# Class Notes

### Feb 27

https://www.vice.com/en/article/dy7axa/how-i-broke-into-a-bank-account-with-an-ai-generated-voice

https://www.usatoday.com/story/tech/talkingtech/2019/04/08/bridge-failure-facial-recognition-id-flunks-test-nycs-rfk-bridge/3401879002/

https://www.theguardian.com/uk-news/2018/may/15/uk-police-use-of-facial-recognition-technology-failure

https://gcn.com/1998/07/software-glitches-leave-navy-smart-ship-dead-in-the-water/290995/

https://www.bankinfosecurity.com/chase-breach-affects-76-million-households-a-7395

https://www.csoonline.com/article/3318238/the-opm-hack-explained-bad-security-practices-meet-chinas-captain-america.html

https://firewalltimes.com/amazon-web-services-data-breach-timeline/

https://www.cnet.com/tech/services-and-software/breach-exposes-h-r-block-customers-tax-records/

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Infowars – information warfare

1. Hackers – individuals
   1. https://en.wikipedia.org/wiki/Gary\_McKinnon
2. Corporate – attack rivals
   1. hacker for hire
3. State actor

https://www.techtarget.com/searchsecurity/definition/honey-pot

#### Security Requirements

- overlap with Business anlysis and software testifnu ng

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#### Class Project

Data Validation

- ingest data, validate and store

Medical booking service

* App that patients use to book appointments at clinics and doctors offices
* Notify of appointment

Domain Analysis

* What are the contexts for the application? Who are the stakeholders?
* What are the process involved – what are the trust boundaries?
* What sort of data is involved – what are the requirements on the data?

Security issues

* Not all users are created equal – authorization – privelege levels
* How do we know we are talking to ? Authentication.
* Data validation... handle bad data to avoid an attack with bad
* Hippa Confidentialy. Insurance information.

Bad actors

* estranged spouses
* disgruntled patients and employees
* State actors
* Criminal gangs – ransomware

#### DevSecOps

**Codeing and Build**

* The code works correctly – safe
* The code is robust
* Secure standards and secure coding -> more testing for these vulnerabilities

# March 2

1. Name
2. Your area of expertise
3. Your current needs – current tasking
4. Experience with the product
5. Any expectations on what you want to learn

#### Scenarios

1. Regression testing – making changes to an existing application or UI
   1. Want to make sure the changes
2. New app dev
   1. Have some sort of stub, mock object which interacts with the interface
   2. As the app in implement, replace mock with real function

#### Testing in General

1. Bad test case design
2. Bad test execution design
3. Systemic error

#### Test Management

1. Common test object maps
2. Common Data
3. Cohesive scripting – script subroutines

#### Identify the “steps” of the scenarios

1. Use the recorder to record those steps
2. These steps are like subroutines
3. Create a scenario end to end execution
   1. Calling each of the pieces in turn

#### lab objectives

1. Create a new project
2. Create a common datapool and object map – open the data pool and put in dummy recorder
3. Classics
   1. Scripts to log in as differnet people
   2. Scripts to order with different payments and amount
   3. Test then to make sure they work.
   4. Create some scenarios – run e2e end to end.

Two low level script

logs someone in

second pays with card

four different scenarions trent/amex tent/visa susan/mc susan/vist

#### Best Practices

1. Use a script to create the datapool schema
   1. Don’t assume defaults will always be there!!
2. Use hardcoded values to create the initial scripts
3. Convert the hardcoded values into variables
4. Define e2e scenarios *in the datapool*

https://www.ibm.com/docs/en/rft/9.1.0?topic=reference-overview