# case study:
# PAPERWISE

## Need:

**Composite web application to integrate multiple desktop applications**

Paperwise, a document management and workflow software company, has worked with Code Scientists for many years to create algorithms, applications, and platforms. For Paperwise, we created a web-based composite application that integrates all of their desktop applications into a single, easy to use, cloud application.

## Solution:

Code Scientists, LLC created Symphony, which integrates the functionality from all the Paperwise desktop applications including document searching, indexing, scanning, and storage.

Symphony is tightly integrated with desktop applications. This desktop integration lets Paperwise transfer document metadata from line of business applications running on user PCs into Symphony to use as indexing criteria for documents.

We also created native mobile applications that allow Paperwise users to scan documents with their phones and tablets and import those into Symphony and other Paperwise platforms. At the algorithmic level, our team created document recognition and 3-dimensional deskew routines to make documents clearer and more readable when photographed with mobile devices. These mobile applications are used in the trucking industry to capture trip-related documents, for example.
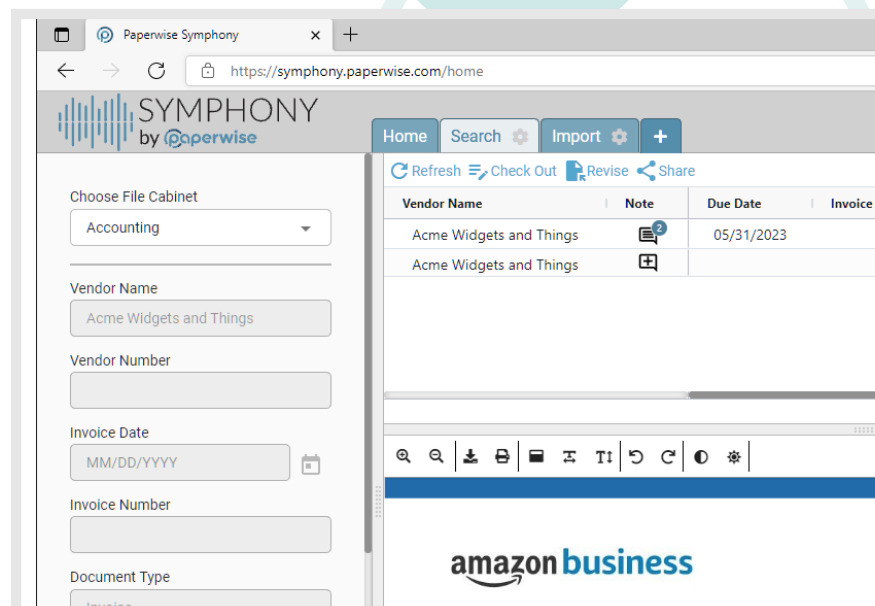
## Skills used:

- Angular, Angular material, TypeScript/JavaScript
- C#, asp.net core, SignalR
- Composite Application Patterns for angular
- OpenCV
- objective-c, Swift, Java
- iOS and Android Development
- Algorithms

SYMPHONY
by paperwise

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Search  Index  Inbox  Advanced Search  Import  Process Manager  Processes  Settings

Latest Symphony Feature Additions and Bug Fixes

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Release Notes Q1 2023

**Product Updates Released on January 17, 2023**
List of All Changes

| Feature | Description | Issue Number |
|---|---|---|
| Import Tab | Corrected an issue that kept subsequent groups of documents from being added to the initial group of documents in the import list. | 19607 |
| Index Tab | Updated the pop-up captions in the list of tasks on the Index tab. | 19567 |
| Process Manager | Corrected an issue that led to the lock icon not being displayed on a past version of a process in the Process Manager. | 19227 |
| | n issue that allowed a process task to be submitted without the status started. | 19064 |
| | as minimized the view of documents attached to a task, attachments e to be minimized for the Symphony session. | 19571 |
| | e list of attachments displayed as available for download on a task so | 19572 |

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Home  Search  Import  +

| Format | Name | Size | Delete |
|---|---|---|---|
| − | PO 10988 - Invoice 056790.pdf | 727.73KB | 🗑 |
| − | PO 65489 - Invoice 098765.pdf | 105.94KB | 🗑 |

**Drag and Drop Files Here**

or

Browse for Files

PaperWise                    PURCHASE REQUEST

3171 E. Sunshine
Springfield, MO 65804        P.O. NO.   10988
417-886-7505 (p)             DATE       April 15, 2020
                             CUSTOMER ID
                             PROJECT
                             CLASS / DEPARTMENT

VENDOR      Office Supplier
            35678 Pentop Way

Upload        Remove

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Home  Search  Import  +

Refresh  Check Out  Revise  Share

| Vendor Name | Note | Due Date | Invoice N... | Vendor N... | Invoice D... | Payment ... |

**Notes**  ✕

Text to search for

◉ Search notes for all documents in the cabinets
○ Search notes for the currently displayed list of documents
○ Search notes for currently selected documents

Preview    Open in Search

No data

Invoice # 1LKK

Payment due by May 08, 2020

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code scientists