CSCI 460: Operating Systems Final Project Proposal Reese Pearsall, Logan Pappas, Dallas LeGrande, Chris Cooper Fall 2019

Our project will be looking at ransomware and how ransomware interacts with the components that an operating system manages. Our technical report will contain multiple sections.

<u>Technical Definition</u> - This section will give a definition of ransomware and how ransomware works.

<u>Background/History</u> - This section will cover the history of ransomware, danger of ransomware, and the purpose of ransomware.

<u>Example and Analysis of Ransomware</u> - In this section we will (hopefully) be able to look at real malicious ransomware code and look at how the code interacts with the file system. We are hoping that this section will be able to tie ransomware and operating systems together.

<u>Solutions for Ransomware</u> - This section will cover modern solutions that combat ransomware and how these solutions work.

<u>Future of Ransomware</u> - This section will cover the future outlook of ransomware in the cyber world. What the future looks like, what can be done to prevent ransomware attacks, and how vulnerable our modern day operating systems are.

These are the planned sections as of now, but if we find some interesting information along the way we may add/change some sections. Our group has four people, so we will divide the sections and work on them in pairs. Finding an example of real ransomware code and analysing it will be done by all four of us due to this portion being the most difficult, interesting and time consuming. We will be starting the project within the next week or so and hoping to present before Thanksgiving break or shortly thereafter, so our technical report and presentation slides will hopefully be finished by November 22nd -ish.