

Hose Show Administration Program Improvements

(Technical Report)

The Mental Health Effects of Social Media

(STS Research Paper)

An Undergraduate Thesis Portfolio
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SocioTechnical Synthesis

In any software engineering project, maintenance is often the most time consuming portion of the software development process. This semester, we primarily performed maintenance on a previous team's Django application. Additionally, our team completed smaller tasks such as writing documentation on branching strategy, JIRA usage, and installation instructions for all products used. Development and maintenance of this software was guided by a specific customer from the Charlottesville area. This customer runs a horse show for which the software was originally built for, but the final product did not meet all of their needs. At the beginning of the semester, there were five specific bugs that were requested to be fixed, but more bugs and potential improvements were recognized throughout the semester. Our team would meet bi-weekly with this customer to showcase our changes and discuss further improvements. Throughout the semester, our team was able to complete all of the bug fixes and improvements that the customer desired.

One of the major takeaways of this product was the importance of following procedures in both what to work on and how it was added to the master branch of the GitHub repository. As our team consisted of five members, we needed to utilize extra tools to ensure that the work was distributed efficiently. We used Jira to track the various features to be implemented or fixed, and we used Git to create a branch for every user story, which was then merged into the master branch using a peer-reviewed pull request. This project improved upon an existing piece of software, but another result of our work is that a future team will be able to utilize our team methods and documentation to perform maintenance on other software products.

My technical project focused on improving an existing system that tracks horse data. My research project is loosely coupled to it. My research project is focused on what the mental health effects of social media are. Social media tracks user's data to provide a better user experience in effort to get users to keep coming back similar to the horse show platform. My goal was to find what are the effects of having a system that tracks users' data efficiently.

The research addresses social media usage in today's society and what mental health effects are linked to using social media. Social media's success is due to their algorithms, functionality, and the software supporting the infrastructure keeping users on their platform. Each user is creating content that is being used to entice other users to stay on the platform. The more time a user spends on the site, the more personalized content being shown to that user. This creates a massive network of 24/7 interconnectivity. The technology of social media affects a high degree of the population and therefore the culture of a society. Most people are able to get on social media at any given time within seconds due to cell phones now. As social media is a relatively new concept it has yet had the time to be properly studied. Social media was created to bring us closer together, however, one of the unintended consequences of usage are the mental

health effects. Research will be gathered through surveys that will provide quantitative data that provide data on user's time spent on social media, mental state, as well as lifestyle habits. The surveys will be focusing on expanding on what case studies have already shown. Then interviews will provide anecdotal and personal testaments as another form of research. The research will be backing what other research has proven and build off what has already been discovered. There will be direct correlation to time spent on social media and quality of life. In addition, there will be indirect effects such as social media taking time away from other productive habits or affecting quality of sleep. The implications of social media are quite dramatic with the amount of time people spend on it today. The research can shed more light on the dangers of social media if there are any.