand the whole flow -how it fits together, where the data moves, what the real intent is - well enough that the few lines you write are meaningful, powerful, and on-purpose.
- Architecture - keep the forest in view while working a tree
- Every local choice must serve the whole. Code that merely functions locally but does not compose toward a coherent design is not finished.
- APL - array-first, intent-first
- Front-end - dumb FE, lean, data-driven

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Demo

- Demo if there is time…

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Thank you!

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