Hello Health Catalyst,

I want to thank you for the opportunity for a potential internship this summer with your organization. Over the past semester, I began learning about databases and developing software for them. Databases quickly became my favorite facet of computer science. During the course of developing *The People Search Application,* I had various ups and downs. The ups were working with databases and learning new technical skills to complete the task at hand. The downs were learning new technical skills to complete the task at hand in such a limited time. Upon receiving the email from you seven days ago, your take home test has joined the ranks of three other semester long projects and finals looming around the corner to further destroy my already wounded sleep schedule (you all remember the drill).

Coming into the take home test, I had never used Entity Framework and only used WPF and MVVM (Improperly) once. Entity framework came pretty naturally and I learned how to use migrations along the way. I found out while building the app that I had way too much Code Behind in my past MVVM trail. My WPF experience while working on this application taught me that databinding is the way of the future. The parts I found most difficult were adding unit tests to my application. I regretfully have not taken any courses or found out how to implement them properly on my own, but I am enrolled in a testing course during my next semester at Washington State University. Another problem area I encountered was adding images to the database and creating a data migration for them. I figured out that I needed to read in the images into a stream and convert that stream to a byte array before loading it into the database. It was too little too late though because the deadline had come too quickly. I did not want to rush the last two features because as a coder it is better to do the things you know how to do well, rather than rush through features and implement some improperly. The seed data that I used for my application was generated from <http://www.generatedata.com>. If you have not had a chance to check out this website, I recommend doing so as it allows users to generate data in CSV, HTML, JSON, SQL, XML, and various scripting languages. Using my application is straight forward, either type or select an entry from the combo-box and users whose first or last name matches the text are queried. The application then returns query results to the view. Overall, I had a great time working on this task and look forward to working on similar projects as a future Health Catalyst employee.

Best Regards,

Corey Neal