

Past Experiences – Joe Frausto Jr.

For over 24 years, my software background has been creating dynamic, straight-forward, simple to use, ad hoc, data-centric, web-based and desktop solutions, with experience through all phases of the System Development Life-Cycle:

1. Concept – whether there is a need to develop a new process, or modify an existing system, I always start with discussion and analysis of the current processes, tools used, and issues with failing processes, followed by the customer’s vision of an improved process.
 - I have an exceptional ability to envision an end product and ask the right questions concerning processes or actions that the customer may not have considered.
 - I listen to the customer to understand what they think they want, able to ask the right questions (always future thinking) to help define where they want to go.
2. Planning – Inform the customer of the steps that would be involved to complete the development process including the possible risks – basic documentation, using project management principles to establish an estimated time line.
3. Requirements Analysis – Discuss the needs, requirements and functionality for an application including all the data elements to be collected, form fields and layout through basic paper drawing or digital mockups, and a robust security model to handle authentication and authorization (forms and/or specific form objects) in conjunction with enterprise login.
4. Design – design a new [relational] database model to handle the data needs, or re-engineering with the modifications necessary to update an existing database schema. This includes the physical characteristics, inputs/outputs, and data conversion processes (ETL/ELT). Create prototype forms and continually meet with the customer (generally working directly with an end-user that would become a SME) to confirm layout and direction, comparing form objects against the database model to ensure all data elements were covered.
5. Development – Develop web-based or desktop applications, or windows services, depending on what makes the most sense for the specific application or will be the most efficient means of processing data, with significant user input throughout an Agile process. Develop dynamic page content tied to RDBMS databases (Sybase, SQL Server, Oracle, Teradata) or integration to other MES, EPR, or CRM data repositories, in three environments – dev, test/pre-prod, production.
 - Created scripts or ad hoc programs (custom VB or VBA) to extract, transform and migrate legacy data (MS Access), MS Excel, other database, or provided mechanisms to import mismatched legacy data through web forms.
 - One project included a mechanism to import data in MS Excel files through a web interface by first converting the Excel data to XML format, and vice versa for export.
 - Wrote custom procedures to copy ERP part data to a local system to provide 100% application up-time with near real-time data, eliminating previous issues that generally caused significant production down-time – never previously done (helped reduce Quality Inspection lost time by increasing inspection visibility).
6. Integration and Testing – Perform unit testing and provided scripts to guide the process of end-user acceptance testing performed throughout the development process, and final acceptance testing session, generally in a computer lab.
 - Provide documentation and full end-user training in a classroom environment or through focused one-on-one training.
7. Training – provided end-user training documentation, with focused one-on-one training, individual training for SMEs, or full end-user training in a classroom environment for groups of end-users.

8. Migrate and transform all legacy data or provide mechanism to import legacy data through the application.
9. Implementation – Documented concise implementation procedures to ensure a successful rollout.
10. Operations and Maintenance – provided support, monitoring and system modifications as needed.
 - Have created simple bug tracking systems that included new feature requests.
11. Disposition – Retire legacy system, documenting the process for archiving and disconnecting legacy systems.

The majority of my work experience has been converting legacy applications (MS Access, MS Excel, VB6) to web-based solutions, but also developing in-house desktop tools, other ad-hoc applications, and windows services to control the flow of data.

Nearly all of the position I have held in my career have been as “the” developer, only having worked as part of a team on one or two occasions.

When I started school at ITT Technical Institute, back in 1992, my goal was to enter field service – be able to go anywhere and troubleshoot anything

My ideal position was a manufacturing engineering specialist – continuous process improvement.

Today, I’m a highly specialized, full life-cycle software engineer – architect, analysis and troubleshooting, database modeler, and application developer.

My passion is for manufacturing and continuous process improvement, with 2 years of Statistical Process/Quality Control (SPC/SQC). Was pushed into software development (a new position was created within a fab) after two years as an electro/mechanical engineering technician having written several custom software applications to make my job easier by making data collection more efficient.

Overall experience

1. Have designed training tools (mechanical jigs) to help people learn their jobs better.
2. Have designed parts for machine tools to prevent scrap and downtime as well as a lock-out/tag-out device, working with a machine shop to produce the parts, and installed the parts.
3. Continuous Process Improvement – after root cause analysis of numerous process issues, have submitted proposals to update (re-write) work/specification documents to clarify (sometimes simplify) operating instructions or procedures, and/or created flow charts to help the operators understand the process flow and increase efficiency.
4. Reduced hours of tedious computer work to seconds of automated processing – MS Excel VBA macros, or other ETL/ELT means.
5. Developed custom ETL tools for data migration from legacy systems into new database schemas.
6. Designed applications that actually meet the end-user specific needs, and exceed their expectations.

While at Micron Technologies, during a review, I was told by the engineering manager that I had more ideas than all the other technicians and engineers put together.

Thank you for your time and consideration,

Joe Frausto Jr.