# Elements of a solution

Projects may vary in complexity and the amount of effort necessary for development. This is a small and simple project, however a more complex projects most likely require the following steps in general:

* Selected technologies/custom code may be new, upgraded, updated, or include added components. Everything must be well tested.
* Technologies may include hardware, software, peripherals, or network components. An SQL Server instance required in this case. Depends on the Windows version, a .NET 6 installer also.
* Training applies to everyone who will be using or supporting the solution that is to be deployed.
* Documentation refers to all the information needed to install, maintain, support, and use the solution.
* Support processes include the procedures necessary to perform backups, restorations, disaster recovery, troubleshooting, and Help desk functions.
* External communications involve keeping external stakeholders apprised of the progress of the deployment and the ways in which the solution will affect them.
* Deployment processes include installation/un-installation procedures for deploying hardware and software, automated deployment tools, and procedures for emergency rollback.

# Installer

An installer is necessary before delivering the solution. There many ways to achieve it, here are some examples:

* Offline installer and local access: using WiX installer package to build a Windows Installer
* Deploying behind a Remote Desktop Service. For example, in Azure I can setup a server environment, create individual customer account to access the server. The application automatically start at logon. This method provides an online access and maintenance free deliver for the customers.
* Deliver over an update service, like FTP server. With a Windows Batch script, every user can deploy the solution to their local computer. This can be a full- or semi-automatic process to deploy and configure the solution.

+1 method: creating the solution as an All-In solution, where the UI code base developed in one or more projects and the same codebase deployed under Windows Winform, WPF, any web browsers (as WebAssembly), Android, Linux, Mac-Catalyst, iOS applications and delivered using the right channels. This is a service oriented solution, using services and dependency injection to support platform independent implementations. One UI codebase, one development for all platforms. Here is a full demo: <https://github.com/JZO001/Forge.Yoda>