

## Decade Software

# Commercial Public Health Info System

### Project Overview

Decade software is a company that published one of the most popular of the public health inspection maintenance systems used in the public sector. This is a very complex system that maintains all the regulations for county inspectors to ensure local restaurants, gas stations, and other establishments do not break any laws regarding public health. Inspectors would take these systems into the field on laptops and use them while doing random field inspections, recording all the information necessary to either pass or fail a particular location.

### Solution

We were asked to assist the internal team at Decade Software to update their system to run faster and with more advanced technology. We also introduced the latest quality approaches to their development team, ensuring the team would internalize the new procedures and continue with them throughout the rest of the project.

The system design required that the laptops be able to run and execute the application while disconnected from the network, then update all the information when they returned to the headquarters.

### Technical Details

Since the application would often run while disconnected, it was necessary to build it as a Winforms application instead of a web application. We introduced Dependency Injection and other software patterns in an effort to break the existing system up into smaller pieces that were more easily managed.

### Benefit

**Improved System Speed** – We were able to improve the speed of the system by using the latest technology and patterns to break the system apart into smaller pieces. Only the pieces that were necessary to run the current piece of the application were loaded into memory, thus resulting in better utilization of the hardware and a faster system.

**Faster Time to Market** – The improvements in architecture we made enabled the development team to build features more quickly than before, thus decreasing the time necessary to push a new version out to the market.