CprE 491 - sdmay19-38

Android App Forensic Evidence Database

Weekly Report 10

11/22/2018 - 11/29/2018
Client: Neil Gong and Yong Guan
Faculty Advisors: Neil Gong and Yong Guan

Team Members:

Mitchell Kerr -- Tech Lead
Connor Kocolowski -- Report Lead
Emmett Kozlowski -- Meeting Scribe
Jacob Stair -- Testing Lead
Matthew Lawlor -- Meeting Facilitator

Past Week Accomplishments

- We have obtained storage from LSS and got it mounted to our VM provided by ETG.
- Containers
  - We have an initial dockerfile set up for each of our flask apps. There is still some work to be done as it needs to be fine tuned to make sure each service has the appropriate amount of resources and debugging still need to be done and is addressed in pending issues.
  - There was some research into docker swarm an alternative to kubernetes as we are not sure that kubernetes will work out. Docker swarm has some of the core features that we are looking for to manage our containers but lacks some of the extra features that kubernetes had. Docker swarm also is more flexible in setting up with different infrastructures.

Pending Issues

- There was a massive security bug just found in kubernetes that allowed root access to nefarious users and is undetectable. This new found bug may make us reconsider our position on this technology in our system.
- There is a problem with our docker containers starting the application contained within it and also allowing outside connections both inbound and outbound. We are looking into why this is happening and how to properly debug it.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Mitchell Kerr	Finish APKMirror crawler to begin data uploading	5	52
Connor Kocolowski	Continued researching the best way to download files (including those locked behind a login)	6	70
Emmett Kozlowski	Looked into other container orchestrators and debugging docker file.	7	63
Jacob Stair	Continued working on unit tests for UpToDown web crawler	5	54
Matthew Lawlor	Worked on making sure our crawlers were able to download APKs to our shared drive	6	50

Plans for Coming Week

- Start setting up the database in our new storage space that we got
- Continue debugging the dockerfile
- Ensure all current crawlers will be ready to begin uploading to database once it is ready