Abstract

The SmartTag Phase II project continues the work of a previous UTD Senior Design project to develop an application for automated data tagging. This application has been tailored to work specifically with the Wonderware ArchestrA IDE system used by ATOS. Our team focused on improving the usability of the program by changing visuals and adding new functionality. Icons for data points and program tools were updated, and a pause/stop ability was added to the data exporting process. Several errors were resolved, and other functionality was researched for future development, such as an undo/redo function. Our team’s work on this application brings the product closer to completion, where it will help improve productivity in ATOS, as the company often works on large scale projects. Instead of manually recording and tagging thousands of objects and their extension points, this application will allow developers to save significant time by automatically tagging the data.

Results

Our team gained valuable experience by working on an established project within a company. A significant amount of time was spent learning about the program that already existed and communicating with the team manager to improve our understanding. This project taught us crucial skills and lessons that we can use as we transition to our careers within the industry.

The SmartTag application has been improved with an updated user interface and new functionality to better serve ATOS. Several aspects of the UI, such as data icons and toolbar buttons, were changed to clarify the internal processes of the program to the user. The data export process was outfitted with pause and stop buttons to allow further control of the process.

Architecture

Impact

ATOS often develops large scale software projects that have thousands of objects and data extension points. Currently developers must manually record and tag data objects points, spending a significant amount of the project time doing so. The SmartTag application will automate the tagging process, which would greatly reduce the time needed for developers to organize and track objects, thereby improving productivity. Improving the user interface and adding new functionality will allow ATOS users to increase efficiency while using the software, while also reducing user error.