

Solo Developer Rapidly Builds Audio Analysis Apps Using Syncfusion UI Controls



140+ JavaScript UI controls



140+ WPF UI components



Syncfusion Community License

Introduction

Fernand Bertemes is an independent developer based in Luxembourg. With a background in C#, JavaScript, and WPF development, Fernand currently volunteers at a local radio station and builds applications involving audio analysis and data transmission.

Problem Summary (Before Syncfusion)

While volunteering at a local radio station, solo developer Fernand Bertemes wanted to build applications that simplify audio analysis and data transmission. However, configuring and creating UIs from scratch was laborious. This prompted Fernand to search for a reliable set of ready-made UI controls to streamline the development process.

"I really like to use [Syncfusion's libraries] because they give me a lot of flexibility and allow for great creativity while coding."

– **Fernand Bertemes**, solo developer



Industry

[Radio and Television Broadcasting](#)



Region

Luxembourg



Customer Detail

Fernand Bertemes, solo developer

Use Case

Using Syncfusion's JavaScript and WPF UI controls, such as the DataGrid, Fernand successfully developed an application that transmits metadata and an application that transcodes and analyzes audio.

BEFORE SYNCFUSION

Challenges

- ❌ Manually configuring and building UIs requires substantial effort.

AFTER SYNCFUSION

Solutions

- ✅ Used Syncfusion's JavaScript and WPF UI controls to configure and implement UI elements.

Implementation

Since Fernand had previous programming experience with C# and WPF, he adopted Syncfusion's UI controls easily. Leveraging Syncfusion's JavaScript and WPF UI components, Fernand rapidly configured an application that transcodes and analyzes audio, including loudness, peak, true peak, correlation, and silence detection.

Fernand found Syncfusion's DataGrid to be particularly useful when developing an application that sends metadata to internet streams, FM transmitters, and more, since it allowed him to present data easily in a tabular format for end users.

Results

- Reduced development work by customizing prebuilt UI controls instead of building complex functionality from scratch.
- Accelerated the SDLC by minimizing time spent manually writing code.
- Successfully supported real-world radio broadcasting workflows involving metadata transmission, audio transcoding, and audio analysis.

Future Plans

Fernand is currently developing an application that monitors web streams for audio loss and notifies users about changes in sound quality. He is using Syncfusion's UI components to set up the application and may expand his usage as future needs arise.

Conclusion

Syncfusion's JavaScript and WPF suites proved to streamline application development. With 140+ ready-to-use, tailorable UI controls in each platform, Fernand effortlessly built desktop applications for a local radio station, simplifying daily activities related to metadata transmission, audio transcoding, and audio analysis.