



The Quality Payment Program: From Wireframes to Website



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Science, Discovery, and the Universe
Computer Science and Mathematics

Introduction

This summer, I worked as a technical intern for Northrop Grumman in the Health IT Division, which is located in Windsor Mill, MD. The mission of this global security company is to provide new technologies to its domestic and international customers for various applications. Northrop Grumman holds its Technical Services headquarters in Herndon, VA.



Latima Gresham (front and center) coordinated all the interns for the whole summer. She set up this photo.

Issues Confronting Site

I worked with the Usability Team and the Centers of Medicare and Medicaid Services (CMS) on the Quality Payment Program (QPP). The QPP is a new payment plan for professionals with Medicare patients, in order to improve the care provided. Our job was to create a user-friendly website for this program. I came into this project after it had started, so the website had already been through several iterations, but there were many more to come during my time.

Activities

The team worked in an Agile environment which measured time and production in two-week intervals called sprints. Therefore, we were in a continuous process of imagining a new feature for the website and then designing a mockup of the website using a photoshop tool. The next step included wireframing it, which meant creating a clickable prototype of the website for users to review. In order to do this, we used a software called Axure. Then, based on usability test results, the website would be updated as needed, with input from CMS executives. The expected launch date was August 12th, but the timeline was delayed to fix issues.

Impact

Throughout my time at Northrop Grumman, I learned about the Software Development Life Cycle (SDLC). I observed and worked with every part of the process from brainstorming ideas to building prototypes to usability testing to finally developing the website. Although I did not spend as much time doing the latter, learning about this from skilled programmers in the field was an eye-opening and enriching experience.



I worked on earlier iterations of this page before it was released as is. It looks fairly similar but improved.



The development of this homepage consisted of several iterations, as it displays the first visuals the user will see when entering the website. It is one of the most important interactive pages, and it required *extensive* testing with users in order to find the happy medium among various features and tools. Displayed above is the final homepage on the live website.

Future Work

This coming summer, I will be returning to Northrop Grumman. Although project assignments are not finalized, I would hope that I can gain more development and programming experience when I return. Understanding this step of the SDLC on a more in-depth level will certainly have positive effects for my future in the field of computer science. Northrop Grumman has the intention of bringing back interns continuously in order to diversify our skills.

I extend my utmost gratitude to those who helped me have this successful internship experience at Northrop Grumman. Thank you to Ms. Latima Gresham, who assumed the role of intern coordinator. Thank you to my QPP mentors: Mr. Jeff Turner, Mr. Vince Goldsmith, Ms. Denise Ward, and the Usability Team who took me under their wing.