

# Assignment 5: APPLES Reflection 1

Our team was very surprised to learn how the UNC medical labs handle the immunohistochemical validation forms. Currently, the whole form validation process is done using paper forms that are filled out by lab technicians and pathologists, which are later stored in binders. Clearly, there is a need for a software solution to digitize the validation process. One that would enable easy information management as well as optimize cooperation among those involved in the process. Our main goal in this project is to deliver a web-based application that will improve the sample validation workflow in the UNC medical labs by the end of the term. To accomplish the aforementioned, we have identified the following targets that must be met by our application:

1. The application will be integrated with the existing single-sign-on system used by UNC Health, or have its own secure user authentication system.
2. Lab technicians and pathologists must be able to fill out the immunohistochemical validation forms electronically, and they also must be able to electronically sign the forms.
3. Form results can be shared between technicians and pathologists to allow for efficient cooperation and guarantee accuracy.
4. Last but not least our application system must provide a robust decentralized data backup system that will guarantee full access to previously completed forms no matter what happens.

We believe that by accomplishing these four goals we can significantly improve not only the efficiency of the UNC medical labs but also the accuracy of the validation process by minimizing human error. If a renowned institution such as UNC still uses such an outdated form management system, we believe that the need for this software can go well beyond this campus. It is our future goal to help institutions across the country digitize their workflow with this application, making a decisive and noteworthy impact in the medical industry and also in people's lives.