TechSmith Corp

TechSmith Corporation located in Okemos, MI is a business to business and business to consumer software company. Currently, I am interning with their IT and DevOps departments. TechSmith develops screen capture and recording software for individual and professional use. Some of TechSmith’s featured products are Snagit and Camtasia. Many of the worlds leading corporations, educational institutions, government agencies, and small businesses use their products. There is a lot of work and development that goes on behind the scenes for each updated release.

When William Hamilton founded TechSmith in 1987 it started as a tech consulting business. In 1991, Snagit was released and the company rapidly grew into what it is today. Now with a portfolio filled with a variety of software including Snagit, Camtasia, Jing, Screencase.com, and Morae. I chose TechSmith since I have the most background information on the company, being an employee. After receiving the assignment, I asked around the IT and Dev departments to see what went on behind the scenes to get a better idea. It has almost been a year since I first started and did not realize how little I knew about the company’s infrastructure.

Snagit and Camtasia are the two flagship software programs so I will be focusing this research assignment on only those two programs. Recently, there was a delay in the release of the new Snagit and Camtasia due to developmental issues. As teams debated on how to meet deadlines I got a great glance at what really goes on behind the scenes. The new release of both programs was a complete rewrite. That means that the original code is scrapped and completely new code is written. In order for better collaboration both teams are separated into their own wings, Camtasia Wing and Snagit Wing. The teams collaborate on code across different platforms and deploy when everything is said and done.

Snagit being the first product ever developed by TechSmith is given a lot of love. The new update will have a lot of new features. Originally developed solely for Windows devices the software was released on OSX. Out of the box Snagit looks like an ordinary screen capture tool. Once the program is in use the user can quickly tell there is much more to it. The built in editor allows for images to be quickly edited with different features. Some of those features are arrows, text boxes, lines, color changes, and more. Snagit is coded in C++ and C#. Using TechSmith’s private Github account the code is pushed to a repository for access to the members of the Snagit team. Locally the code is tested on servers in house and some that are hosted at Liquidweb. Icons and images are created in Adobe Photoshop and Illustrator and used within the program. When a user takes a screenshot they can upload it to another TechSmith software called Screencast.com. Screencast.com uses CDN networks to reduce cache and produce faster load times for images and videos. Both products are tied in together for a simple all in one feel.

Similar to Snagit, Camtasia is a flagship product for TechSmith. Camtasia is used for screen recording and editing. Many educational institutions use Camtasia for online lectures. Throughout the semester I’ve noticed that our lectures were recorded using Camtasia. What makes Camtasia unique is that the screen area can be chosen freely, and audio or other multimedia recordings may be recorded at the same time or added later. Camtasia is broken down into two different parts, Camtasia Recorder and Camtasia Studio. The recorder captures what is on screen. The editor is the component for which the recorded screen capture can be just that edited. Within the editor users can import multimedia objects, audio, video, and other various types. Camtasia was developed using C++ and C#. Just like Snagit the software is deployed first to a Github repository for cross team development.

After programs are developed they needed to be tested for bugs before final deployment. Within the organization there is a Quality Assurance (QA) department which uses test cases across different platforms likes Windows, OSX, Android, and iOS. The QA team tests the program every step of the way looking for broken code. If code is broken they report it to the Development team to be fixed. Once all the bugs have been reported a “War Room” is setup for developers to try and break code and hack their own program. This is a final testing to see if it can with stand normal use and sometimes even extreme use. Many software issues are found during this stage. When services are live and a problem occurs it is called a “fire.” When a fire is reported teams gather to quickly solve and put it out.

TechSmith has been an industry leader since its inception in 1987. Still to this day they are the leaders in screen capturing tools even though some tools come standard on most devices. The overall ability and usability makes the software standout compared to the rest. With over 300 employees the corporation feels like you’re working within a small business. All teams are divided to into their own sections with cross collaboration always more than welcomed. When issues arise in a department other departments quickly jump on board to solve them. It’s a large team that feels like one small, strong, united family.