

MICROARRAY INSTRUMENTATION SOFTWARE

Client Profile:

A biotech company developing new technology for the Life Science Industry.

Technologies Used:

C#/C++, .NET Framework, XML, Mercury Quality Center / WinRunner

Project Summary:

This client developed a microarray/bio-sensor instrument that is used to characterize molecular interactions and support the expanding field of Proteomics. ASHVINS' focus in this project was the development of a Windows based graphical user interface to control and acquire data from the new instrument. The instrument is attached to a robot sample handler. The application was required to manage the interaction of both the robot movements and instrument data capture procedures. Phase 1: Created a team consisting of members from the industrial design company, the biotech client and ASHVINS to develop the Software Requirements Specification. Phase 2: Developed the Design and Architecture of the system utilizing established UML Best Practices. Phase 3: Implementation of the solution, testing/validation processes, change control procedures and defect tracking. Throughout the life of the project, communication was critical since both the firmware for the instrument and the software was developed concurrently. Constant interaction between the biotech company, the industrial design company, and ASHVINS ensured a successful project. An application was developed with an easy to use graphical interface that allows a lab technician to learn and use the application in less than a day while orchestrating complex experiments in less time than competing systems.