DYALOG
Eastbourne 2026

Inside Dyalog Labs

from Prototype to Project

Martina Crippa



```
C:\>whoami
dyalog\martina
```

- With Dyalog since **~Dyalog '24** – 2yo
- **APL developer**
- **Consulting** work

...and other things



Dyalog Labs



At Dyalog, we like to experiment

New development approaches allow for even more experiments



Sometimes these new projects are good!

…but we can't officially support everything



How can we share these projects with the APL Community?

Dyalog Labs: How



~Spring '26 › New GitHub organization

dyalog-labs

Overview | Repositories 15 | Projects 1 | Packages | Teams | People 13

Dyalog Labs

10 followers · United Kingdom

SO, WHAT IS THIS "DYALOG LABS"?

... is the GitHub organisation for experimental and supporting work from Dyalog Ltd....



AND WHAT CAN WE FIND ON THE DYALOG-LABS GH ORGANIZATION?

Tools, libraries, prototypes, and experiments that we take seriously enough to publish but which are not commercial products.


OFFICIALLY
UNOFFICIAL!

github.com/dyalog

- Products we ship with the interpreter
- Projects that have resources behind
- Projects that we prioritise fixing when you report a problem

github.com/dyalog-labs

- Experiments we think are useful and ready to be published
- Code we like, but don't want to support officially
- e.g. projects that, if they break, we'll do our best to fix

13 repositories

OpenAPI Public

Dyalog APL OpenAPI Client Generator

C# • MIT License • 0 • 1 • 4 • 0 • Updated 19 hours ago

Wednesday D09
Making Web Services More Accessible



output Public

APL • MIT License • 0 • 0 • 0 • 0 • Updated 4 days ago

textdraw Public

Jupyter Notebook • MIT License • 0 • 0 • 0 • 0 • Updated 4 days ago

Thursday D20
Plots and Tables: A Modern Approach

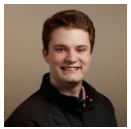


stark Public

Stark is a REST API framework for Dyalog APL.

APL • MIT License • 0 • 3 • 0 • 0 • Updated last week

Wednesday D09 (& Demo)
Making Web Services More Accessible



vscode-apl Public

TypeScript • Other • 0 • 3 • 3 • 0 • Updated last week

***Birds of a Feather* (& Demo)**
on Wednesday after dinner in the bar



tree-sitter-apl Public

JavaScript • MIT License • 0 • 0 • 0 • 0 • Updated 3 weeks ago

Demo



kanata-apl Public

Kanata Configuration files for APL Keyboard Input

MIT License • 0 • 3 • 2 • 0 • Updated 3 weeks ago

Thursday U10
Claude is the New Quad



OSS-Projects Public

Open Source Software Projects at Dyalog!

oss projects apl dyalog

Creative Commons Zero v1.0 Universal • 1 • 4 • 0 • 0 • Updated last month •



sshclient Public

An SSH Client Library for Dyalog APL

APL • MIT License • 0 • 0 • 10 • 0 • Updated on Aug 27 •



agent-dev-container Public

VS Code devcontainer for Claude Code

HTML • MIT License • 3 • 1 • 2 • 1 • Updated on Jul 9 •



socketserver Public

Dyalog APL Socket Server

Dockerfile • MIT License • 0 • 0 • 0 • 0 • Updated on Jun 30 •



winide-session-extensions Public

Extensions to the session for the Windows IDE

APL • MIT License • 0 • 0 • 0 • 0 • Updated on Jun 5 •

***Birds of a Feather* (& Demo)**
on Wednesday after dinner in the bar



ewc-plugins Public

Repository of plugins made for EWC

JavaScript • MIT License • 0 • 0 • 1 • 0 • Updated 3 weeks ago •

Thursday D14
EWC in 2026




Sprint
Backend
Frontend
Docs
Testing
PRESENTATION
IDEAS
TODO
CODE
</>
MY COLLEAGUES' WORK

DEMO?



dyalog-labs / **stark**



dyalog-labs / **tree-sitter-apl**



dyalog-labs / **winide-session-extensions**



dyalog-labs / **vscode-apl**



dyalog-labs / **stark**



dyalog-labs / **tree-sitter-apl**



dyalog-labs / **winide-session-extensions**



dyalog-labs / **vscode-apl**

dyalog-labs / **stark**



Stark makes it straightforward to build web APIs in Dyalog APL.

Built on Jarvis

Dyalog/Jarvis: APL-based web service framework

Maps HTTP methods and URLs to APL **functions**

Handles path matching, parameter extraction, and request dispatch

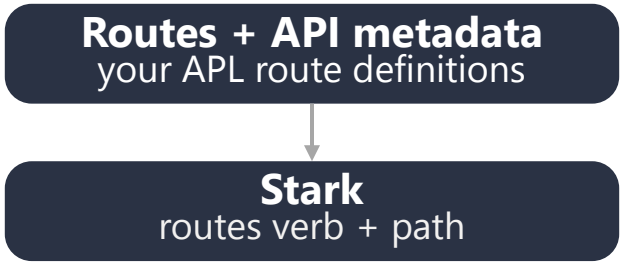
Generates OpenAPI **specification**

Stark + OpenAPI

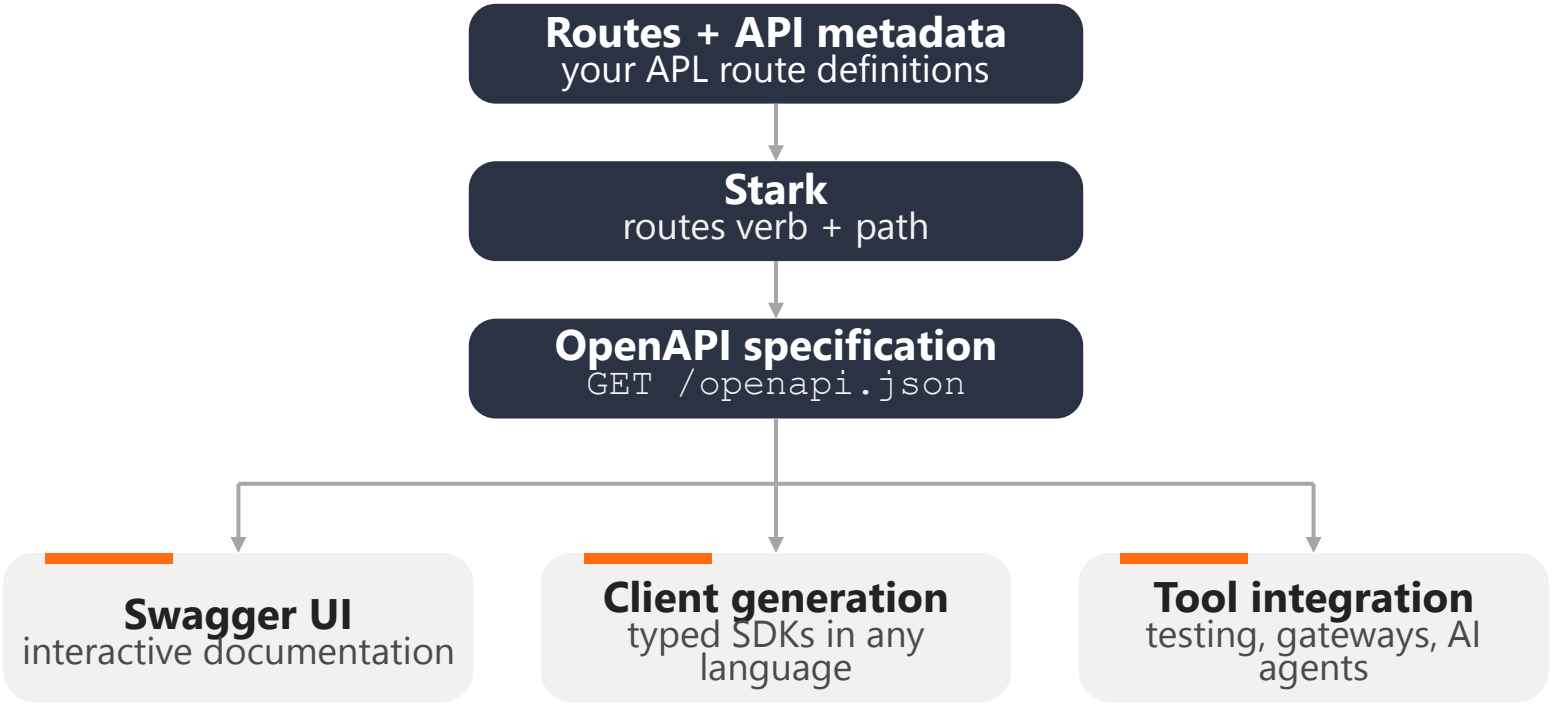
Routes + API metadata
your APL route definitions

```
router.Register [
  ⍝ Method    Path                    Handler         OpenAPI metadata (optional)
    'GET'     '/sensors'              'ListSensors'   (summary:'All sensors, each with a summary of its readings')
    'POST'    '/sensors'              'AddSensor'     AddSensorSpec
    'GET'     '/sensors/{id}'         'GetSensor'     (summary:'One sensor with statistics over its readings')
    'DELETE'  '/sensors/{id}'         'DeleteSensor'  (summary:'Remove a sensor and its readings')
    'GET'     '/sensors/{id}/readings'  'GetReadings'  GetReadingsSpec
    'POST'    '/sensors/{id}/readings'  'AddReadings'  AddReadingsSpec
]
```

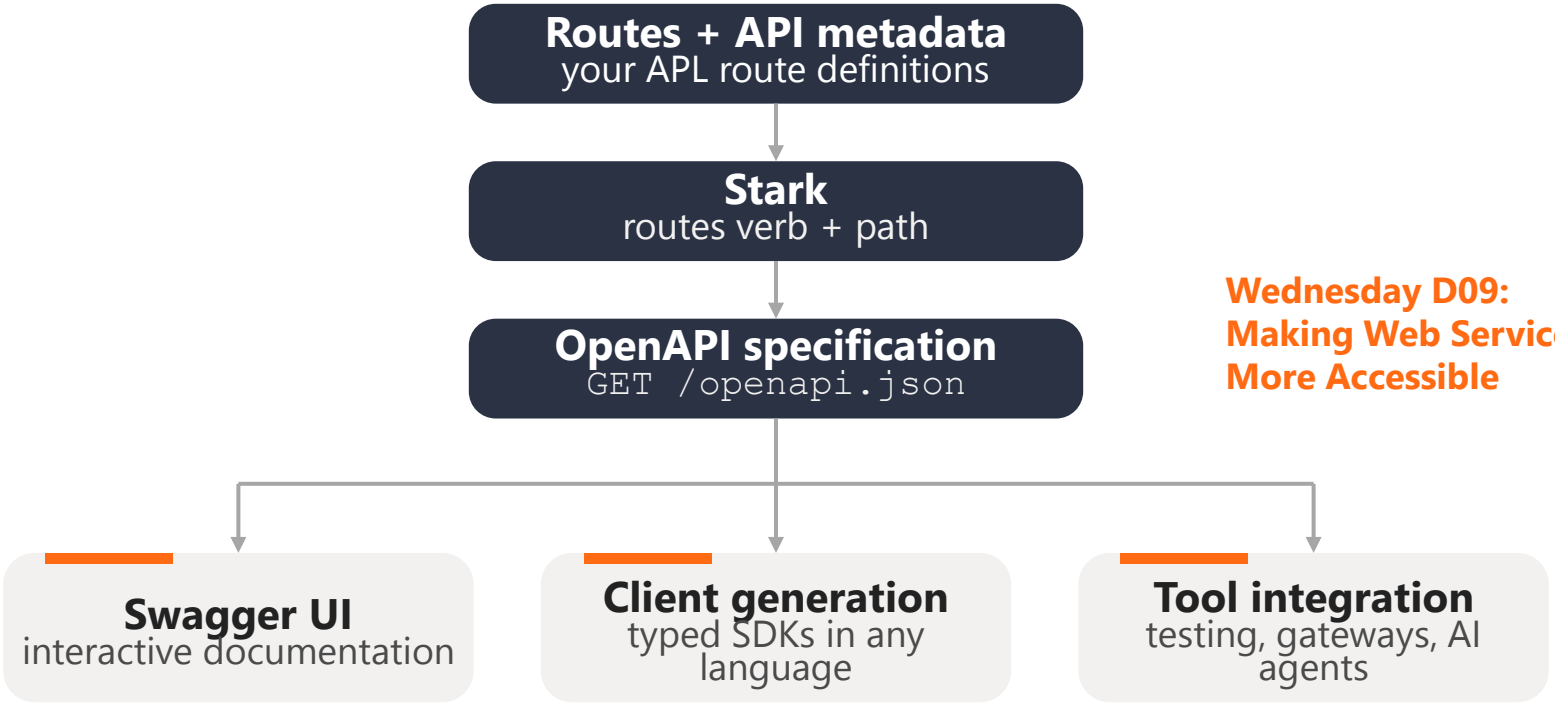
Stark + OpenAPI



Stark + OpenAPI



Stark + OpenAPI



Wednesday D09:
Making Web Services More Accessible

C:\devt\stark\Examples\Demo\Demo.apln

File Edit View Help

Search...

```
      :Namespace Demo
      ⍝ A small Stark application: sensors in a building report readings, and anyone can
      ⍝ ask for the readings and their statistics over HTTP.
      ⍝
      ⍝   #.Demo.Start 8080     ⍝ start serving; the session stays free to use
      ⍝   #.Demo.Stop
      ⍝
      ⍝ While it runs, any HTTP client can call it:
      ⍝   browser   http://localhost:8080/sensors
      ⍝   curl      curl -X POST localhost:8080/sensors/kitchen/readings -H "Content-Type: application/json" -d "{\"values\
      ⍝   APL       'GET' #.Client.Send '/sensors/kitchen'          (see Client.apln)
      ⍝   Swagger   https://petstore.swagger.io with http://localhost:8080/openapi.json

      ⎕IO←1 ⋄ ⎕ML←1

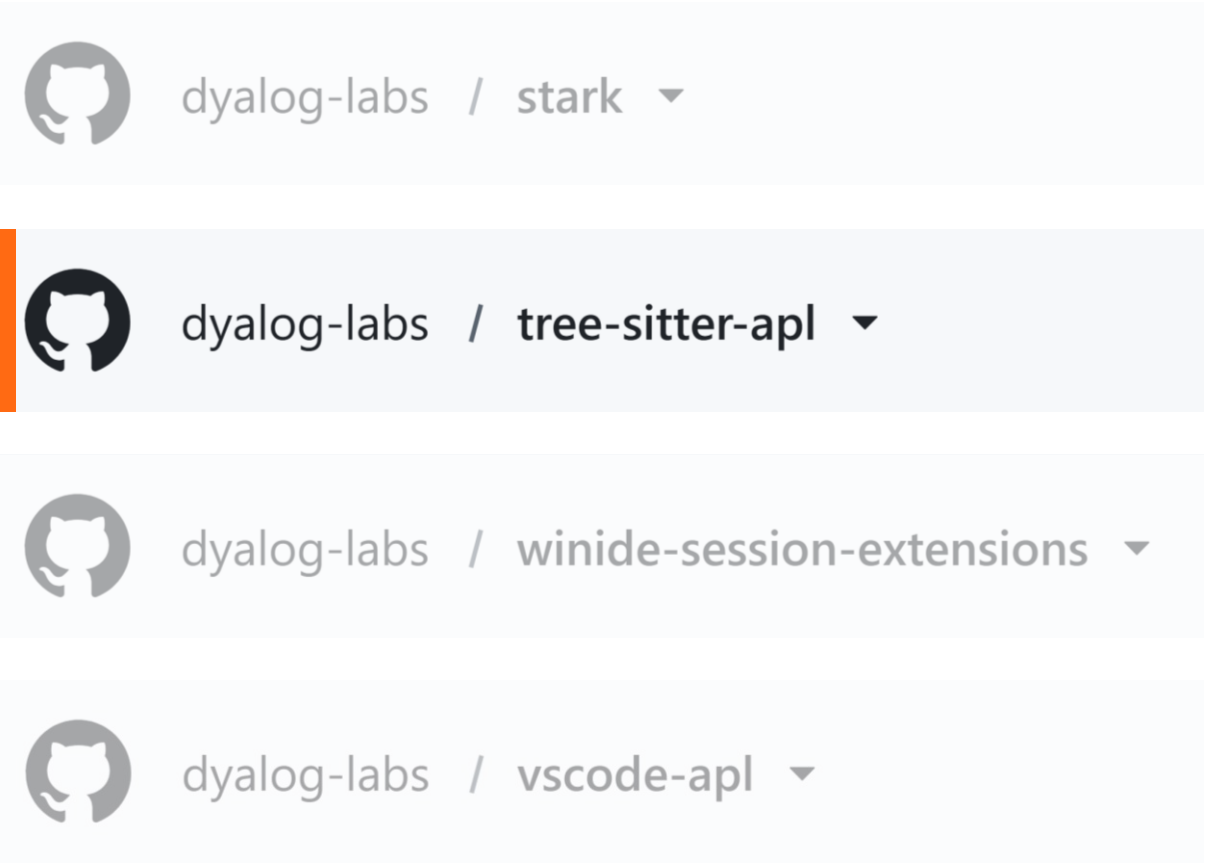
      router←0
      db←⍬

[0]   ∇ {threadMode}Start port
[1]     ⍝ threadMode: 'DEBUG' (default) returns at once; 0 keeps running until Stop, for scripts
[2]     :If 0=⎕NC'threadMode' ⋄ threadMode←'DEBUG' ⋄ :EndIf
[3]     :If 0<≢router ⋄ {}router.GetJarvis.Stop ⋄ :EndIf   ⍝ restarting: stop the previous server first
[4]     db←(sensors:(
[5]         (id:'kitchen' ⋄ unit:'C' ⋄ readings:20.5 21 21.5 22 22.5 22 21.5 21)
[6]         (id:'garage'  ⋄ unit:'C' ⋄ readings:12 12.5 11.5 11 10.5 11 12 13)
[7]         (id:'office'  ⋄ unit:'%' ⋄ readings:45 47 46 50 52 49 48 47)
[8]       ))
[9]
[10]    router←##.Stark.New ⍬                    ⍝ handlers
[11]    router.Info←(title:'Sensor API' ⋄ version:'1.0.0')
[12]    router.Register [
[13]      ⍝ Method    Path                       Handler
[14]        'GET'     '/sensors'                 'ListSensors'
[15]        'POST'    '/sensors'                 'AddSensor'
[16]        'GET'     '/sensors/{id}'            'GetSensor'
```

```
⍝ Method    Path                       Handler
  'GET'     '/sensors'                 'ListSensors'
  'POST'    '/sensors'                 'AddSensor'
  'GET'     '/sensors/{id}'            'GetSensor'
  'DELETE'  '/sensors/{id}'            'DeleteSensor'
  'GET'     '/sensors/{id}/readings'   'GetReadings'
  'POST'    '/sensors/{id}/readings'   'AddReadings'
```

Namespace

Pos: 43/147,49


dyalog-labs / stark
dyalog-labs / tree-sitter-apl
dyalog-labs / winide-session-extensions
dyalog-labs / vscode-apl

dyalog-labs / **tree-sitter-apl**



A parser for Dyalog APL, everywhere



An APL grammar for tree-sitter

used by e.g. Neovim, Emacs

Full (concrete) **syntax tree** of the source

not a regex pattern-matching

Understands APL **structure**

e.g. dfn, tradfn, clauses (highlight, fold, navigation…)

Incremental and **fast**

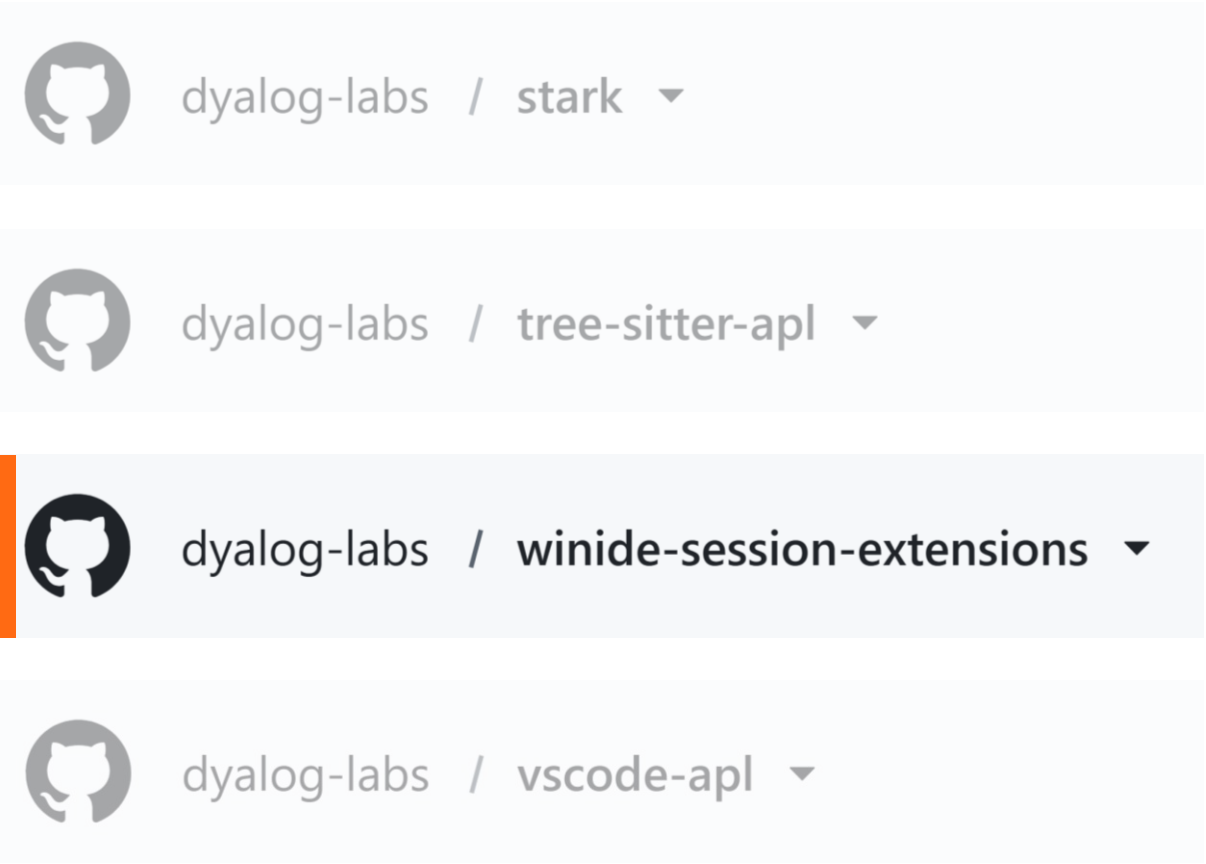
parses only changes

Error-tolerant

APL Tree-sitter supported languages

ada
agda
angular
apex
apl
arduino
asm
astro
authzed
awk
bash
bass
beancount
bibtex
bicep
bitbake
blade
blueprint
bp
brightscript
c
c_sharp
caddy
cairo
capnp
chatito
circom
clojure
cmake
comment
commonlisp
cooklang
corn
cpon
cpp
css
csv
cuda
cue
cylc
d
dart
desktop
devicetree
dhall
diff
disassembly
djot
dockerfile
dot
doxygen
dtd
earthfile
ebnf
ecma
editorconfig
eds
eex
elixir
elm
elsa
elvish
embedded_template
enforce
erlang
facility
faust
fennel
fidl
firrtl
fish
foam
forth
fortran
fsh
fsharp
func
fusion
gap
gaptst
gdscript
gdshader
git_config
git_rebase
gitattributes
gitcommit
gitignore
gleam
glimmer
glimmer_javascript
glimmer_typescript
glsl
gn
gnuplot
go
goctl
godot_resource
gomod
gosum
gotmpl
gowork
gpg
graphql
gren
groovy
gstlaunch
hack
hare
haskell
haskell_persistent
hcl
heex
helm
hjson
hlsl
hlsplaylist
hocon
hoon
html
html_tags
htmldjango
http
hurl
hyprlang
idl
idris
ini
inko
ipkg
ispc
janet_simple
java
javadoc
javascript
jinja
jinja_inline
jq
jsdoc
json
json5
jsonc
jsonnet
jsx
julia
just
kcl
kconfig
kdl
kotlin
koto
kusto
lalrpop
latex
ledger
leo
linkerscript
liquid
liquidsoap
llvm
lua
luadoc
luap
luau
m68k
make
markdown
markdown_inline
matlab
menhir
mermaid
meson
mlir
muttrc
nasm
nginx
nickel
nim
nim_format_string
ninja
nix
nqc
nu
objc
objdump
ocaml
ocaml_interface
ocamllex
odin
pascal
passwd
pem
perl
php
php_only
phpdoc
pioasm
po
pod
poe_filter
pony
powershell
printf
prisma
problog
prolog
promql
properties
proto
prql
psv
pug
puppet
purescript
pymanifest
python
ql
qmldir
qmljs
query
r
racket
ralph
rasi
razor
rbs
re2c
readline
regex
rego
requirements
rescript
rnoweb
robot
robots
roc
ron
rst
ruby
runescript
rust
scala
scfg
scheme
scss
sflog
slang
slim
slint
smali
smithy
snakemake
solidity
soql
sosl
sourcepawn
sparql
sql
squirrel
ssh_config
starlark
strace
styled
supercollider
superhtml
surface
svelte
sway
swift
sxhkdrc
systemtap
t32
tablegen
tact
tcl
teal
templ
tera
terraform
textproto
thrift
tiger
tlaplus
tmux
todotxt
toml
tsv
tsx
turtle
twig
typescript
typespec
typoscript
typst
udev
ungrammar
unison
usd
uxntal
v
vala
vento
verilog
vhdl
vhs
vim
vimdoc
vrl
vue
wgsl
wgsl_bevy
wing
wit
xcompose
xml
xresources
yaml
yang
yuck
zathurarc
zig
ziggy
ziggy_schema


APL
⍝ Naive Fibonacci as a dfn
fib ← {⍵≤1 : ⍵ ⋄ (∇ ⍵-1)+∇ ⍵-2}
∇ r ← Stats data
:If 0 < ≢ data
mean ← {
(+/⍵) ÷ ≢⍵
}
r ← mean data
:Else
r ← ⍬
:EndIf
∇
nums ← ¯3.14 2J1 1E6
result ← Stats nums ⍝ arithmetic mean
~
~
~
~
~
~
~
~
~
~
~
<ee-sitter-apl\e8a0bd0f-6e43-43b7-8c38-995e63e03055\scratchpad\demo.apl [+] 16,8 All


dyalog-labs / stark
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dyalog-labs / vscode-apl

dyalog-labs / **winide-session-extensions**



Windows IDE Session Extensions

Expandable collections of functions
to customise your Dyalog Windows IDE

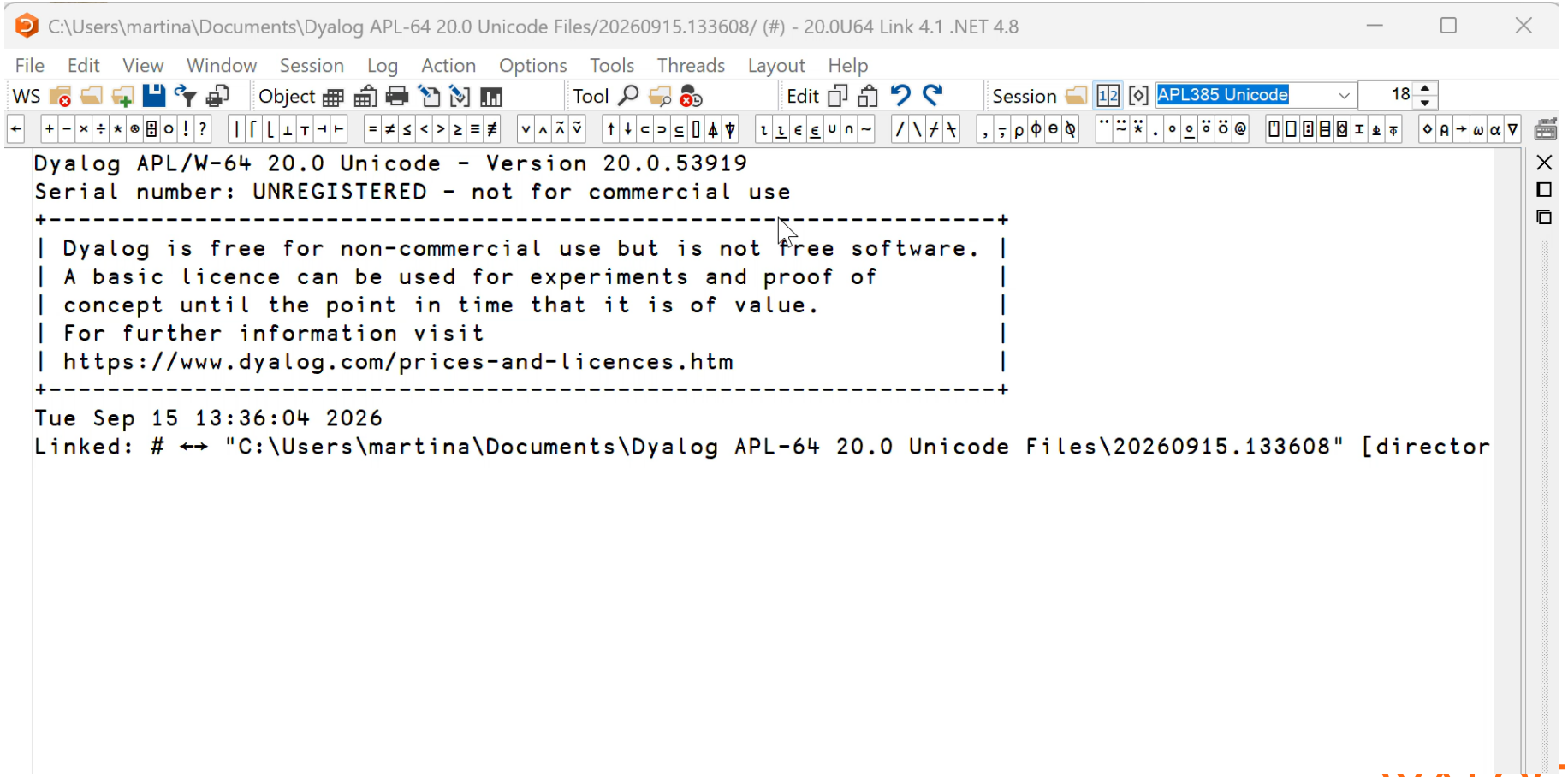
Making the IDE My Own
Part 1 | **Part 2** · Dyalog Blog

…

`autoLink`	Automatically links `#` with a timestamp-named directory
`extStatusBar`	Extends the status bar to allow dropping files and folders
`extToolsMenu`	Extends the Tools menu with an APLcart entry
`extViewMenu`	Extends the View menu with Always on Top, Full Screen, and Zoom In/Out
`setCaption`	Sets the session caption to include `#`'s link and brief version info
`setFKeys`	Sets up a lot of F-keys

…

Birds of a Feather
on Wednesday after dinner
in the bar


C:\Users\martina\Documents\Dyalog APL-64 20.0 Unicode Files/20260915.133608/ (#) - 20.0U64 Link 4.1 .NET 4.8
File Edit View Window Session Log Action Options Tools Threads Layout Help
WS Object Tool Edit Session APL385 Unicode 18
Dyalog APL/W-64 20.0 Unicode - Version 20.0.53919
Serial number: UNREGISTERED - not for commercial use
| Dyalog is free for non-commercial use but is not free software. |
| A basic licence can be used for experiments and proof of |
| concept until the point in time that it is of value. |
| For further information visit |
| https://www.dyalog.com/prices-and-licences.htm |
Tue Sep 15 13:36:04 2026
Linked: # ↔ "C:\Users\martina\Documents\Dyalog APL-64 20.0 Unicode Files\20260915.133608" [director



dyalog-labs / stark



dyalog-labs / tree-sitter-apl



dyalog-labs / winide-session-extensions



dyalog-labs / vscode-apl

dyalog-labs / **vscode-apl**



VS Code plugin for Dyalog APL

Based on **Tiamatica's** work

vscode-apl-debug

… and started as an **experiment** with Claude





Standard functionalities

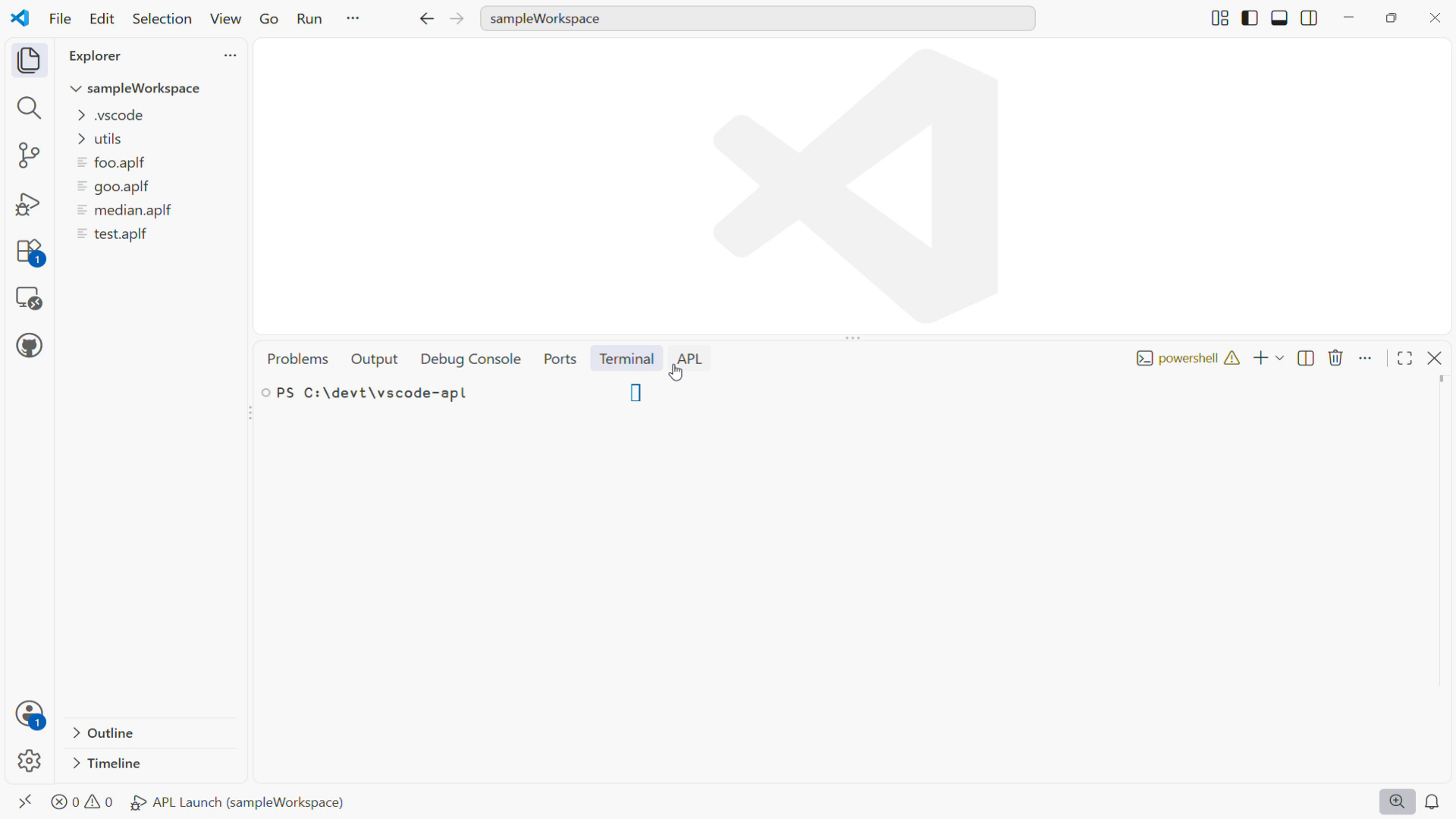
Multi-tab REPL panel, integrated editor, debugging and tracing, docs, plotting, etc.

LLM **pair** programming

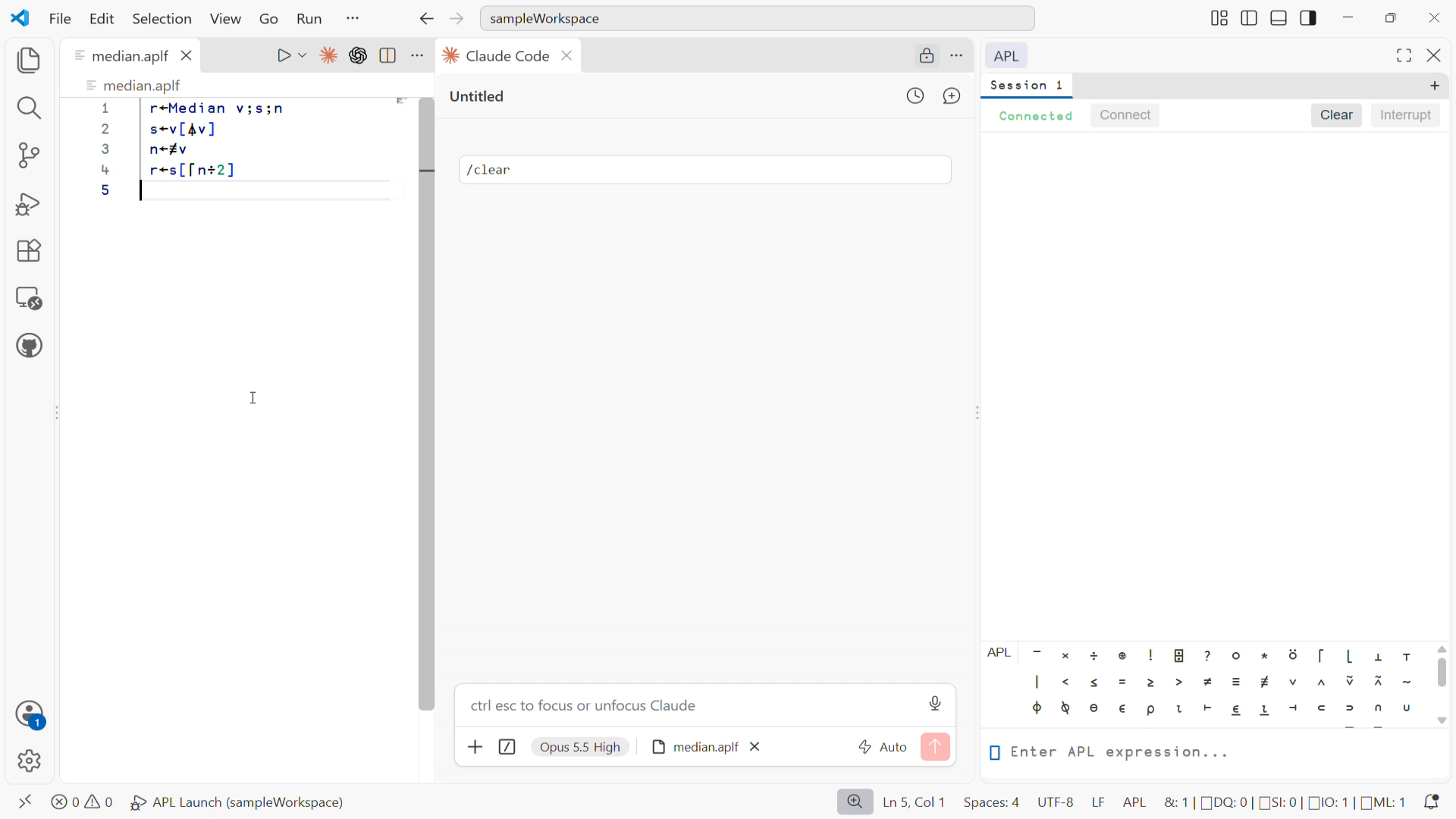
LLM execute and debug code autonomously

***Birds of a Feather* on Wednesday after dinner in the bar**

Editing and debugging


File Edit Selection View Go Run ···
sampleWorkspace
Explorer
sampleWorkspace
.vscode
utils
foo.aplf
goo.aplf
median.aplf
test.aplf
Problems Output Debug Console Ports Terminal APL
powershell
PS C:\devt\vscode-apl
Outline
Timeline
0 0 APL Launch (sampleWorkspace)

LLM pair programming


File Edit Selection View Go Run
sampleWorkspace
median.aplf
median.aplf
1 r←Median v;s;n
2 s←v[⍋v]
3 n←≠v
4 r←s[⌈n÷2]
5
Claude Code
Untitled
/clear
ctrl esc to focus or unfocus Claude
Opus 5.5 High
median.aplf
Auto
APL
Session 1
Connected
Connect
Clear
Interrupt
APL
Enter APL expression...
0 0
APL Launch (sampleWorkspace)
Ln 5, Col 1
Spaces: 4
UTF-8
LF
APL
&: 1 | DQ: 0 | SI: 0 | IO: 1 | ML: 1



dyalog-labs / stark



dyalog-labs / tree-sitter-apl



dyalog-labs / winide-session-extensions



dyalog-labs / vscode-apl

… and more!

9

more projects you can check out already!

Others will be added soon

- Repositories from personal “dyaloggers” accounts to dyalog-labs
- Repositories from dyalog to dyalog-labs
- …

Click **Follow** on github.com/dyalog-labs