

# Modern Desktop with Telerik UI for WinForms



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Software Engineering Manager

3 June 2025

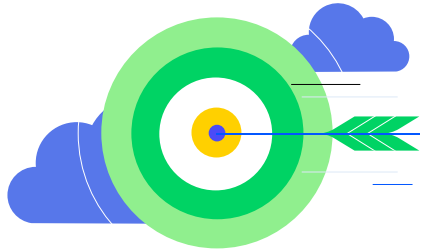
# **Full-featured, themeable, developer friendly UI components for modern desktop apps**

# Agenda

- Standard WinForms
- Telerik UI for WinForms
- Document Processing
- Q & A Session

# Standard WinForms

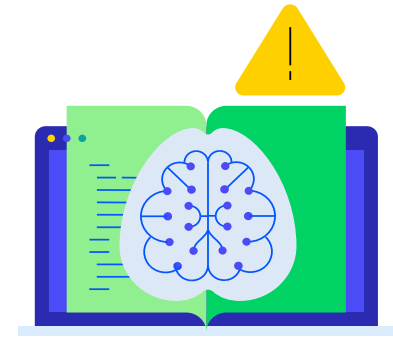
# Standard WinForms



**How is it built?**



**Why is it so good?**



**Pitfalls**

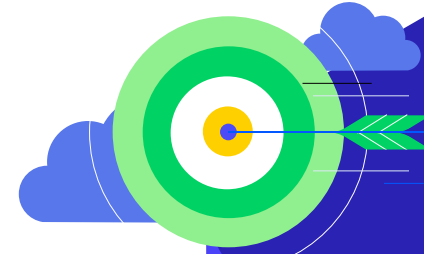
# Standard WinForms

## How is it built?

# Standard WinForms

How is it built?

- Win32
- Control Wrappers
- Message Loop
- Rendering
- Event Model
- Interop



# Standard WinForms

Why is it so good?



# Standard WinForms

Why is it so good?



- Fast to Learn and Use
- Productive Visual Designer
- Deeply Integrated to Windows
- Mature and Stable

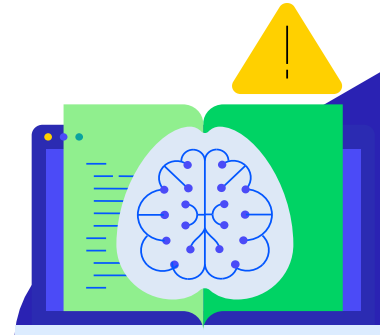
# Standard WinForms

## Pitfalls

# Standard WinForms

## Pitfalls

- Control Set and Features
- UI/UX
- Customizations
- Scaling
- .NET Framework vs .NET



# Telerik UI for WinForms to the Rescue...

**...Delivering More Than  
Expected Since 2006**



# Microsoft

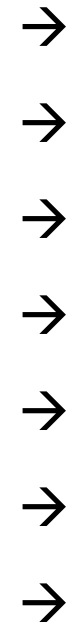
## Foundation

- Control Set & Features
- UI/UX
- Customizations
- Scaling
- Visual Designer
- Accessibility
- Community Support



# Telerik

## Added Value



- Extensive Component Library
- Themes
- Telerik Presentation Framework
- High DPI & Vector Graphics
- Enhanced Editors and Wizards
- UI Automation Everywhere
- Technical Support

# Control Set → Extensive Component Library

# Extensive Component Library

## Data Management

GridView  
PivotGrid  
VirtualGrid  
ListView  
TreeView  
FilterView  
PropertyGrid

## Data Visualization & Scheduling

Map  
Diagram  
Chart View  
Scheduler  
GanttView  
TaskBoard  
TreeMap  
Gauges

## Forms and Interactivity

Forms  
Docking  
Flyouts  
Task Dialog  
Virtual  
Keyboard  
Webcam  
Image Editor

## Document Viewers

RichText  
Editor  
Spreadsheet  
PDF Viewer  
Syntax Editor

## AI

AI Prompt  
PDF AI  
Insights  
TBD

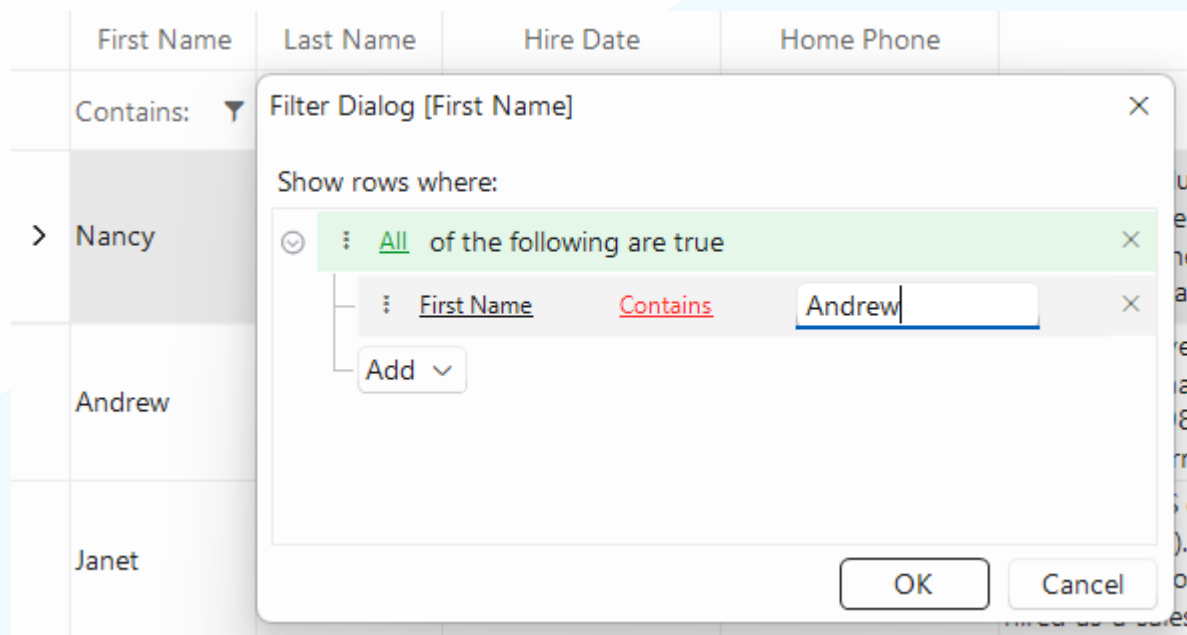


# Data Management

# Data Management

## RadGridView

- Sorting, Filtering, Grouping, Paging
- OpenEdge BypassFilter & BypassSort mode
- Hierarchical Data Display
- Summary Rows
- UI Virtualization
- Easily Customizable
- Exporting data

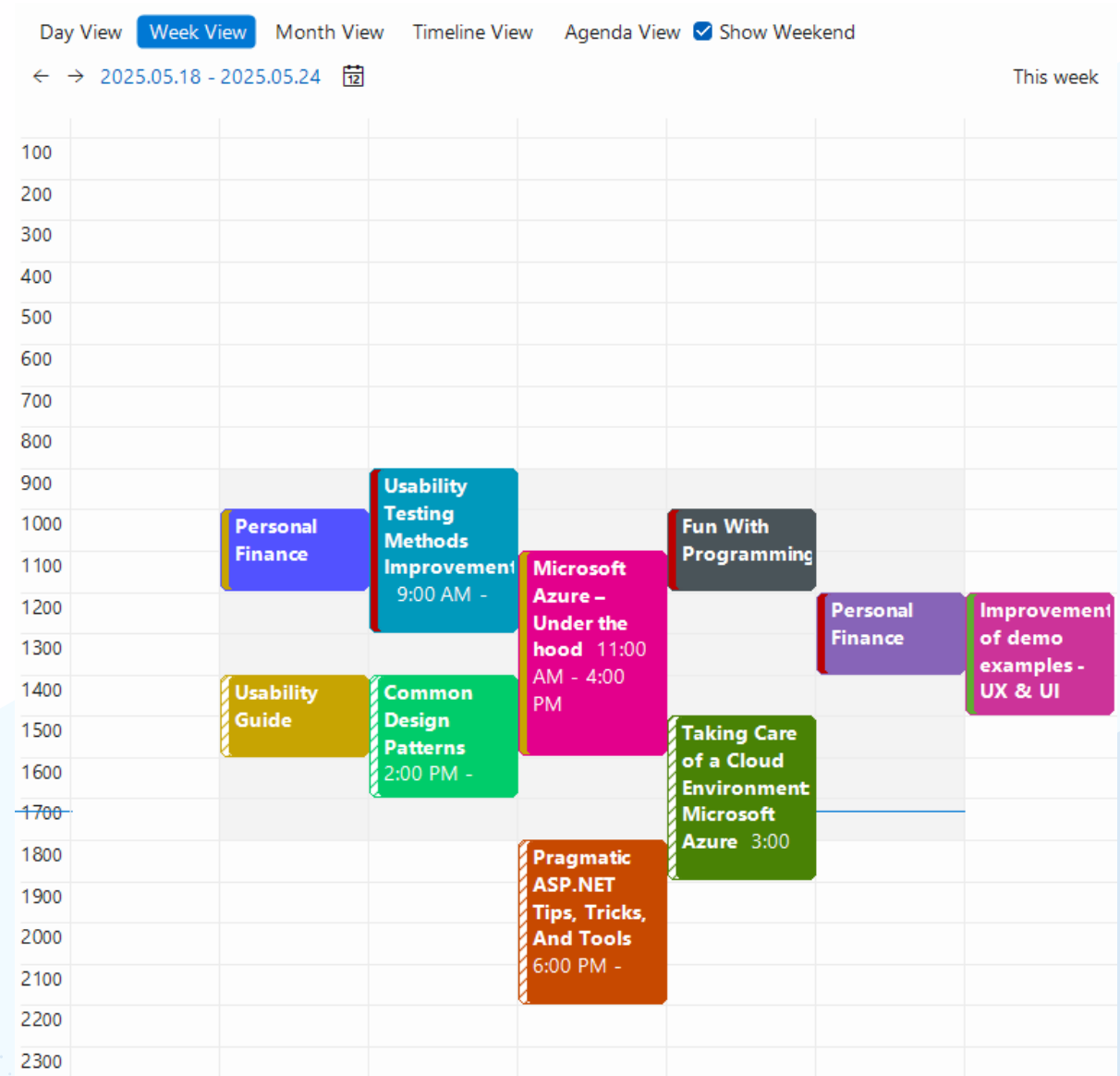


# Scheduling

# Scheduling

## RadScheduler

- Appointment Management
- Variety of Data Sources
- Resources and Grouping
- Reminders and Notifications
- Time Zones and Globalization
- ICal compatible
- Easily Customizable



# Interactivity

## Forms

# Interactivity

## Forms

- Form

The screenshot shows a web application titled "RadForm Example". It features a data table with columns: Last Name, First Name, Title, Hire Date, and Country. The table is grouped by "City" with expandable sections for "Kirkland", "London", and "Redmond". The "London" section is expanded, showing a list of employees. The "Buchanan" row is highlighted. To the right of the table is a sidebar with form controls, including three radio buttons (radRadioButton1, radRadioButton2, radRadioButton3), a section for "Buttons", a section for "Check Boxes", and a section for "Radio Buttons". The bottom of the application shows a status bar with "Page 1 of 1", "Words: 2", "Saving..." (with a progress bar), "Check for errors" (with a checkbox), and "English (US)".

	Last Name	First Name	Title	Hire Date	Country
City: Kirkland					
City: London	Buchanan	Steven	Sales Manager	10/17/1993	UK
	Suyama	Michael	Sales Representat...	10/17/1993	UK
	King	Robert	Sales Representat...	1/2/1994	UK
	Dodsworth	Anne	Sales Representat...	11/15/1994	UK
City: Redmond					

Group by: City ▲ X

Radio Buttons

- ☒ radRadioButton1
- ☐ radRadioButton2
- ☐ radRadioButton3

Buttons

Check Boxes

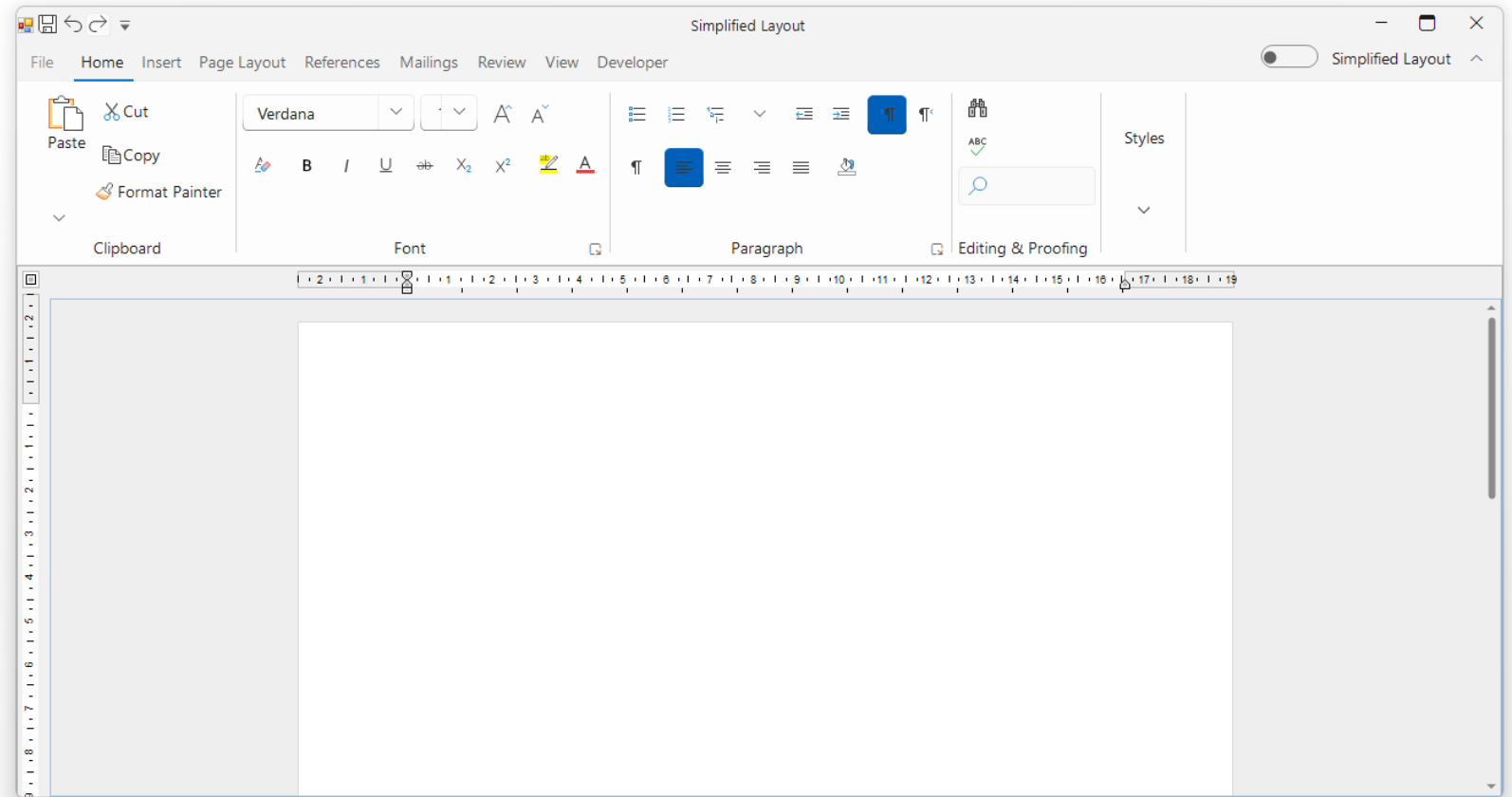
Radio Buttons

Page 1 of 1 Words: 2 Saving... ☒ Check for errors English (US)

# Interactivity

## Forms

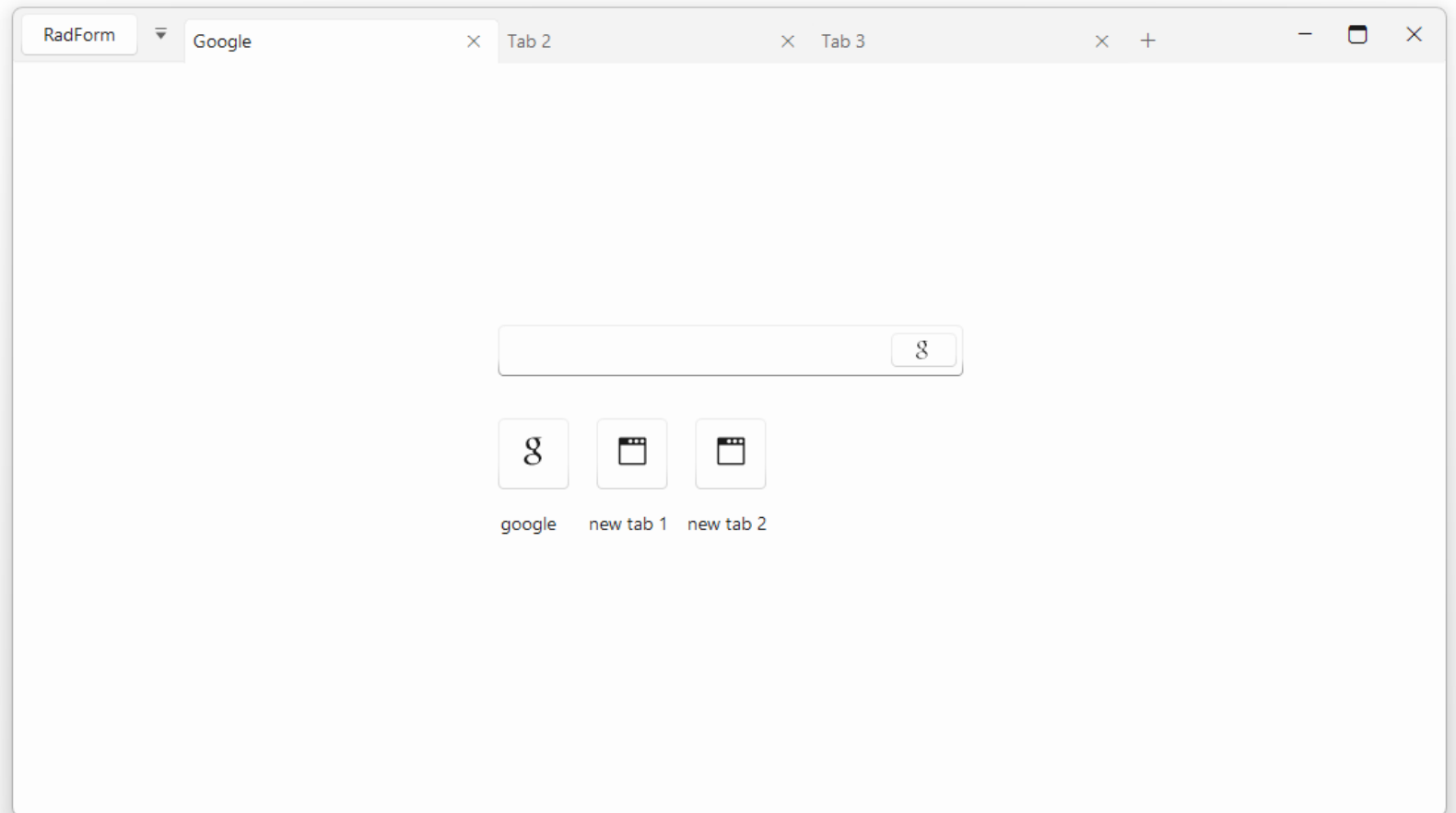
- Form
- Ribbon Form



# Interactivity

## Forms

- Form
- Ribbon Form
- Tabbed Form





# Interactivity Forms

- Form
- Ribbon Form
- Tabbed Form
- Toolbar Form

Data Editor Progress Corporation

General Security Profile Project Settings

Pivot HM

Database

Sum of Quanti Sum of N Year Promotion Aggregates

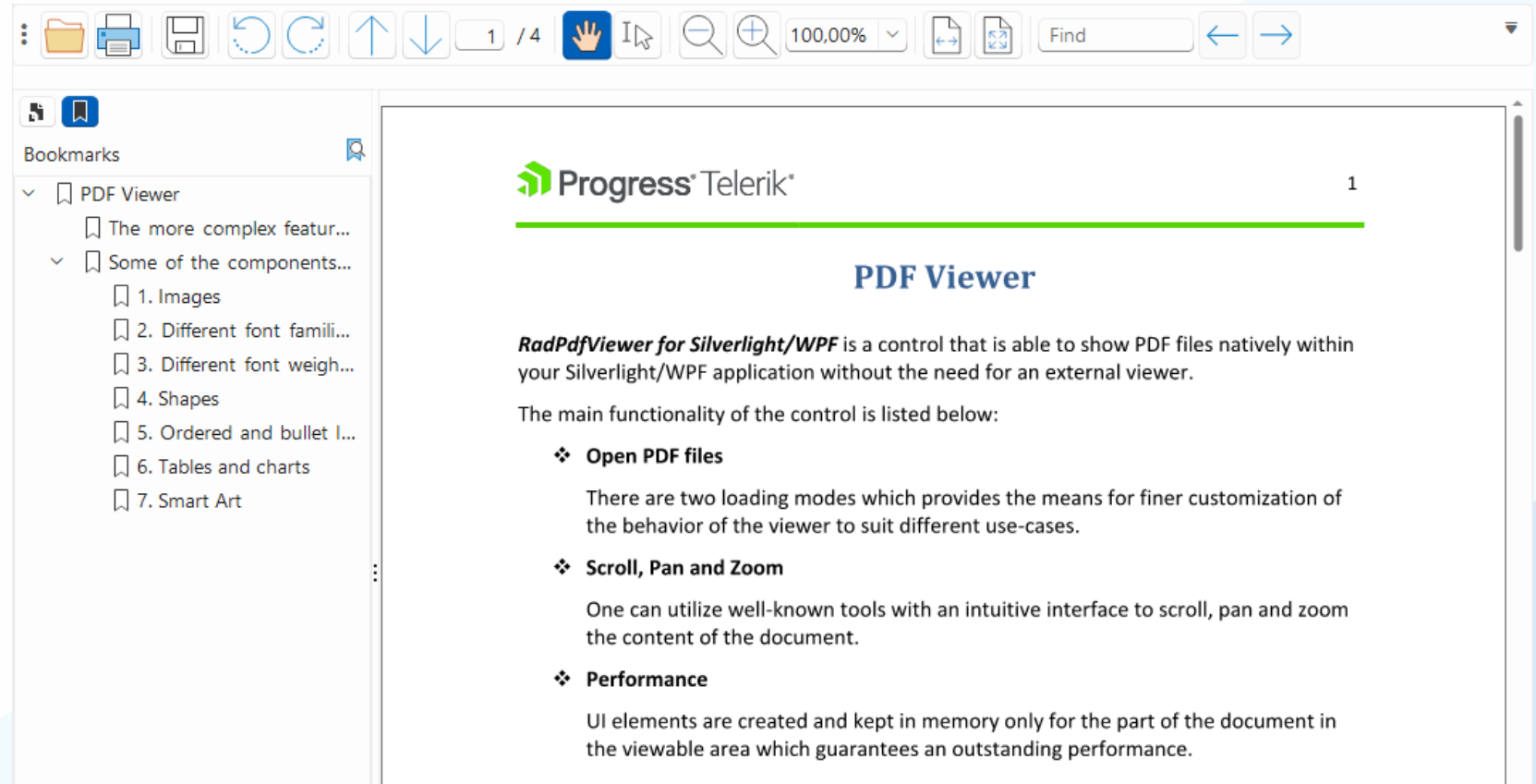
2010

Produ	Adver	1 Free with 10	Extra Discount	2010 Sum of	2010 Sum of	Total Sum of	Total Sum of
		Sum of Quanti	Sum of Net	Sum of Quanti	Sum of Net		
Printer stan	Direct mail	176	2070,81	162	1679,94	338	3750,75
	Magazine	264	3148,11	282	2964,34	546	6112,45
	Newspaper	198	2346,08	262	2716,94	460	5063,02
	Printer stand T	638	7565,00	706	7361,22	1344	14926,22
Mouse pad	Direct mail	385	2991,45	367	2469,91	752	5461,36
	Magazine	836	6464,64	760	5114,80	1596	11579,44
	Newspaper	484	3760,68	528	3553,44	1012	7314,12
	Mouse pad To	1705	13216,77	1655	11138,15	3360	24354,92
Glare filter	Direct mail	220	3293,40	182	2360,54	402	5653,94
	Magazine	352	5224,56	367	5009,99	719	10234,55
	Newspaper	242	3622,74	345	4474,65	587	8097,39
	Glare filter Tot	814	12140,70	894	11845,18	1708	23985,88
Copy holde	Direct mail	154	1196,58	168	1130,64	322	2327,22
	Magazine	341	2610,72	214	1440,22	555	4050,94
	Newspaper	297	2307,69	265	1783,45	562	4091,14
	Copy holder T	792	6114,99	647	4354,31	1439	10469,30
GrandTotal		3949	39037,46	3902	34698,86	7851	73736,32

# Document Viewers

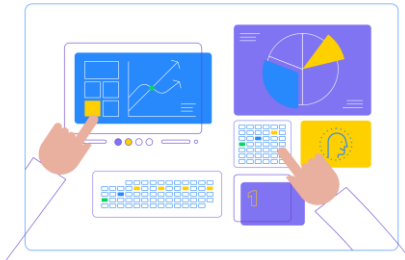
# Document Viewers

- RichText Editor
- Spreadsheet
- PDF Viewer
- Syntax Editor

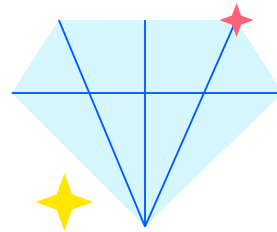


# UI/UX → Themes

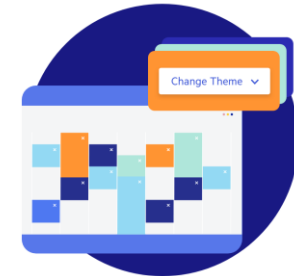
# Themes



**Modern**



**Classic**

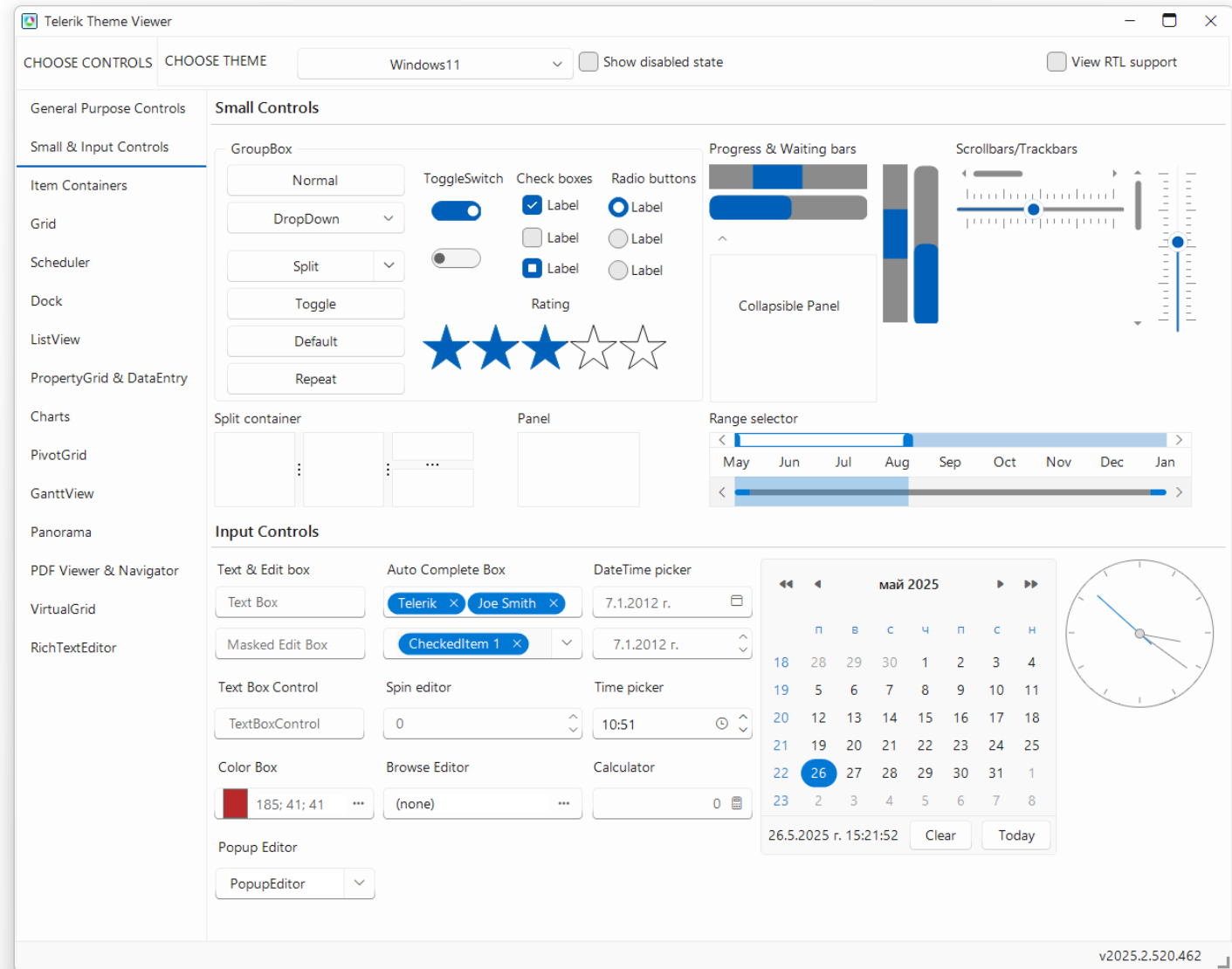


**Dark**

# Themes

## Modern

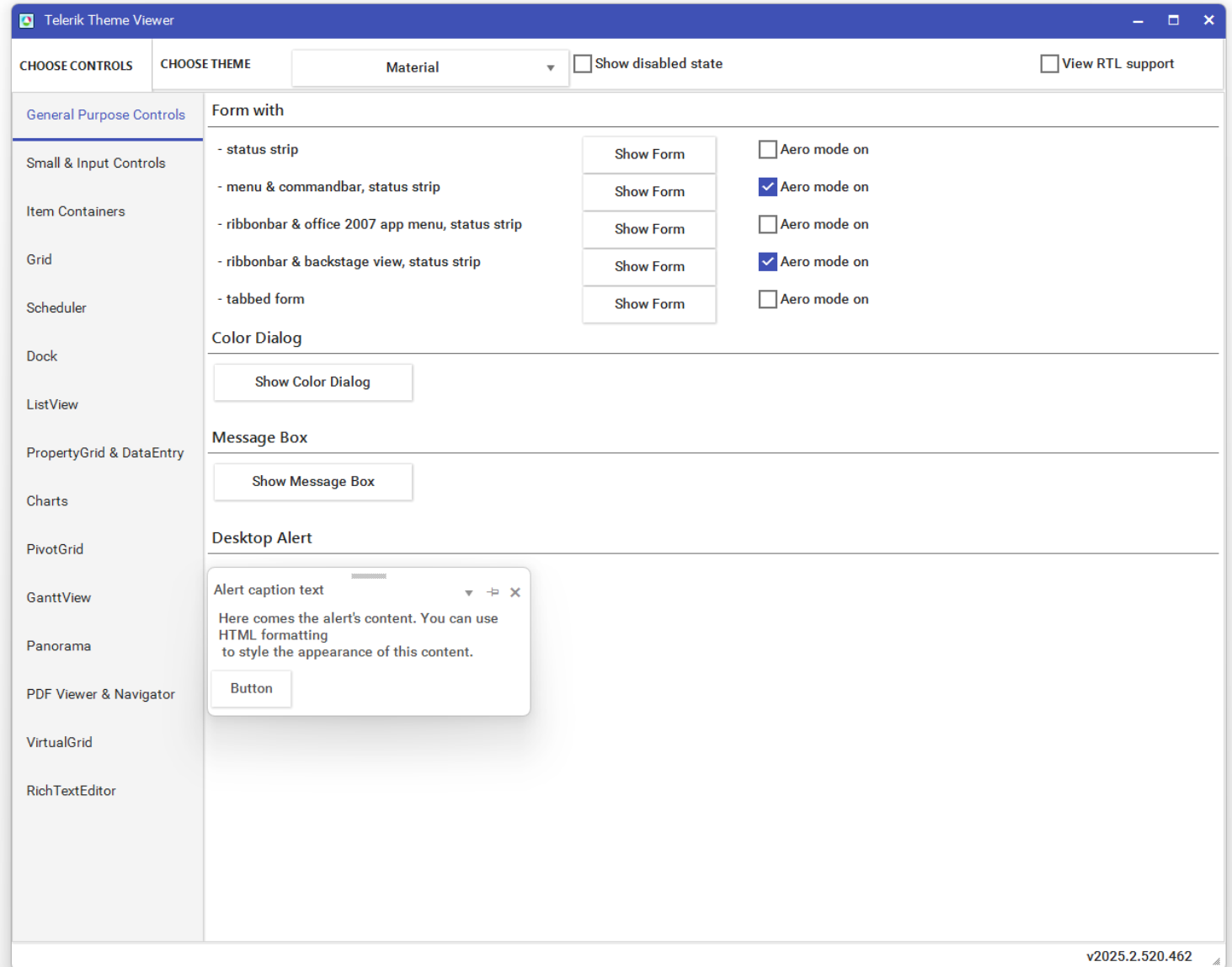
- Windows 11
- Material
- Fluent
- Crystal
- Visual Studio 2022
- Office 2019
- Telerik Metro



# Themes

## Modern

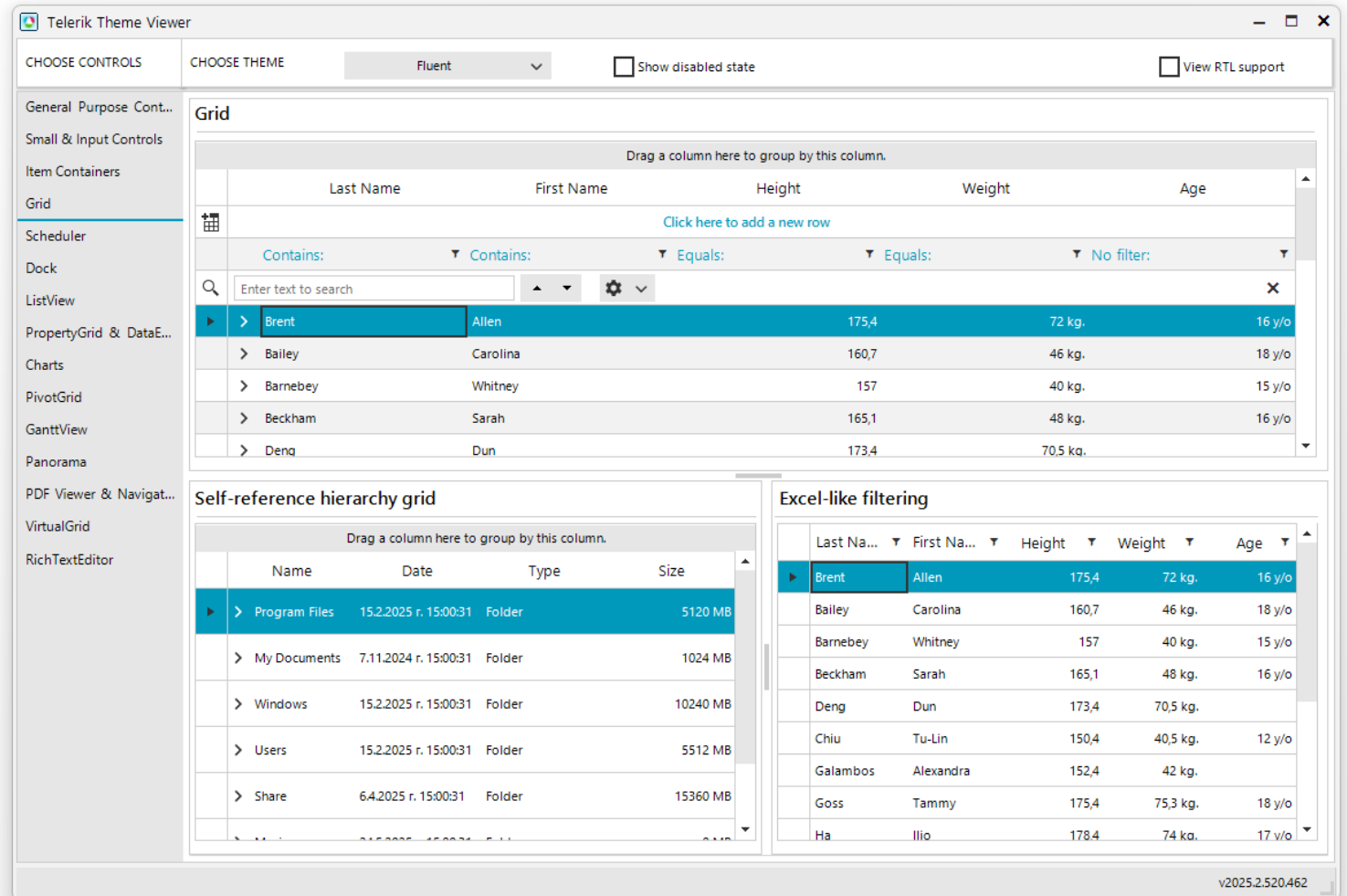
- Windows 11
- Material
- Fluent
- Crystal
- Visual Studio 2022
- Office 2019
- Telerik Metro



# Themes

## Modern

- Windows 11
- Material
- Fluent
- Crystal
- Visual Studio 2022
- Office 2019
- Telerik Metro

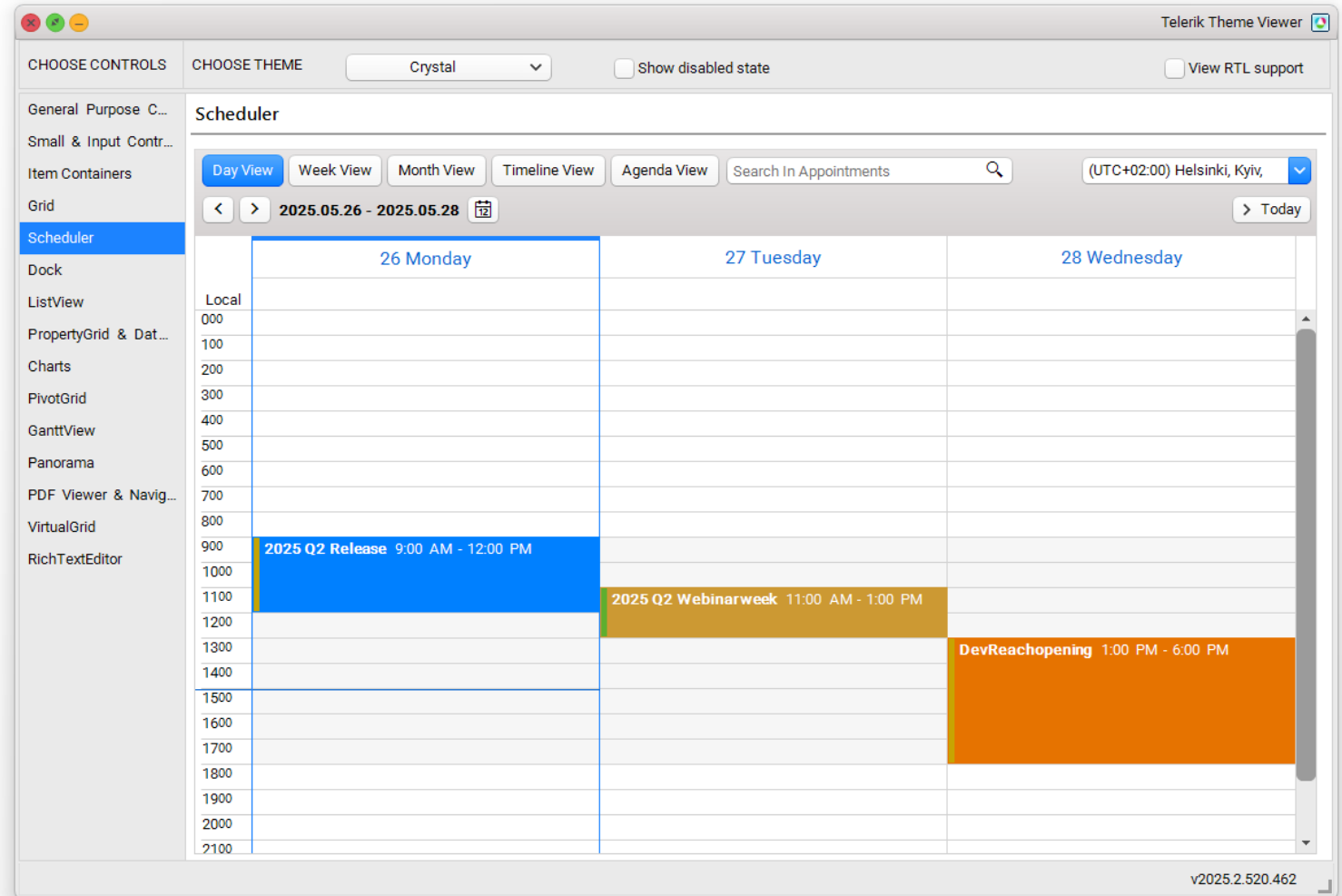




# Themes

## Modern

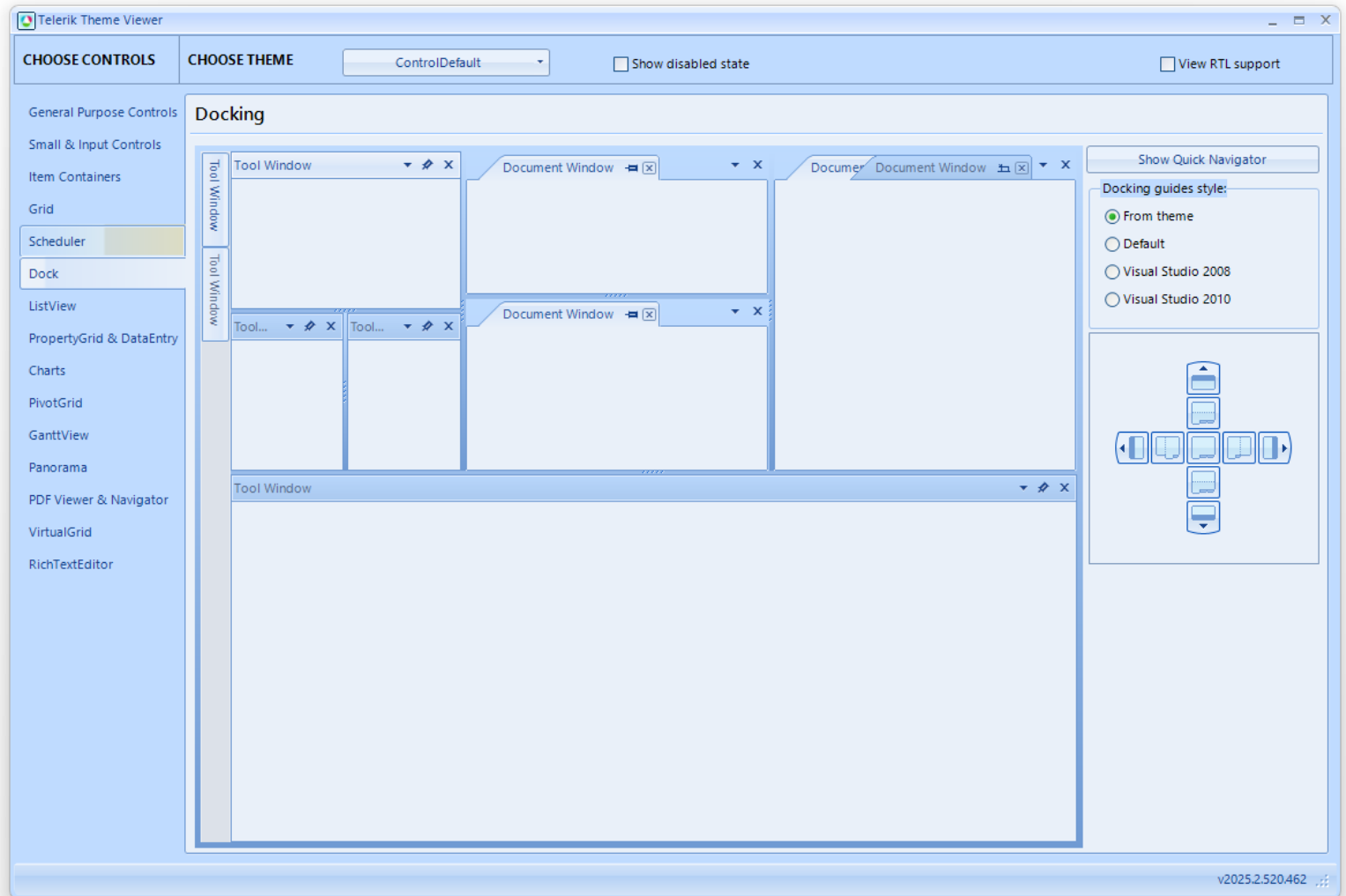
- Windows 11
- Material
- Fluent
- Crystal
- Visual Studio 2022
- Office 2019
- Telerik Metro



# Themes

## Classic

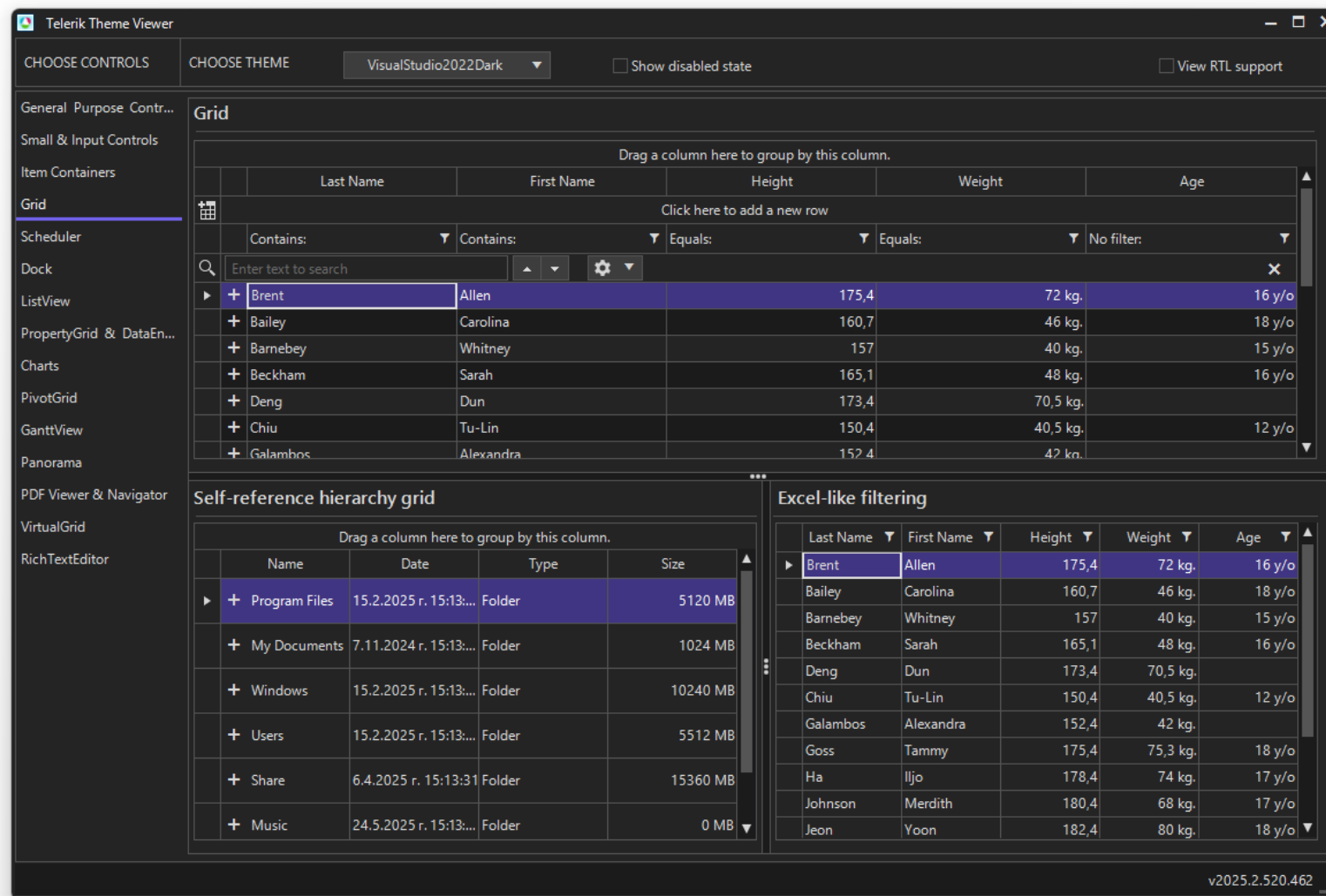
- ControlDefault
- Desert
- Breeze
- Aqua
- Windows 7
- Windows 8
- Office 2010/2013



# Themes

## Dark

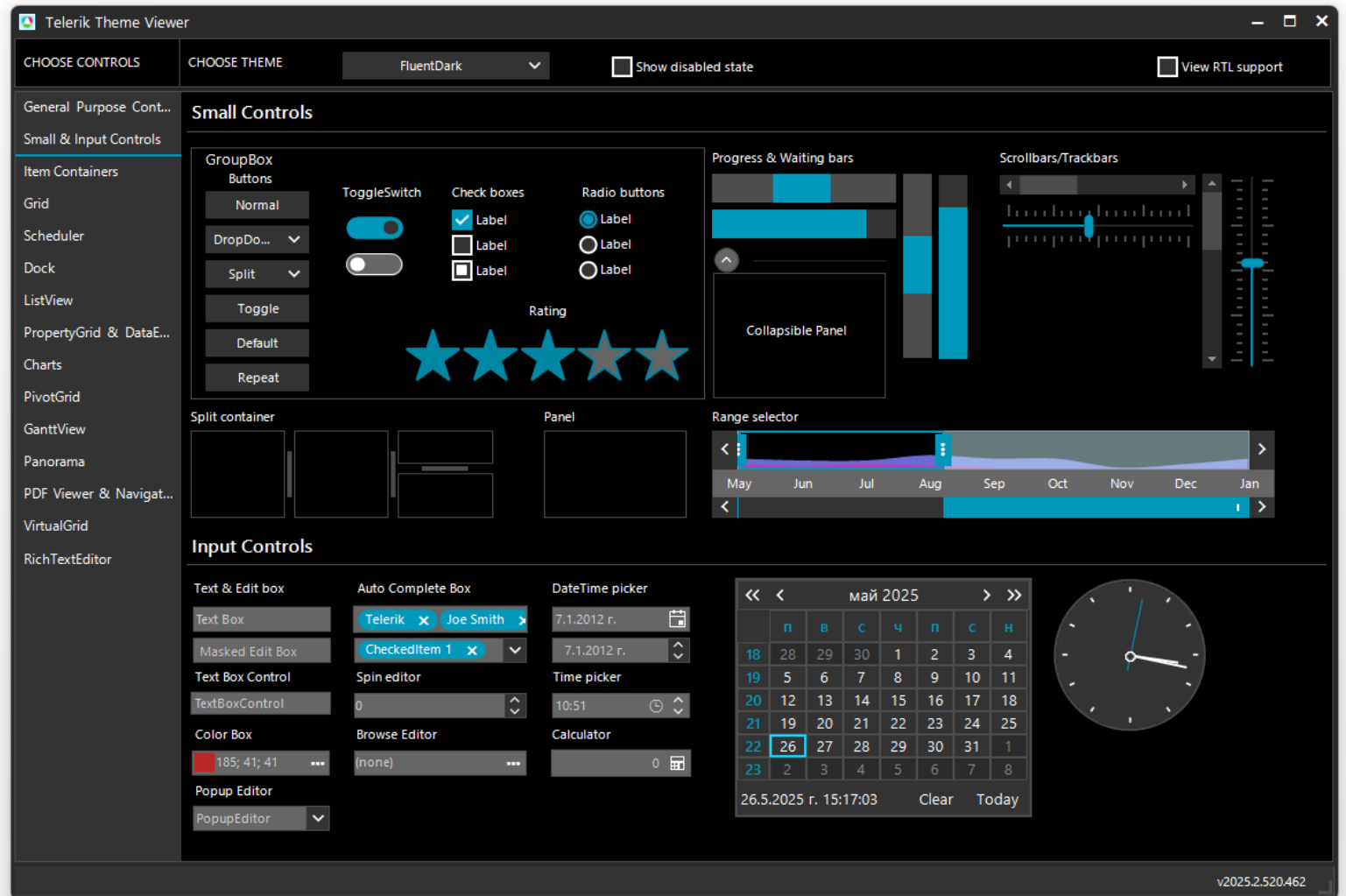
- Windows 11
- Visual Studio 2022 →
- Fluent
- Crystal
- Visual Studio 2012
- High Contrast Black



# Themes

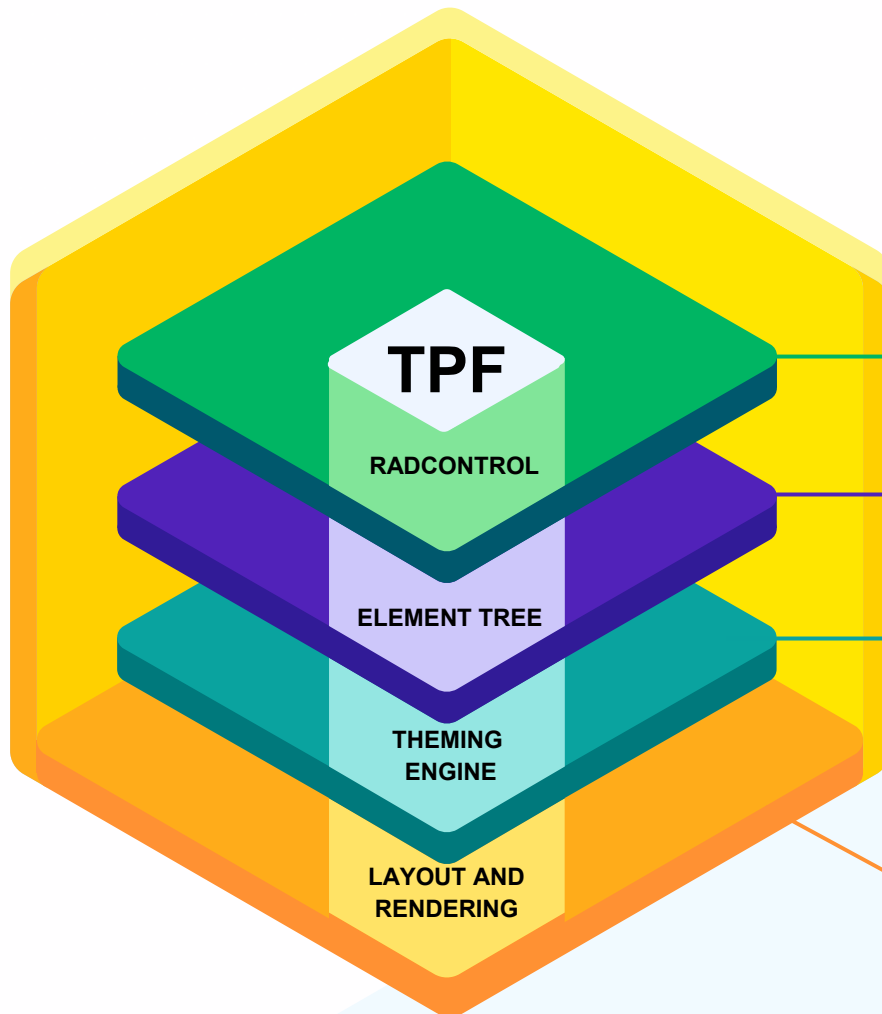
## Dark

- Windows 11
- Visual Studio 2022
- Fluent
- Crystal
- Visual Studio 2012
- High Contrast Black



# Customizations → Telerik Presentation Framework (TPF)

# Telerik Presentation Framework (TPF)



## RADCONTROL



Inherit Control



Process Messages



Expose API



Handle Input

## ELEMENT TREE



RootRadElement



RadItem



Event Tunnelling



RadElement



Primitives

## THEMING ENGINE



Precedence



Animations



Dependency Properties

## LAYOUT AND RENDERING



Layout



Painting



Text Rendering

# Scaling → High DPI & Vector Graphics

# High DPI & Vector Graphics







- [In-House High DPI Engine](#)
- [Vector Images \(SVG\)](#)
- [Glyph-Based Fonts](#)
- Scaled Fonts And Sizes
- No More Pixelization



# Glyph-Based Fonts

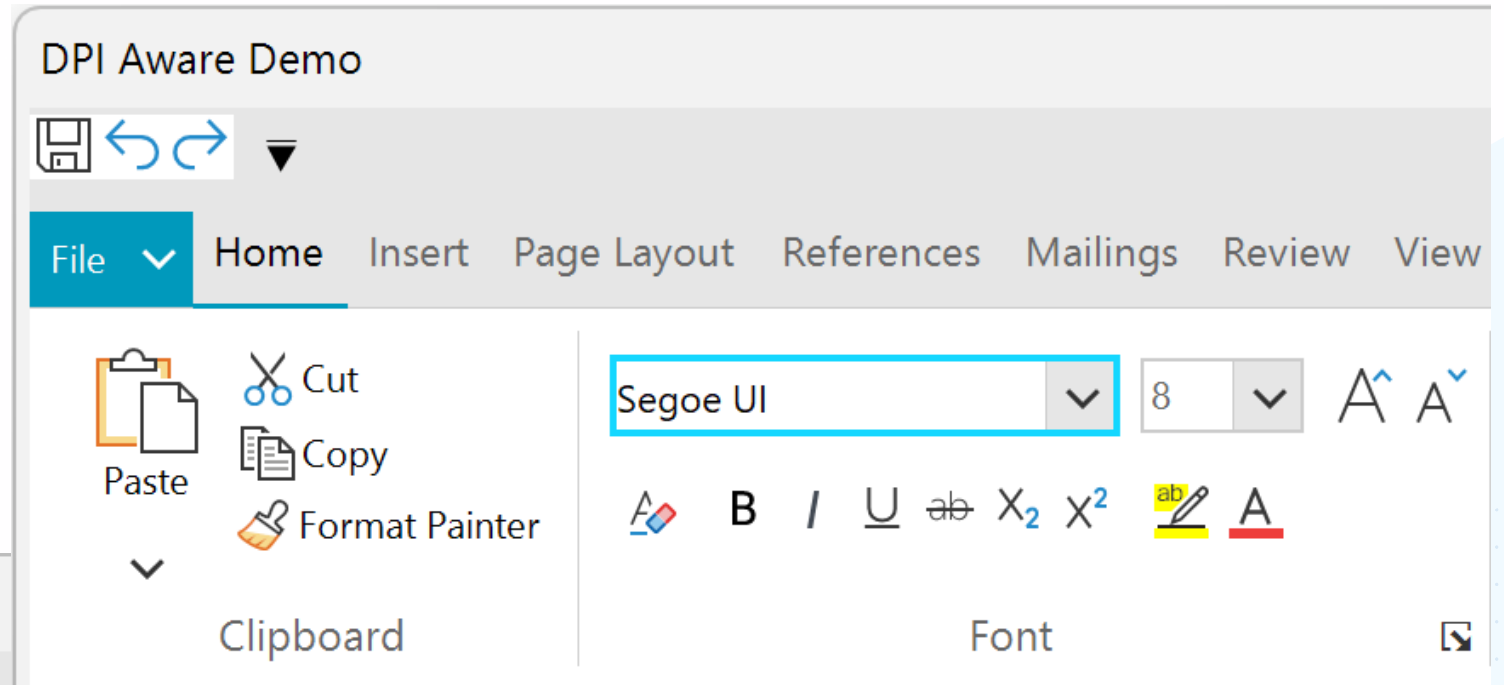
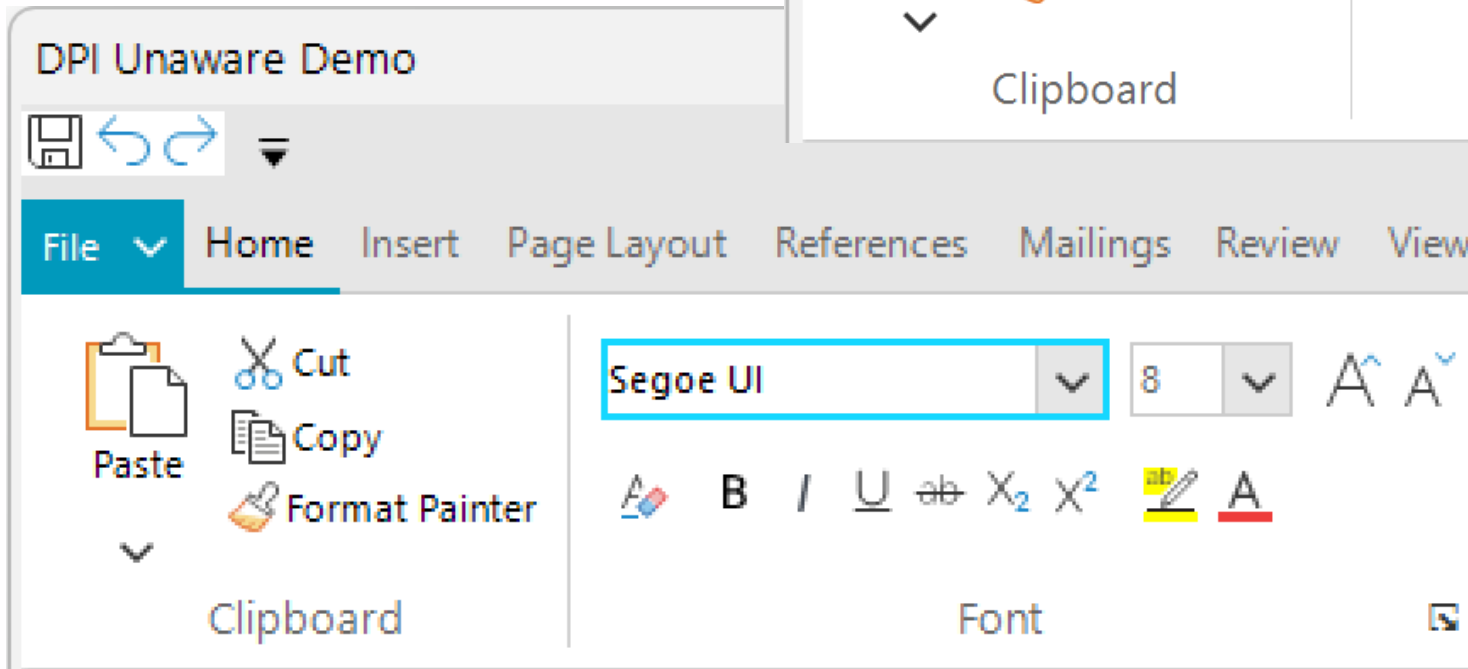
## TelerikWebUI

- [Glyphs Reference Sheet](#)

								
\e800	\e801	\e802	\e803	\e804	\e805	\e806	\e807	\e808
								
\e809	\e80a	\e80b	\e80c	\e80d	\e80e	\e80f	\e810	\e811
								
\e812	\e813	\e814	\e815	\e816	\e817	\e818	\e819	\e81a
								
\e81b	\e81c	\e81d	\e81e	\e81f	\e820	\e821	\e822	\e823
								
\e824	\e825	\e826	\e827	\e828	\e829	\e82a	\e82b	\e82c

# High DPI

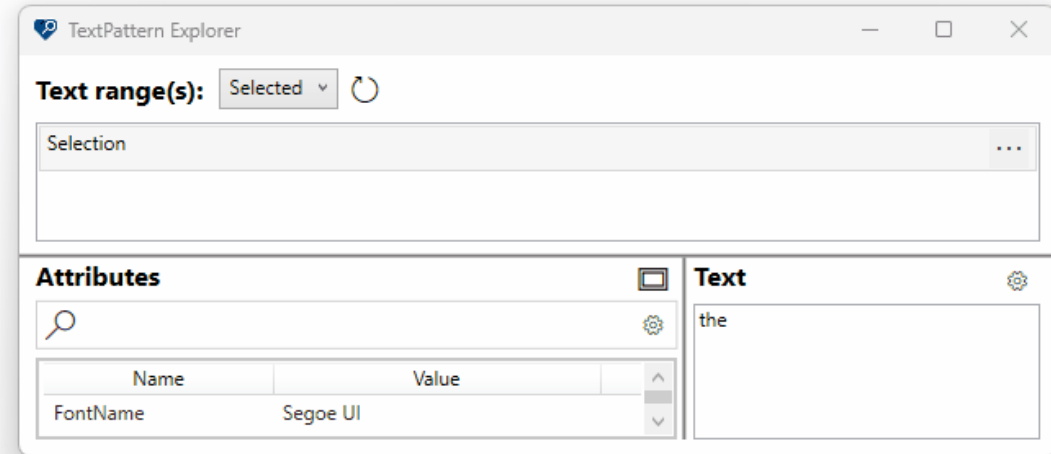
## Aware vs Unaware



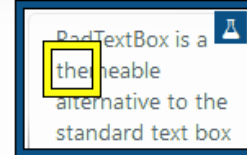
# Accessibility → UI Automation

# Accessibility

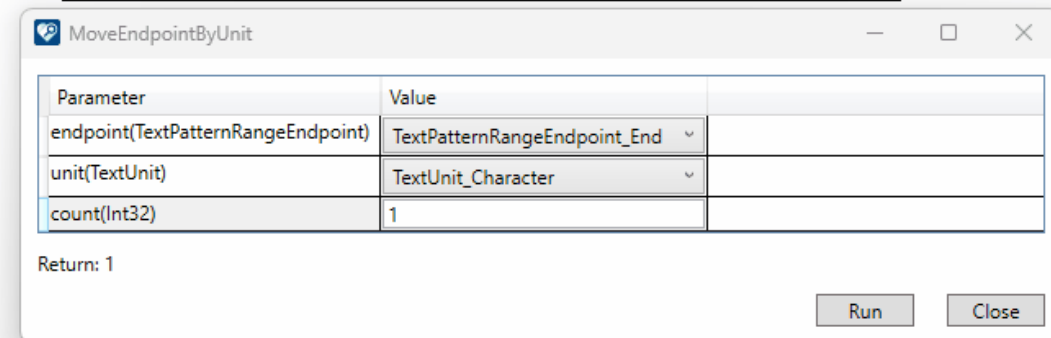
- [Microsoft Active Accessibility \(MSAA\)](#)
- [UI Automation \(UIA\)](#)
- Accessible Themes



Multi-line text box:



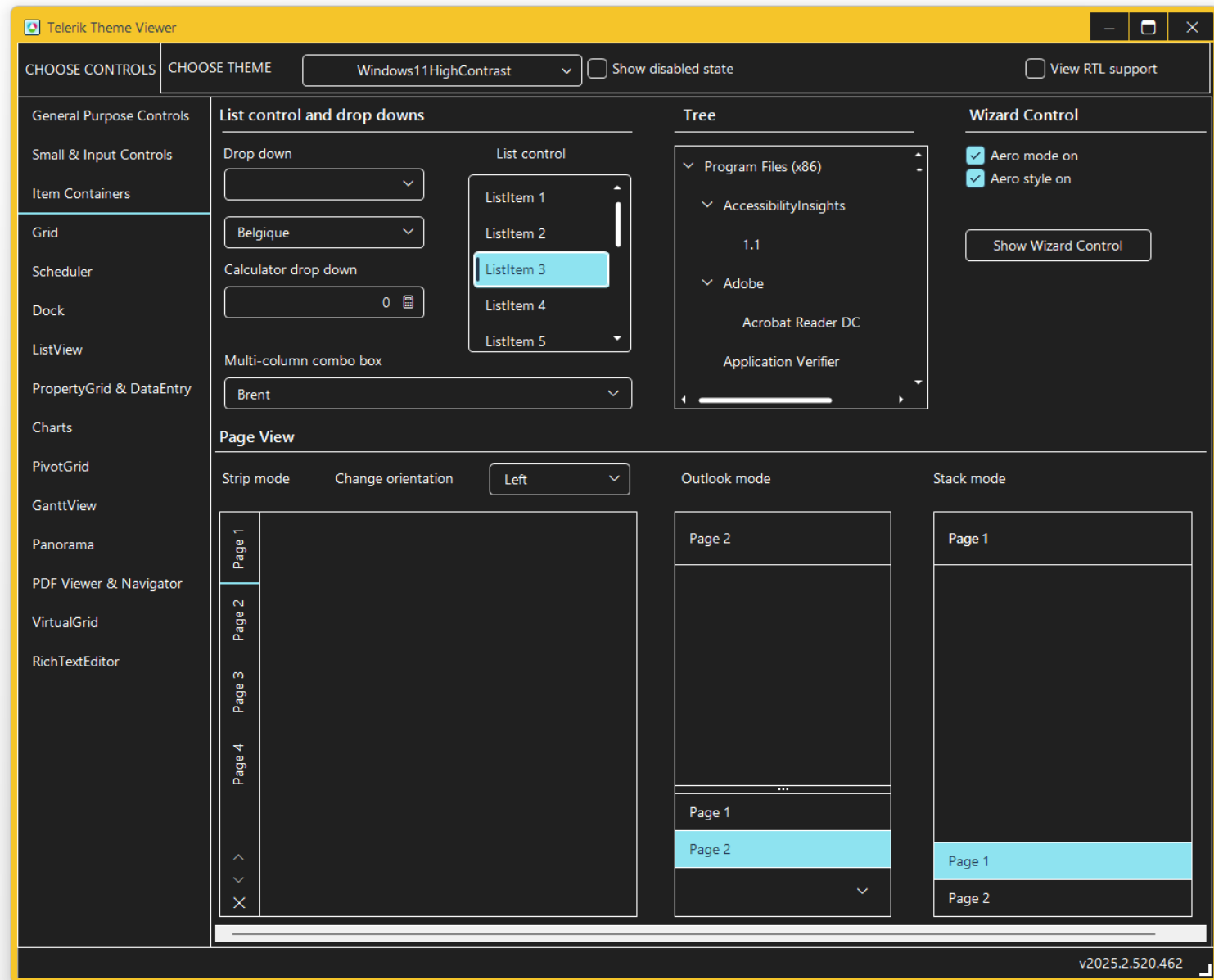
edit 'The Telerik RadTextBox is a themeable alternative to t...



# Accessibility

## Windows 11

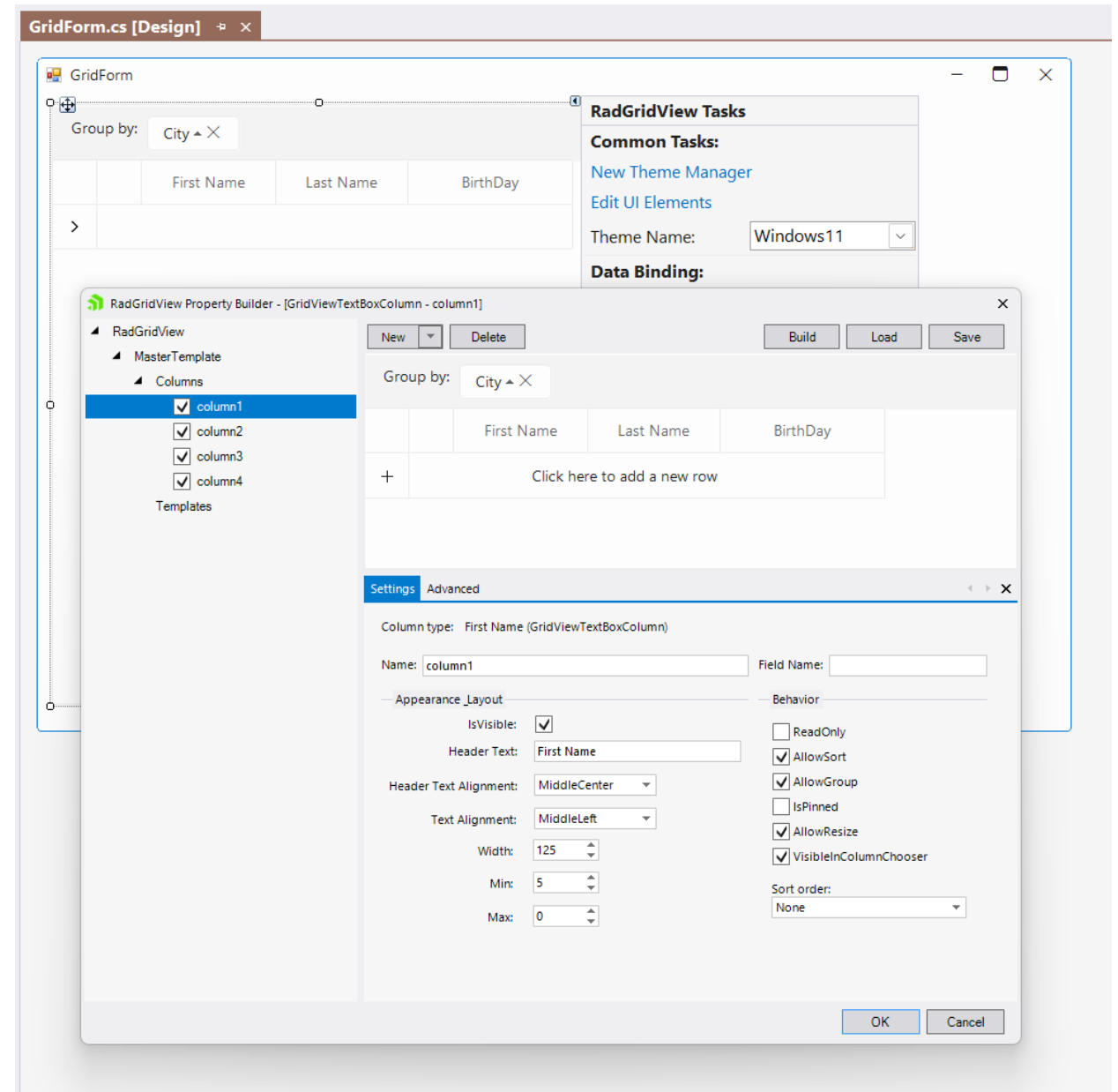
## High Contrast



# Visual Designer → Enhanced Editors and Wizards

# Enhanced Editors & Wizards

- Property Builders and Wizards
- Drag-and-Drop UI Building
- Code Generation
- Extended Smart Tags
- Theming



# Community Support → Technical Support



# Technical Support

## Proven Customer Service



- 96% customer satisfaction rate
- 55%+ first response resolution score

## Large Telerik Community



- 4.6M [forum](#) members
- 285K problems solved

## Phone and Remote Web Assistance



- Resolve complex problems
- Demonstrate in client environment

## Video Onboarding



- Telerik [Video Courses](#)
- Seamless onboarding experience

# Getting Started

# Getting Started

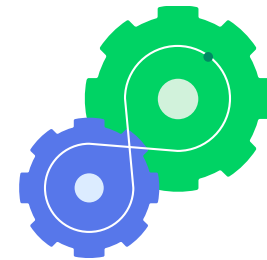
## Get Telerik UI for WinForms



## Resources



## Telerik Licensing



# Get Telerik UI for WinForms

# Get Telerik UI for WinForms

- [NuGet](#)
- Web Installer
- MSI Installer
- Manually on: <https://www.telerik.com/account/>

## PUBLIC VERSIONS

License Type	Version	Search
Purchase ▼	2025.2.520 ▼	<input type="text" value="Search for category, file..."/> 🔍

## Installation

[→ Release notes](#)

FILE NAME	MD5 SIGNATURE	TYPE	SIZE
<a href="#">Telerik_UI_For_WinForms_2025_2_520.msi</a>	<a href="#">View Hash</a>	msi	431 MB

## Other Setup Files

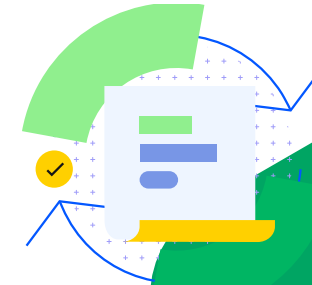
[→ Release notes](#)

FILE NAME	MD5 SIGNATURE	TYPE	SIZE
<a href="#">Telerik_UI_For_WinForms_2025_2_520_Dlls.zip</a>	<a href="#">View Hash</a>	zip	320 MB
<a href="#">Telerik_UI_For_WinForms_2025_2_520_Nuget.zip</a>	<a href="#">View Hash</a>	zip	353 MB
<a href="#">Telerik_UI_For_WinForms_2025_2_520_PDBs.zip</a>	<a href="#">View Hash</a>	zip	90 MB

# Resources

# Resources

- [Documentation & Knowledge Base](#)
- [Sample Apps](#)
- [GitHub WinForms SDK](#)
- [Smart AI Components](#)



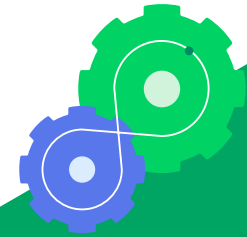
S23	✕	✓	fx						
	A	B	C	D	E	F	G	H	I
1	Year	Winner name	Number of wins						
2	2000	Michael Schumacher	9						
3	2001								
4	2002								
5	2003								
6	2004								
7	2005								
8	2006								
9	2007								
10	2008								
11	2009								
12	2010								
13	Total	Average wins	9.00						

# Telerik Licensing



# Telerik Licensing

- [License Key Files in Telerik and Kendo UI Products](#)
- [New Subscription Packages for Telerik & Kendo UI](#)
- [Frequently Asked Questions](#)
- [License Keys | Your Account](#)



## Your License Keys

### License Key

To use the listed products below, a valid license key is required. You can download your license key directly from here or visit our [Licensing FAQ](#).

Below are links to the product documentation articles, which include detailed instructions on how to apply your license key.

[Download License Key](#)

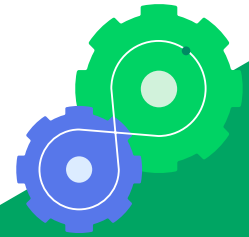
LICENSED PRODUCTS	SCRIPT KEY <span>?</span>	DETAILS
Progress® Kendo UI® for Angular	N/A	<a href="#">View Documentation</a>
Progress® Kendo UI® for jQuery	<a href="#">View key</a>	<a href="#">View Documentation</a>

# Telerik Licensing

- [Telerik Licensing & OpenEdge](#)

```
[assembly:  
global::Telerik.Licensing.EvidenceAttribute("eyJhbGciOiJSUzI1NiIsInR5cCI6ImlRbGVya  
WsgTGljZW5zZSBFdmkZW5jZSJ9.eyJjb2RlIjoieUkNXRilslR5cGUOiJwZXJwZXR1YW  
wiLCJleHBpcmF0aW9uljoxODc3ODM1NjAwLCJ1c2VySWQiOiJlOTMzNTIzMS1kY2Qy  
LTQyN2U+ODNjMi0yODVknzVkZDI1ZjliLCJsaWNlbnNlSWQiOi4NjQxNjE4Mi0xOTM  
3LTQ2ZjltYjcxNi1jYzgzNTE5NmM2ZGQifQ.dGkGQW0nEMXUIXtaayZvK2orcl_C04Fdc
```

```
CONSTRUCTOR PUBLIC Form1 ( ):  
    // ActivePerpetual script key  
    Telerik.Licensing.TelerikLicensing.Register("Your License Key").  
  
    InitializeComponent().  
  
    THIS-OBJECT.ComponentsCollection.Add(THIS-OBJECT.components).  
    CATCH e AS Progress.Lang.Error:  
        UNDO, THROW e.  
    END CATCH.  
  
END CONSTRUCTOR.
```



# Roadmap

# Roadmap

- AI Enablement
- Data Annotations in RadGridView
- Extended UI Automation Support
- Azure Provider in RadMap
- High DPI Improvements
- .NET 10 Support

# Document Processing Libraries

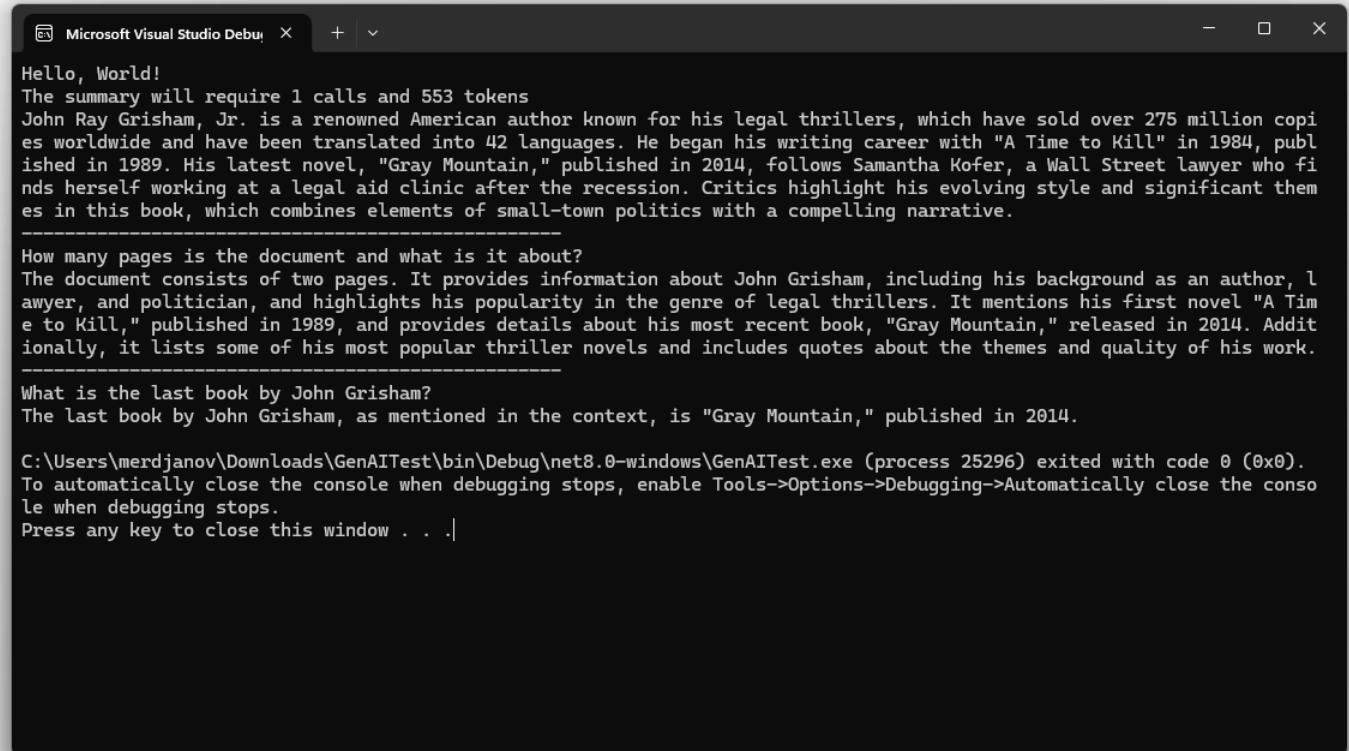
# Document Processing Libraries

- [PDF Processing](#)
- [Words Processing](#)
- [Spread Processing](#)
- [Spread Stream Processing](#)
- [ZIP Library](#)

# PDF Processing

## AI Document Insights

- Information Retrieval
- Token Optimization
- Multiple LLM Support



```
Microsoft Visual Studio Debug Console
Hello, World!
The summary will require 1 calls and 553 tokens
John Ray Grisham, Jr. is a renowned American author known for his legal thrillers, which have sold over 275 million copies worldwide and have been translated into 42 languages. He began his writing career with "A Time to Kill" in 1984, published in 1989. His latest novel, "Gray Mountain," published in 2014, follows Samantha Kofer, a Wall Street lawyer who finds herself working at a legal aid clinic after the recession. Critics highlight his evolving style and significant themes in this book, which combines elements of small-town politics with a compelling narrative.

-----
How many pages is the document and what is it about?
The document consists of two pages. It provides information about John Grisham, including his background as an author, lawyer, and politician, and highlights his popularity in the genre of legal thrillers. It mentions his first novel "A Time to Kill," published in 1989, and provides details about his most recent book, "Gray Mountain," released in 2014. Additionally, it lists some of his most popular thriller novels and includes quotes about the themes and quality of his work.

-----
What is the last book by John Grisham?
The last book by John Grisham, as mentioned in the context, is "Gray Mountain," published in 2014.

C:\Users\merdjanov\Downloads\GenAITest\bin\Debug\net8.0-windows\GenAITest.exe (process 25296) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .|
```

# Microsoft

## Foundation



# Telerik

## Added Value

- Control Set & Features →
- UI/UX →
- Customizations →
- Scaling →
- Visual Designer →
- Accessibility →
- Community Support →
- ✗ →

- Extensive Component Library
- Themes
- Telerik Presentation Framework
- High DPI & Vector Graphics
- Enhanced Editors and Wizards
- UI Automation Everywhere
- Technical Support
- Document Management



# Thank You



**Q & A**  
Let's discuss

**Slides**  
[winforms-sdk/pug](#)