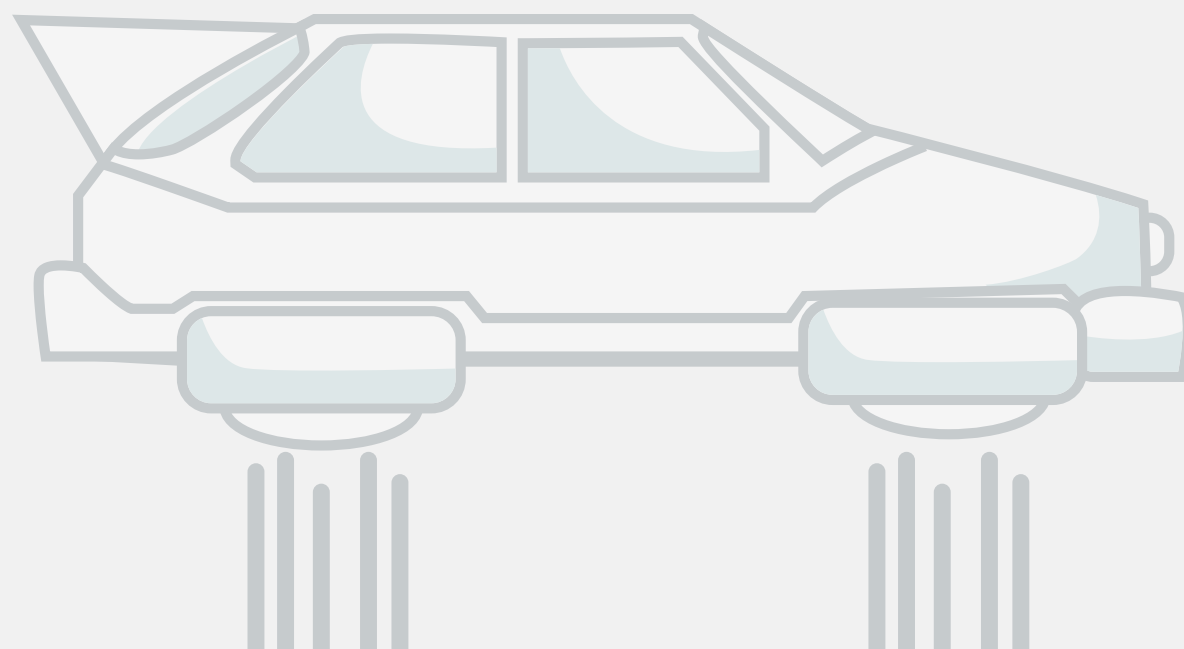


Ritorno al Futuro: sviluppare app mobile e cross-platform in Pascal, Grande Giove!

Marco Breveglieri

12 Ottobre 2024



Marco Breveglieri

💻 Software Developer | 🎓 Trainer and Consultant | 🎥 Tech Content Creator | ❤️ Community lover



Homepage
<https://www.breveglieri.it>



Blog tecnico
<https://www.compilaquindiva.com>



Delphi Podcast
<https://www.delhipodcast.com>



Canale Twitch
<https://twitch.tv/compilaquindiva>

Tutti gli altri link: <https://linktr.ee/marco.breveglieri>



CompilaQuindiva

Let's code together

```
print("Alieno spostato", alieno)

alieno["nomi"] = ['paolo', 'carlo']
alieno["coords"] = (20, 30)
print(alieno)

alieno["features"] = { "laser": True, "power": 500 }
print("alieno.features.power", alieno["features"]["power"])
print(alieno)

for k in alieno.keys():
    print(k)

#alieno["speed"] = None
del alieno["speed"]
print(alieno)

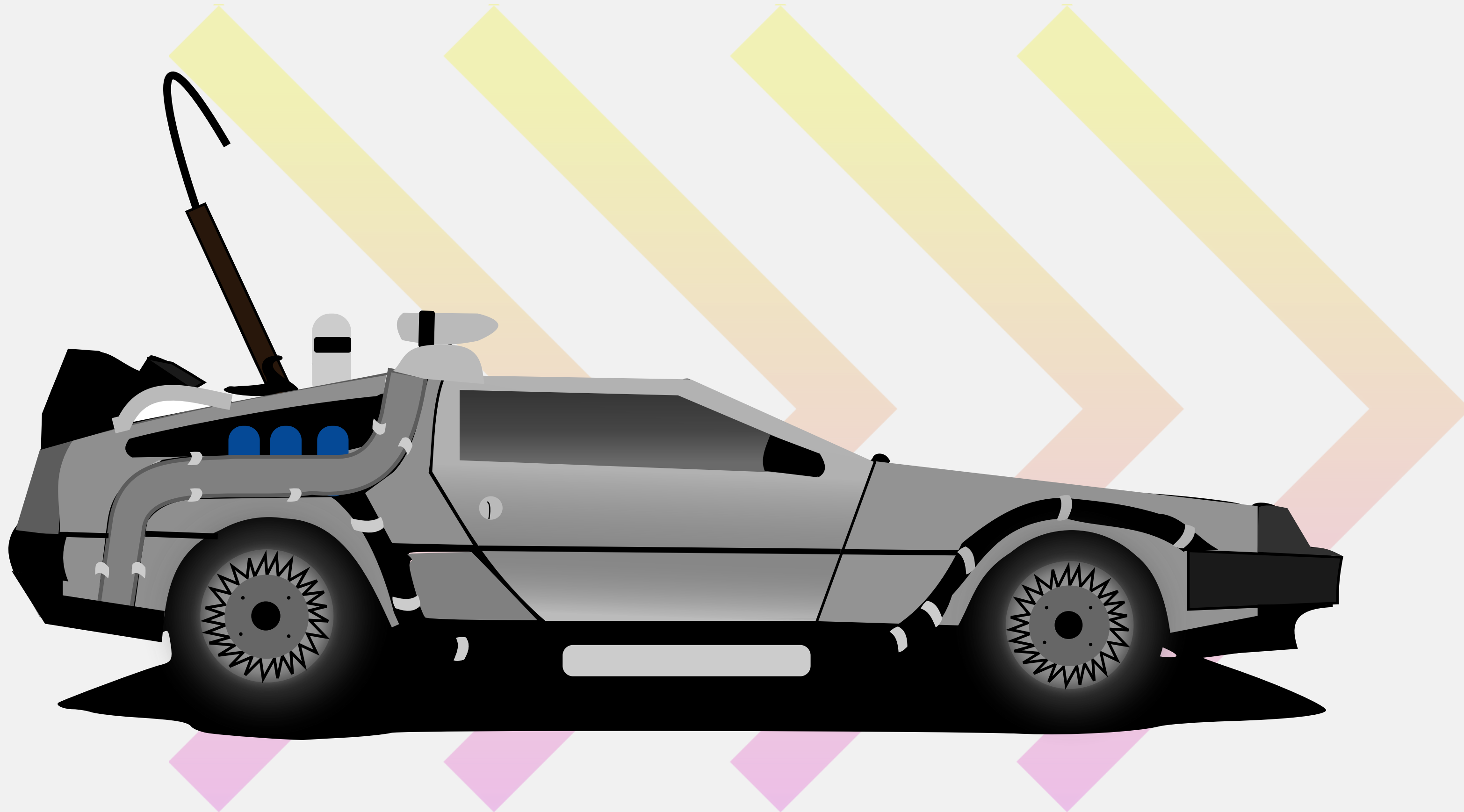
print("get -> punti", alieno.get("punti"))
print("get -> speed", alieno.get("speed"))
```

```
nomi
coords
features
{'colore': 'rosso', 'punti': 100, 'x': 52, 'y': 100, 'nomi': ['paolo', 'carlo'], 'coords': (20, 30), 'features': {'laser': True, 'power': 500}}
get -> punti 100
get -> speed None
>>>
```



@compilaquindiva

LIVE Coding
twitch



Python

C#

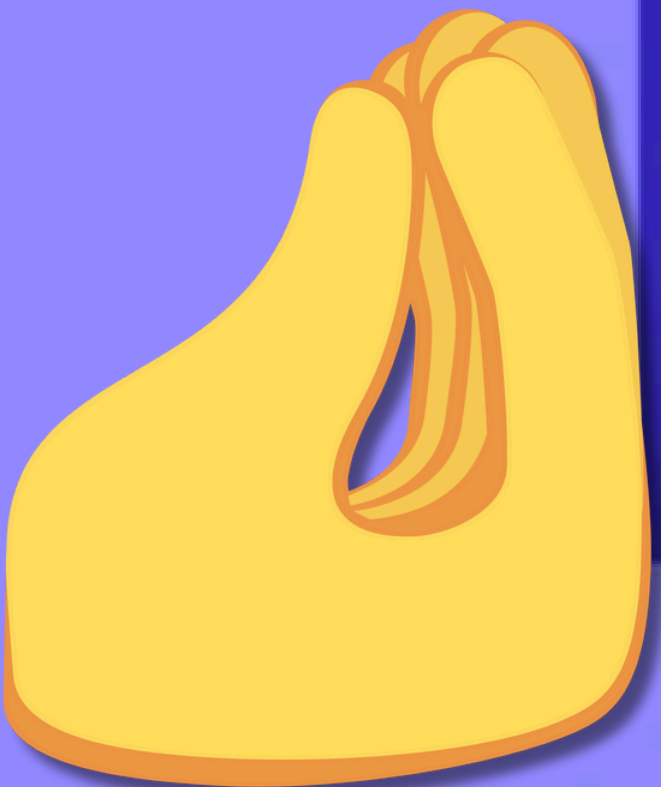


JavaScript

 Pascal



```
**** COMMODORE 64 BASIC V2 ****  
64K RAM SYSTEM 38911 BASIC BYTES FREE  
READY.  
10 PRINT "HELLO WORLD"
```





Perché il Pascal?

1

```
uses
  System.SysUtils, System.Generics.Collections;

type
  TApple = class
    Name: string;
  end;

  TAppleDictionary = TObjectDictionary<string, TApple>;

begin
  var Apples := TAppleDictionary.Create([doOwnsValues]);

  try
    var A := TApple.Create;
    A.Name := 'my apple';
    Apples.AddOrSetValue('apple key 1', A);

    for var ApplePair in Apples do
      Writeln('Found apple key->value: ' +
        ApplePair.Key + '->' + ApplePair.Value.Name);

    Apples.Remove('apple key 1');
  finally
    FreeAndNil(Apples);
  end;
end.
```



Elegante e leggibile

What are Go's ancestors?

Go is mostly in the C family (basic syntax), with significant input from the Pascal/Modula/Oberon family (declarations, packages), plus some ideas from languages inspired by Tony Hoare's CSP, such as Newsqueak and Limbo (concurrency). However, it is a new language across the board. In every respect the language was designed by thinking about what programmers do and how to make programming, at least the kind of programming we do, more effective, which means more fun.



Ispirazione

```
function MakeAdder(y: Integer): TFuncOfInt;
begin
  Result := function(x: Integer): Integer
  begin
    Result := x + y;
  end;
end;
```

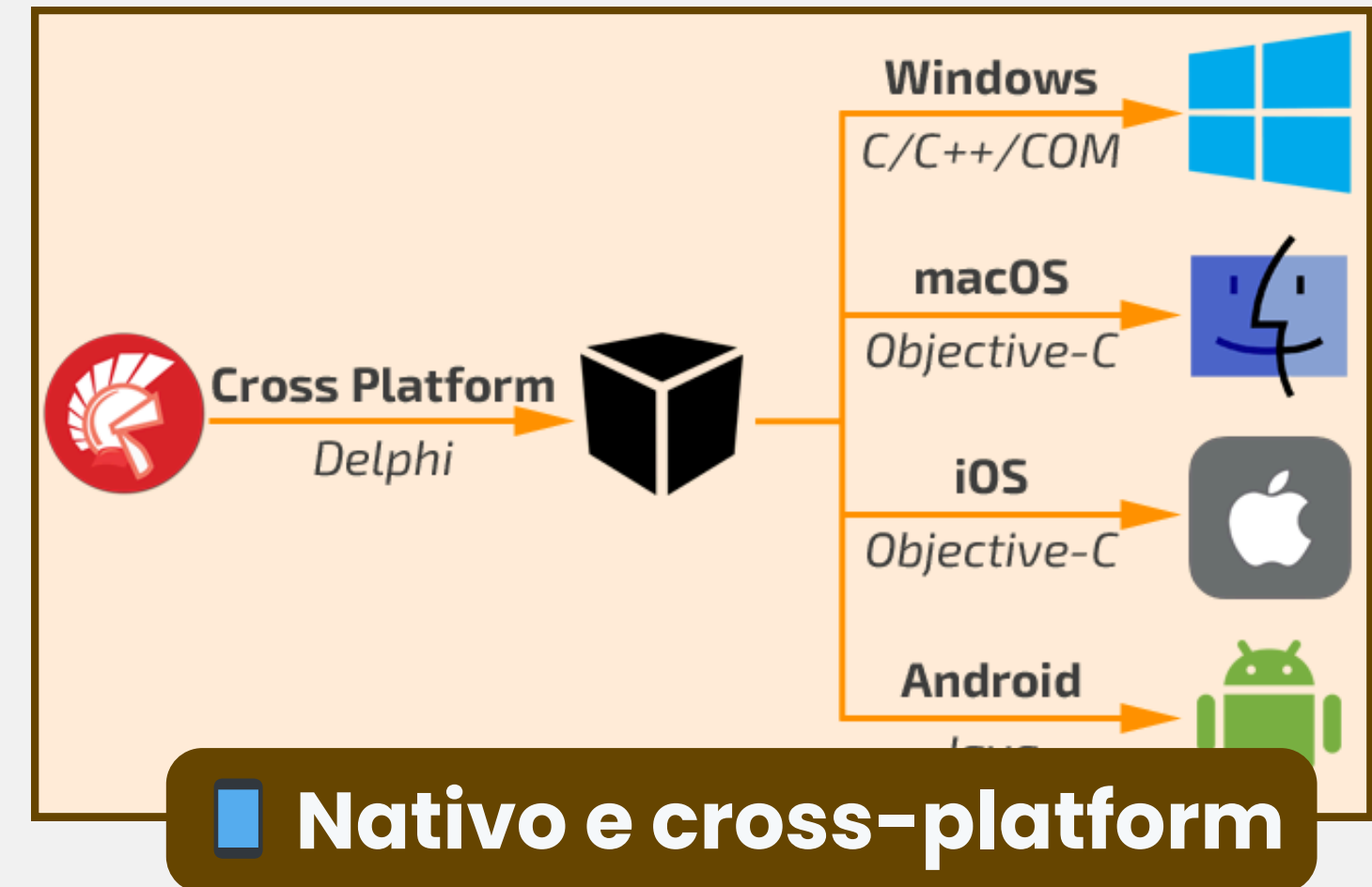
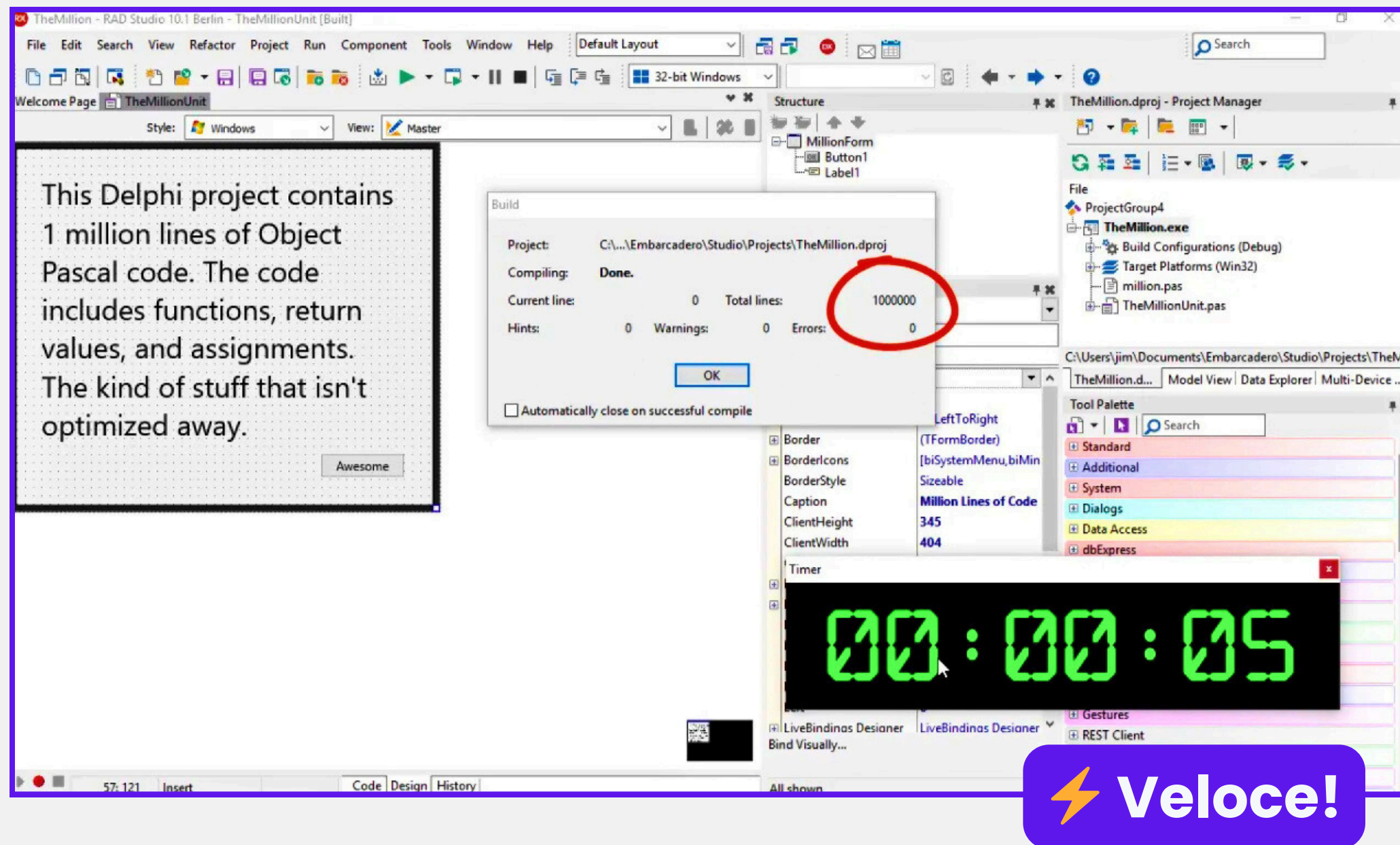
```
procedure TFoo.CompareAndPrintResult<T>(X, Y: T);
begin
  var Comparer := TComparer<T>.Default;
  if Comparer.Compare(X, Y) = 0 then
    Writeln('Both members compare as equal')
  else
    Writeln('Members do not compare as equal');
end;
```

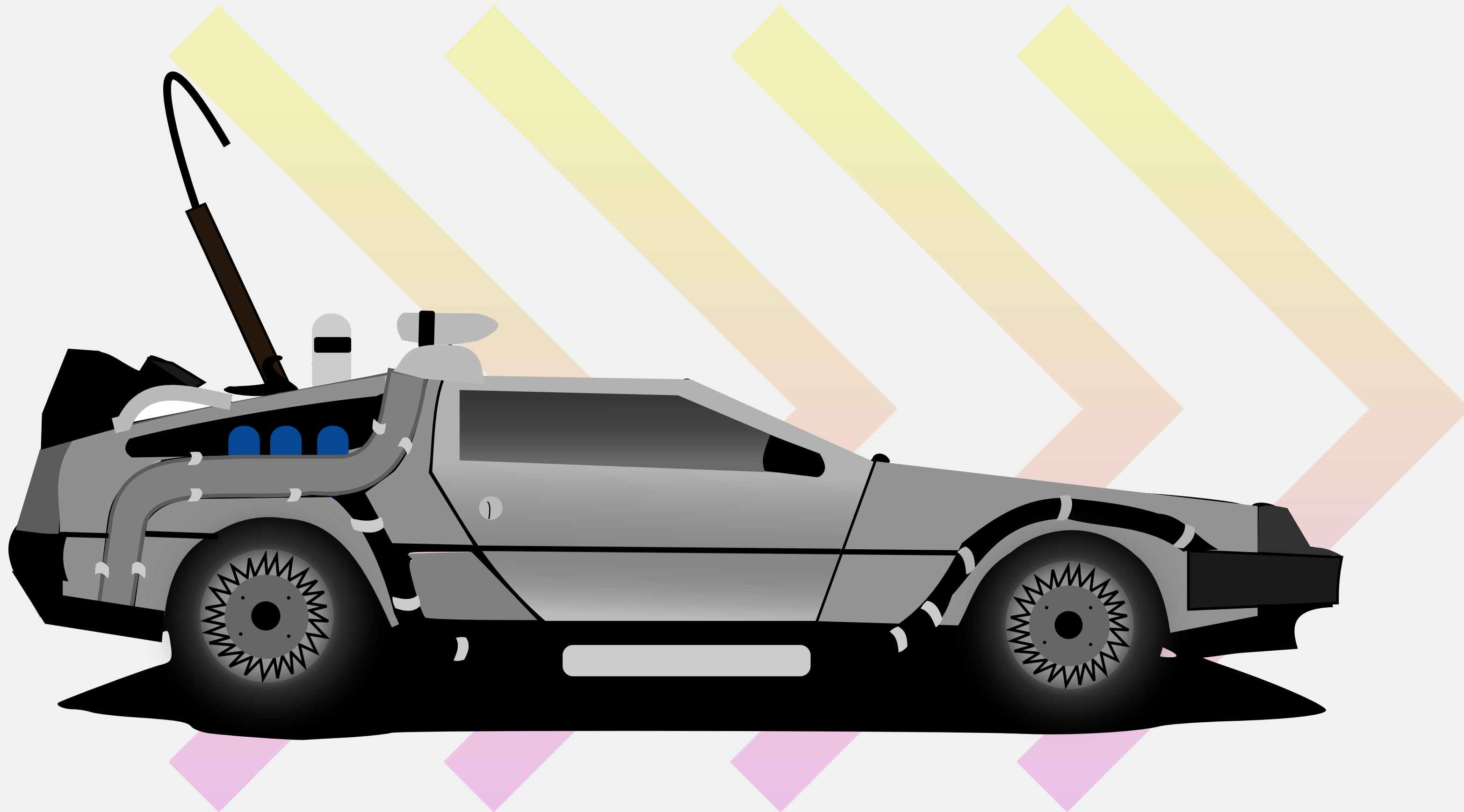


Moderno e type-safe

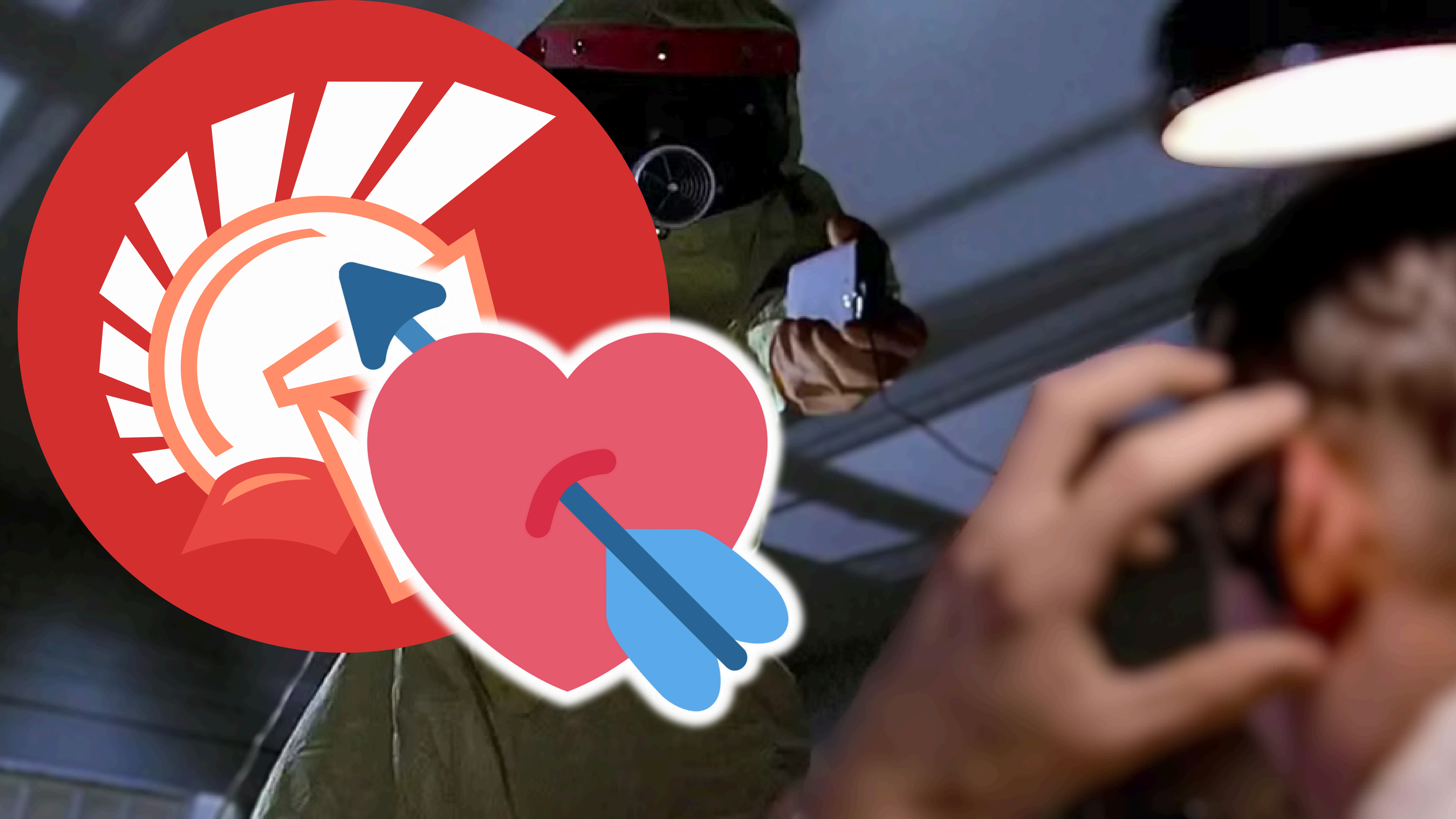
Perché il Pascal?

2









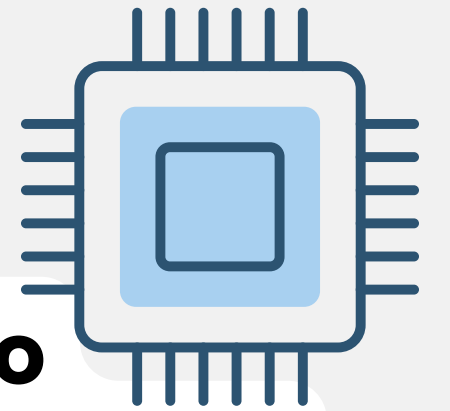
Che cos'è Delphi?

Delphi  è un ambiente di sviluppo software e un linguaggio di programmazione per lo sviluppo di applicazioni *desktop, mobile e web*.

Perché è speciale?



**Sviluppo rapido di app
"true RAD" e prototipazione**



**Codice veramente nativo
e unico per tutte le piattaforme**



**"Low" or "zero" code,
orientato al riuso**



**Progettazione visuale
o solo codice: scegli tu!**

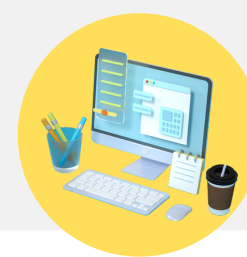


**Linguaggio semplice,
immediato, elegante**

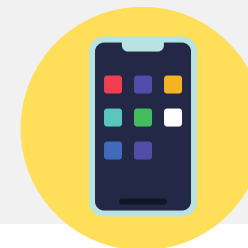
**Multi-Device & Multi-Platform:
desktop, mobile, web!**



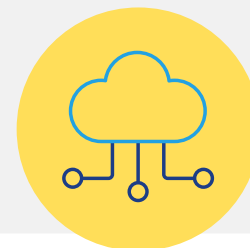
Cosa posso farci di bello?



**Applicazioni
desktop**
(Windows, Mac)



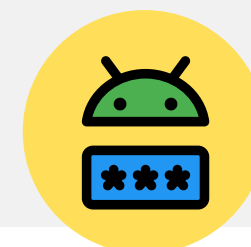
**Applicazioni
mobile**
(Android, iOS)



REST APIs
(Apache, IIS, Windows, Linux)



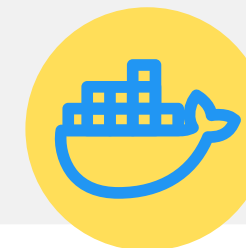
Console App
(Windows, Linux)



**Android
Services**



SSR Web Apps
(Apache, IIS, Windows, Linux)



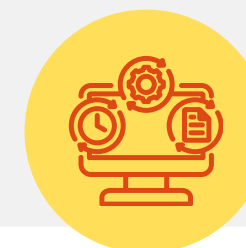
Docker Apps
(Windows, Linux)



Web Services
(Apache, IIS, Windows, Linux)



**Dynamic Link
Libraries (DLLs)**
(Windows, Linux)



**COM/ActiveX
Servers**
(Windows only)

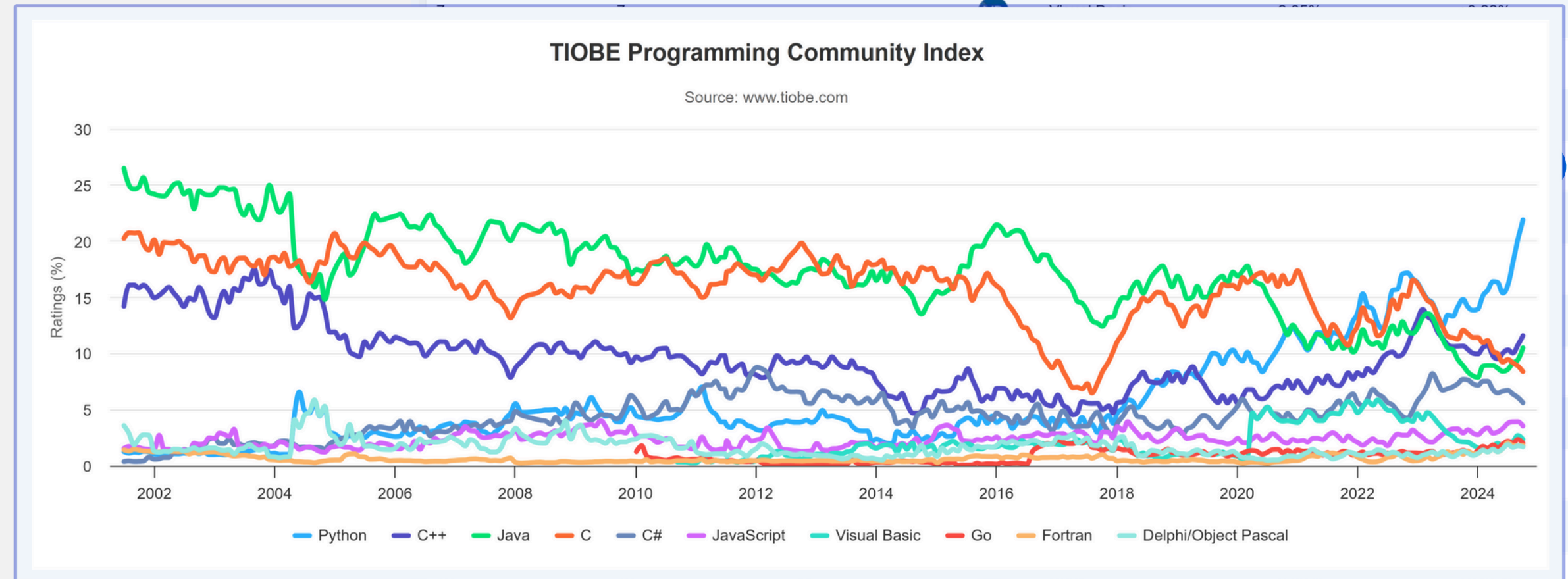


Ma chi lo conosce??



TIOBE
the software quality company

Oct 2024	Oct 2023	Change	Programming Language		Ratings	Change
1	1			Python	21.90%	+7.08%
2	3	▲		C++	11.60%	+0.93%
3	4	▲		Java	10.51%	+1.59%
4	2	▼		C	8.38%	-3.70%
5	5			C#	5.62%	-2.09%
6	6			JavaScript	3.54%	+0.64%

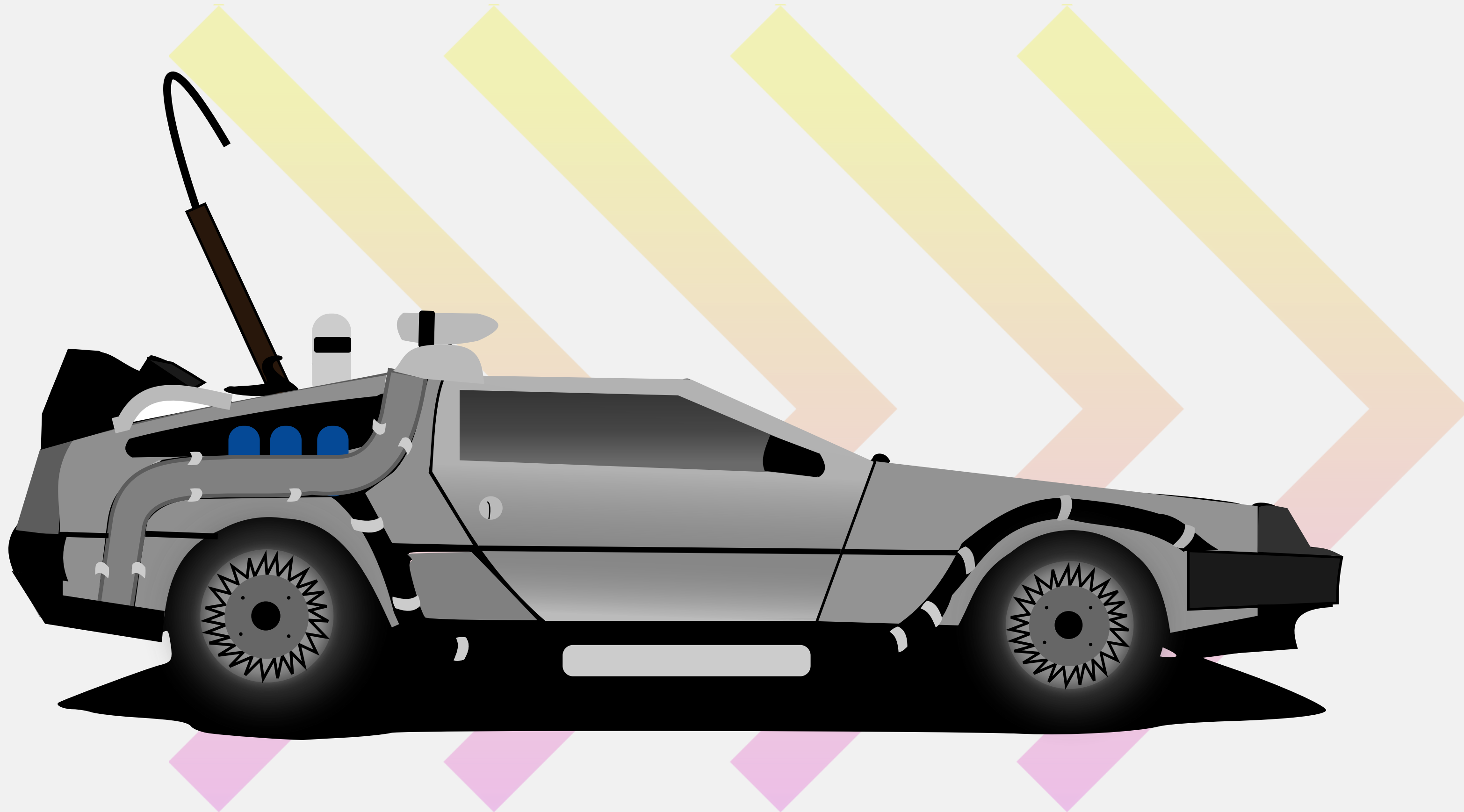


19	24	▲		COBOL	0.99%	+0.23%
20						-0.09%

👉 <https://www.tiobe.com/tiobe-index/>

**Andiamo
a scoprire
il passato!**

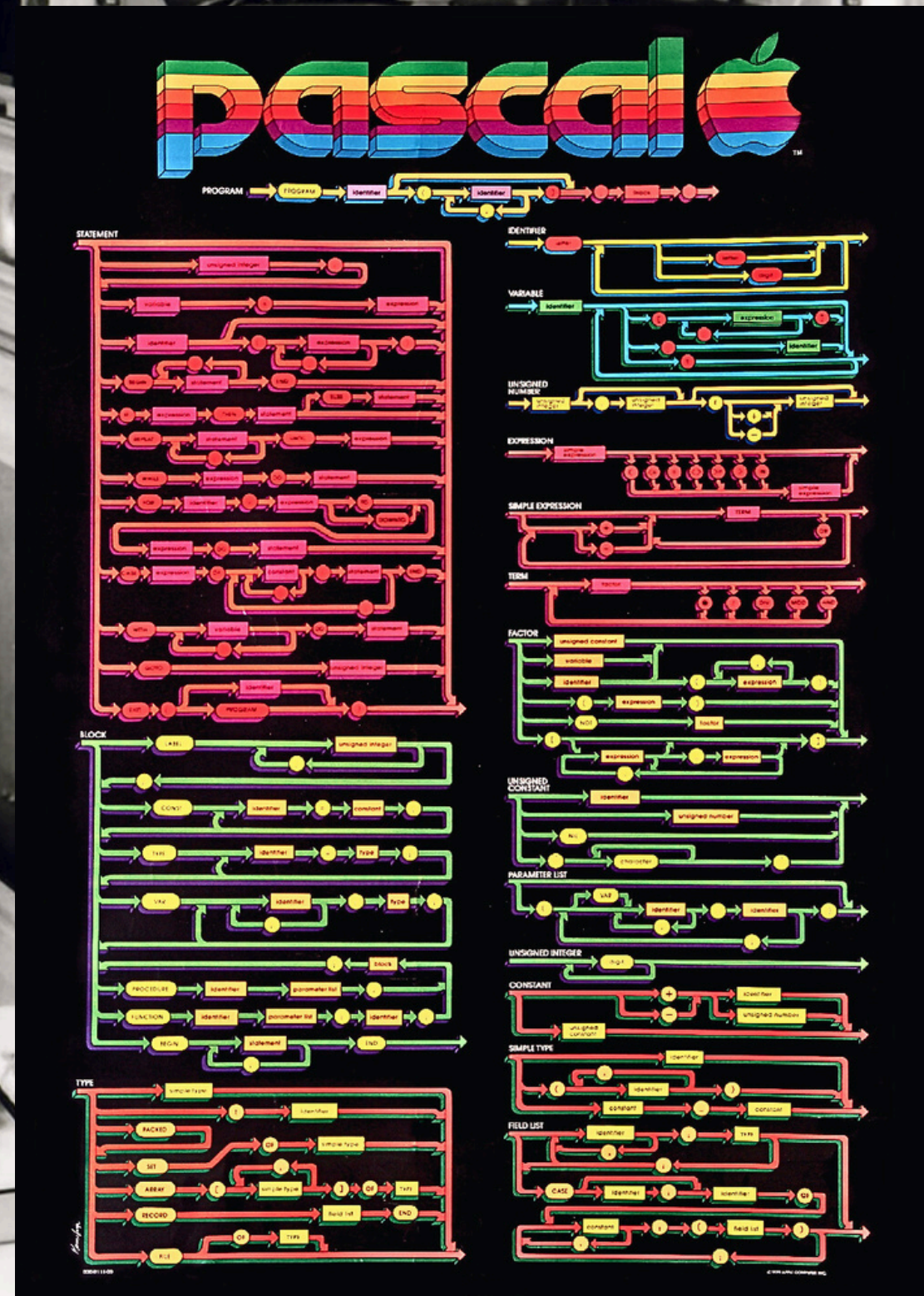




Niklaus Wirth

15 febbraio 1934
1 gennaio 2024

- **1970**: presenta il linguaggio Pascal
- **1978**: crea il Modula-2, come evoluzione del linguaggio Pascal
- **1987**: Inizia a lavorare a Oberon, linguaggio e sistema operativo desktop, che ha mantenuto fino al 2020!



Da Pascal a Delphi

Borland

- 1980: Borland dà vita a Turbo Pascal, apprezzato per velocità di compilazione ed esecuzione
- 1990: Borland inizia a lavorare a un progetto, nome in codice "Delphi", una nuova versione object-oriented del Turbo Pascal
- 1995: nasce Delphi, con la prima versione a 16-bit per Windows 3.1



Già che siamo in ottobre...

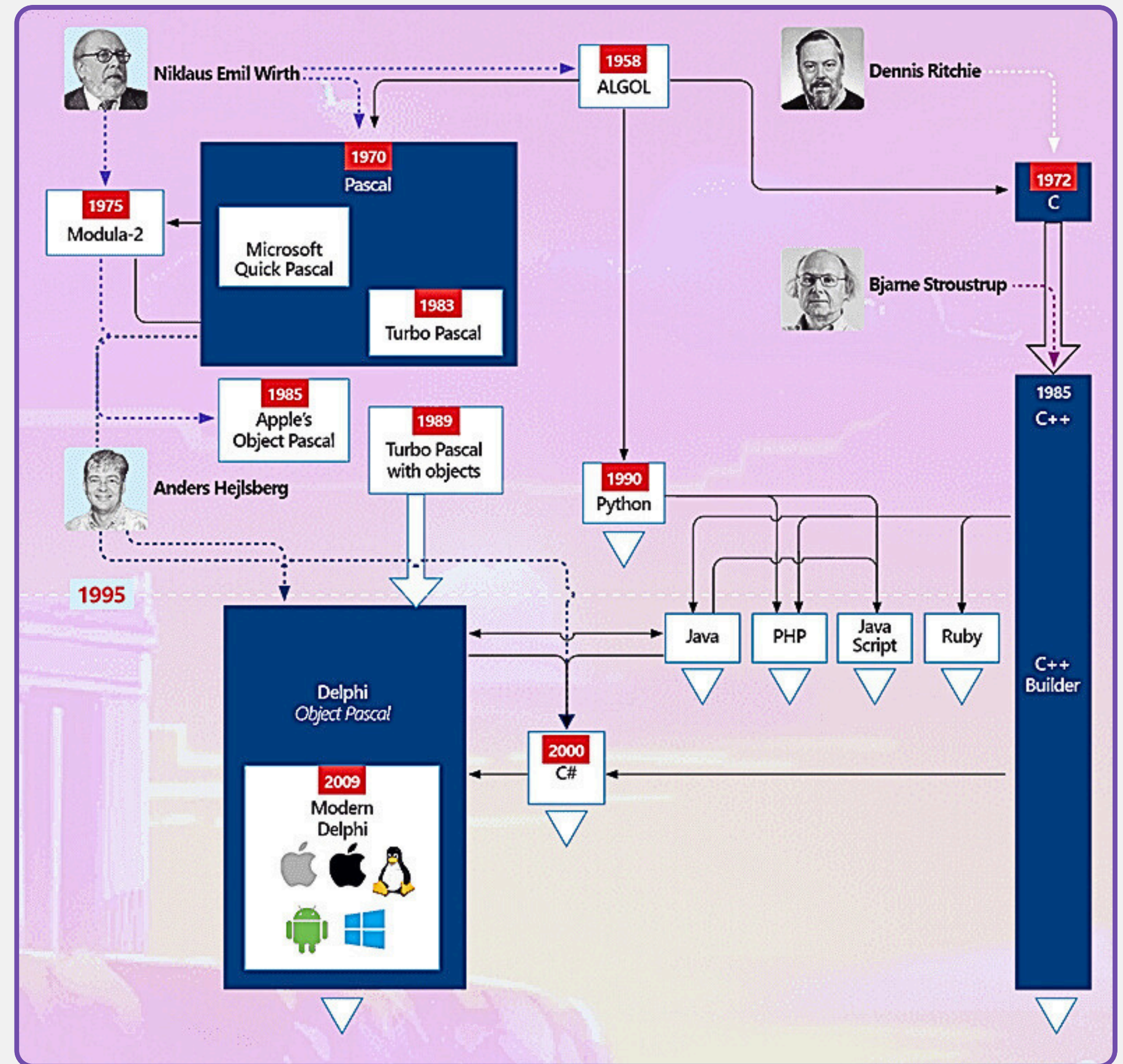


**Do you remember
the original spirit
of Borland?**

Un vecchio spot Borland per Delphi

In buona compagnia...

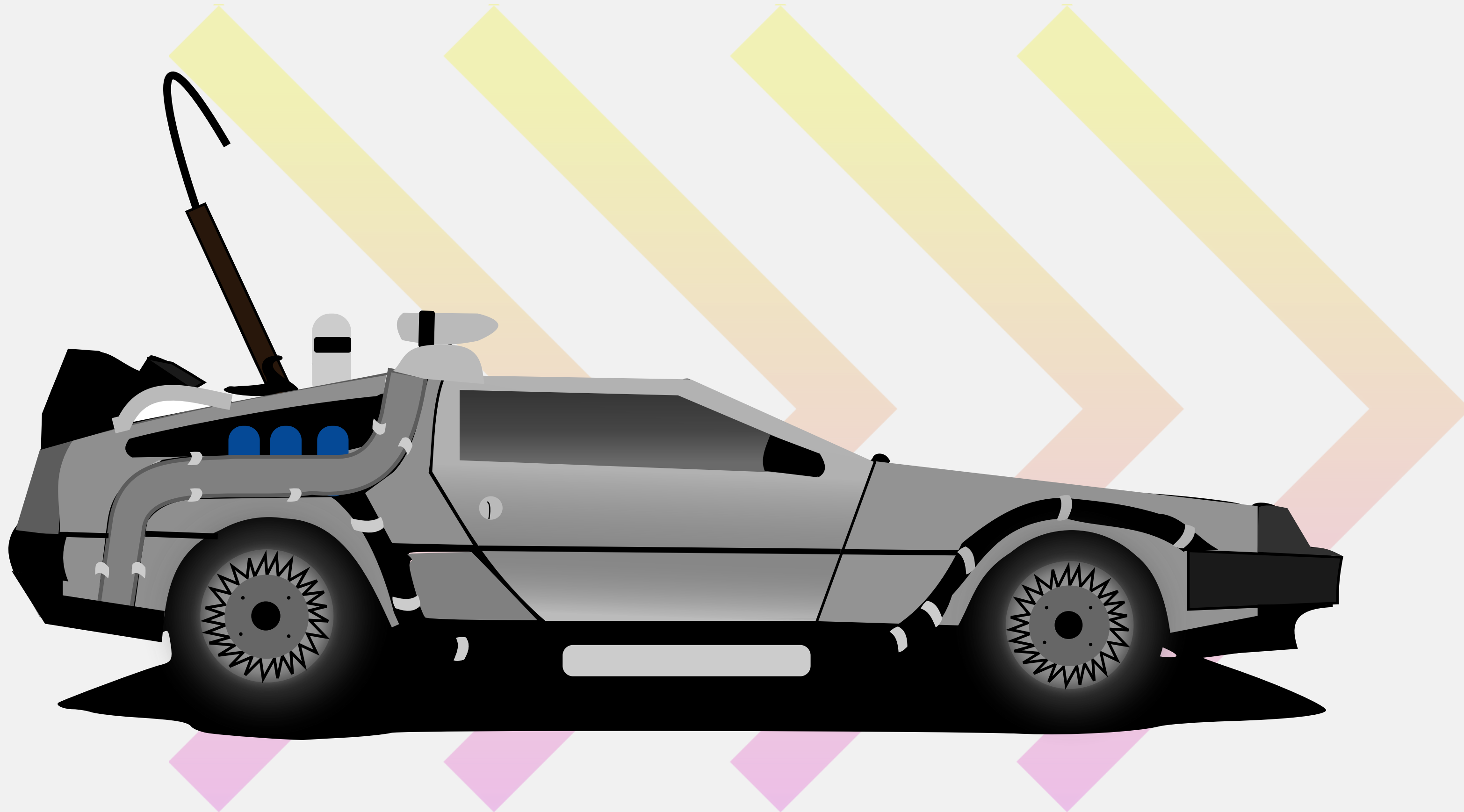
- 1958: ALGOL
- 1970: Pascal
- 1972: C
- 1975: Modula-2
- 1983: Turbo Pascal
- 1985: C++
- 1989: Turbo Pascal with Objects
- **1990: Python**
- **1995: Delphi, Java, JavaScript**
- **2000: C#**
- 2008: Python 3
- 2009: Modern Delphi



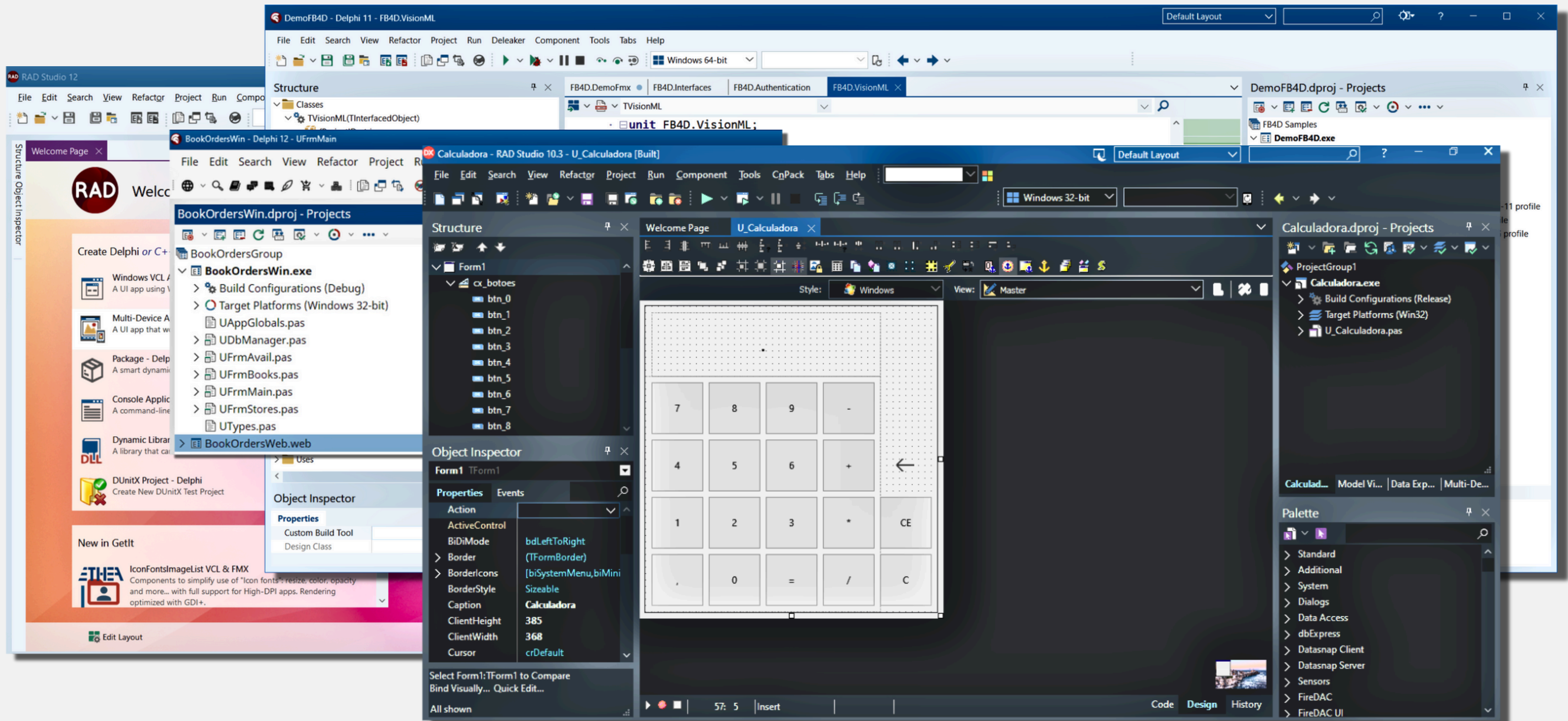
Torniamo al futuro!

(sperando di non finire in un futuro alternativo)





Delphi oggi!



Dove viene utilizzato?



Qualche nome conosciuto...

1Password

XAMPP

TreeSize



FL STUDIO



SupRemo
by Nanosystems



VISUINO

stop
motion
proTM
now everyone's a professional

BEYOND
COMPARE
Reconcile Your Differences!

HeidiSQL



skypeTM



Piccolo demo?

...cosa potrà mai andare storto?



Delphi Community Edition! ❤️

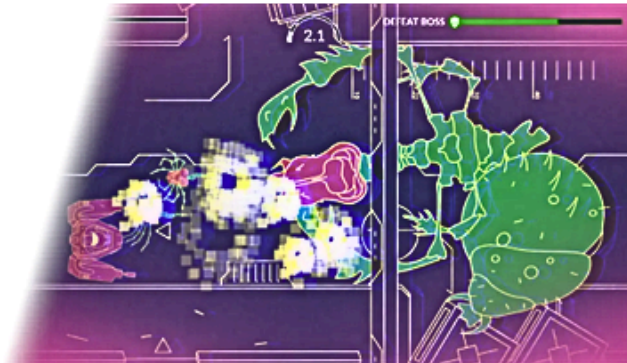
- Consente di creare app desktop e mobile per Windows, Mac OS, iOS e Android
- E' disponibile gratuitamente per sviluppatori freelance, hobbisti, startup, studenti e organizzazioni no-profit
- Include IDE, editor, SDK, compilatori, tool di debugging, driver dei principali database locali
- E' l'ideale per chi inizia, ma anche per chi sviluppa già

👉 <https://www.embarcadero.com/products/delphi/starter>

👉 <https://learndelphi.org>



Tante librerie...



SKIA
FOR DELPHI



the most popular Delphi project on github!
delphimvcframework
3.4.0-neon is out!



DEB
DELPHI EVENT BUS

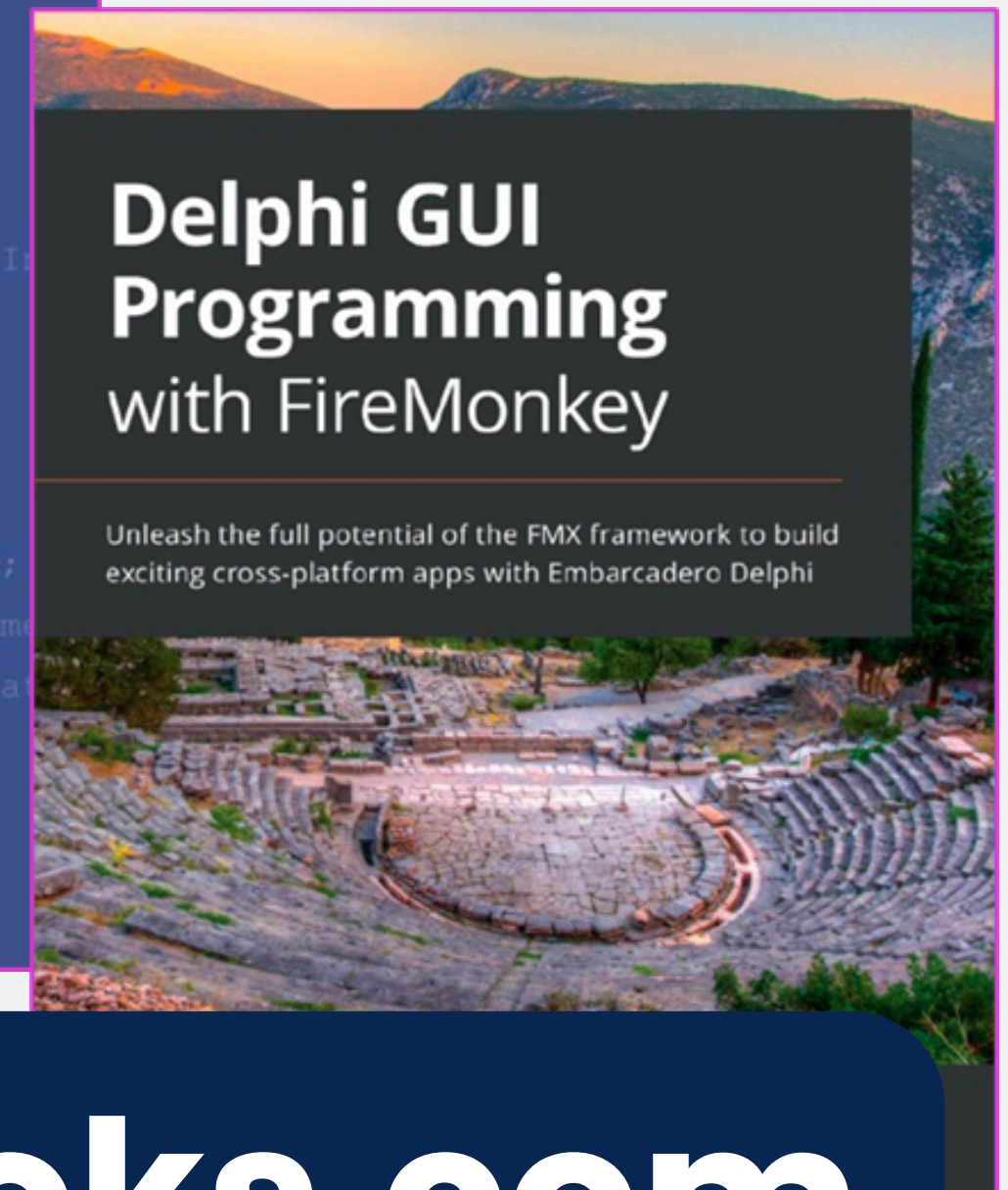
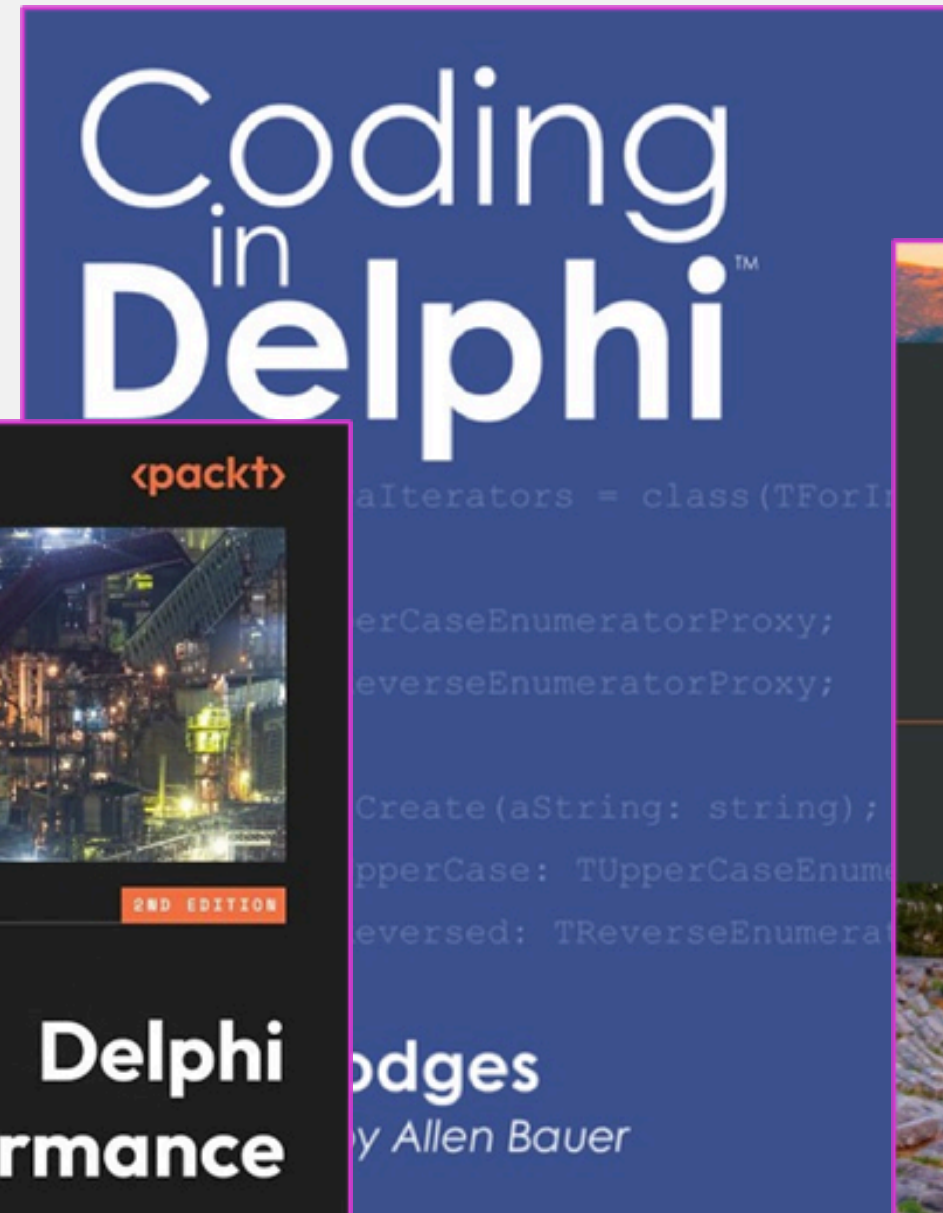
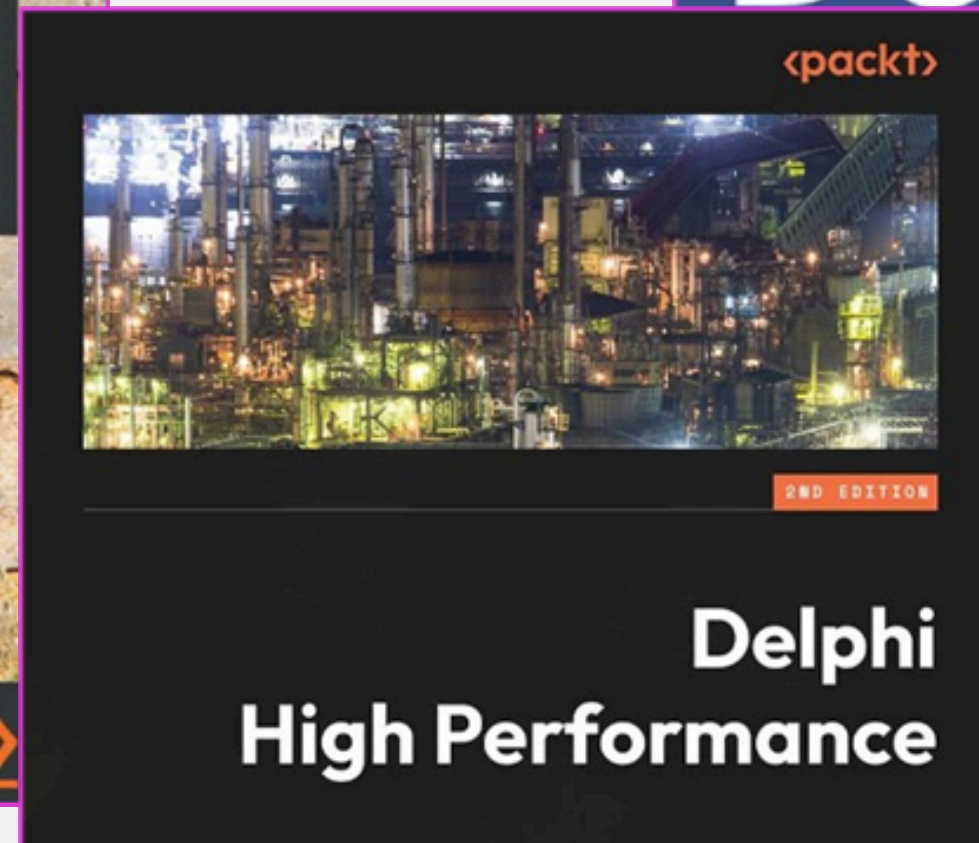
WiRL
RESTful Library for Delphi



Spring4D

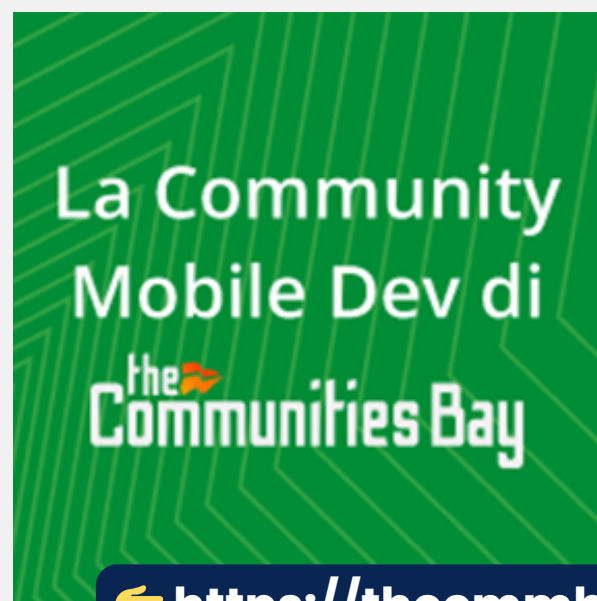


Libri e documentazione



<https://delphi-books.com>

Community



<https://thecmmbay.com/community/mobile-dev>

<https://blogs.embarcadero.com/community/>



Domande? 🙈



Grazie! 🙌😊