This file is used to track changes in the planning of the project.

22/01/22

Began writing some stuff for intro + password protocols section, starting to plan the whole project now. There are currently 5 sections planned. Introduction, Password protocols, Attacks, Defences, And the conclusion.

The current planned timescales are:

- Introduction section {STARTED}
 - Start by:
 - Finish by: 5/2/22
- · Password protocols section (STARTED)
 - o Start by:
 - Finish by: 19/2/22
- · Analysis of password datasets
 - o start by:
 - Finish by: 5/3/22
- · Attacks section
 - Start by:
 - Finish by: 19/3/22
- · Defences section
 - Start by:
 - o Finish by: 2/4/22
- Conclusion
 - Start by:
 - o Finish by: 16/4/22

9 days of extra time to fix any problems and give me some room if i go slow. The final submission is due 25/4/22.

Current timescales are pretty rough, and dont have any specific start dates. 2 weeks per section/task should hopefully work out, ideally ill finish some things before the dates listed above. I will probably work on multiple sections at once when it makes sense (probably most of the time). Research will take place constantly throughout the production of the report. "Finishing" a section doesnt mean i wont change anything written in it later.

23/01/22

Did a bunch of stuff to the password protocols section, decided i may as well add some "start by" dates.

The current planned timescales are:

- Introduction section (STARTED)
 - Start by: asap
 - o Finish by: 5/2/22
- Password protocols section {STARTED}
 - o Start by: 5/2/22
 - o Finish by: 19/2/22
- · Analysis of password datasets

start by: 19/2/22

Finish by: 5/3/22Attacks section

Start by: 5/3/22Finish by: 19/3/22

• Defences section

Start by: 19/3/22Finish by: 2/4/22

Conclusion

o Start by: 2/4/22

Finish by: 16/4/22 9 days extra time Final submission 25/4/22

Considering merging the "attacks" and "defences" section into one, something along the lines of "vulnerabilities and solutions". Each vulnerability can then be a subsection with two subsubsections, one describing the attack and the other describing the measures required to protect against the attack. Ill decide once i properly start that section of the project.

24/01/22

Had quick meeting with big eggleman, he clarified a couple things. Apparently the final submission date of 25/4/22 also needs all his marking done, so really the project needs to be done maybe a week before the 25th. Changed intro section finish date.

The current planned timescales are:

• Introduction section {STARTED}

Start by: asapFinish by: 16/4/22

· Password protocols section (STARTED)

Start by: 5/2/22Finish by: 19/2/22

· Analysis of password datasets

start by: 19/2/22Finish by: 5/3/22

Attacks section

Start by: 5/3/22Finish by: 19/3/22

· Defences section

Start by: 19/3/22Finish by: 2/4/22

Conclusion

Start by: 2/4/22Finish by: 16/4/22

28/01/22

Added hashcat to the plan, "analysis of password datasets" from the previous outline did include using hashcat, but specifically mentioning it makes it clearer

The current planned timescales are:

- Introduction section (STARTED)
 - Start by: asap

o Finish by: 16/4/22

Password protocols section {STARTED}

Start by: 5/2/22Finish by: 19/2/22

· Analysis of password datasets & hashcat stuff

start by: 19/2/22Finish by: 5/3/22

· Attacks section

Start by: 5/3/22Finish by: 19/3/22

· Defences section

Start by: 19/3/22Finish by: 2/4/22

Conclusion

Start by: 2/4/22Finish by: 16/4/22

06/02/22

Speedrunning finishing my planning review the day before its due

Introduction section will be written at the beginning of the project and then again at the end {STARTED}

o Finish by: 16/4/22

Password protocols section {STARTED}

Finish by: 19/2/22

· Analysis of password datasets & hashcat stuff

o Finish by: 5/3/22

· Attacks section

o Finish by: 19/3/22

Presentation

o Will happen on: 28/3/22

· Defences section

o Finish by: 2/4/22

Conclusion

Finish by: 16/4/22End of project reviewDo by: 18/4/22

Project hand in

Hand in by: 18/4/22Final submission to Qufaro

o Submit by: 25/4/22

23/02/22

Renamed things, i think "Vulnerabilites" and "Mitigations" is better than "Attacks" and "Defences" Analysis is now specified to be its own section.

- Introduction section will be written at the beginning of the project and then again at the end {STARTED} {50%
 COMPLETE}
 - o Finish by: 16/4/22
- Password protocols section {STARTED} {90+% COMPLETE}

- o Finish by: 19/2/22
- Analysis of password datasets & hashcat stuff + writeup into its own section {STARTED}
- Finish by: 5/3/22Vulnerabilities section
 - o Finish by: 19/3/22
- Presentation
 - Will happen on: 28/3/22
- · Mitigations section
 - o Finish by: 2/4/22
- Conclusion
 - o Finish by: 16/4/22
- · End of project review
 - o Do by: 18/4/22
- · Project hand in
 - Hand in by: 18/4/22
- · Final submission to Qufaro
 - Submit by: 25/4/22

02/03/22

Since the last entry, I have mostly been writing the code for the dataset analysis. This included:

- Writing code to check if a password contains a certain type of character.
- Breaking C++ code down into header files.
- · Writing python programs for graphing/debugging purposes. Changes to the report itself have been very minimal.

11/03/22

Since the last entry:

- Finished C++ dataset analysis code and performed the dataset analysis.
- Wrote hashcat shell script to perform the password cracking analysis.
- Added the results from the password cracking analysis into the report.
- Wrote about my password cracking analysis in the report, along with other password-related information.
- · Some evaluation of resources.

23/03/22

Since the last entry:

- · Added a couple of images to the report (screenshots related to analysis).
- · Moved some stuff into tables for the password cracking section to make it look much better.
- Some other small additions (a few paragraphs) to various parts of the report.

10/04/22

Since the last entry:

- Wrote about password security misconceptions.
- Moved more stuff into tables.
- · Wrote about addressing password security misconceptions.
- · Wrote about phishing, SQL injection, and man-in-the-middle attacks.

17/04/22

Well, things got a bit messy in terms of my tracking of timescales for this project, and i have not yet done my presentation due to being ill during the week it was supposed to take place, but at least i have my project 99% finished now. Since the last entry:

- Wrote about phishing detection.
- · Wrote about mitigations for injecton and database compromise, as well as MITM attacks
- Rearranged the vulnerabilities section, moved it before the dataset/password cracking analysis
- Improved dataset analysis writeup.
- · Started writing the conclusion.

20/04/22

Did the presentation today, any changes from this point onwards should be pretty minor Since the last entry:

- · Created evaluation of resources table
- · Created presentation powerpoint and presented it
- Various finishing touches and minor changes across the entire essay, including changes based on feedback from mr.eggleton