Intro to CYBR 3600

Dr. Hale
University of Nebraska at Omaha
Information Security and Policy – Lecture 1

Welcome to CYBR 3600

What is this class?

You will be learning about risk and how effective governance can mitigate it through good policy.

Sounds boring?

Its not.

~~Its not~~. Ok, It is a little.

But it will build extremely marketable skills.

and…You will learn by doing.

You will get to see where policies fail so you can create good ones.

You will see how major corporations
and the federal government create policies

We will even explore some system assessment and social engineering in the context of security policies.

Who am I and why should you trust me?

I'm Dr. Matt Hale.
I'm a software engineering that is big into secure web and mobile applications with rich UI and functionality.

A few major web applications I've made include..

SEREBRO

a collaborative online environment that features a set of project management tools and an innovative idea network for tracking how ideas evolve over time in software engineering teams.

Idea Network

serebro

Gambit

Staff Tools
- Analysis
- PM View

Feed
Forum
Wiki
SVN
Tasks
Spreadsheet
Uploaded Files
Schedule
Members

Timeline

Feb 16, 2014	Feb 17, 2014	Feb 18, 2014	Feb 19, 2014

...ton-Ridgway: Meeting 9 (...)

...nton-Ridgway: The (1476)

...ulerOfTheUniverse: ...

...Joanna: meeting (1479)

Feb 16, 2014

[6:44 AM](245) Add animations for when answers are touched [RulerOfTheUniverse]

[6:44 AM](246) Animate the main word of the question [Joanna]

[6:44 AM](244) Animate the correct answer [Joanna]

[6:44 AM](234) Add audio for when answer is chosen [Joanna]

[6:44 AM](248) Add Selected Color Indicator to CP View [Amal-Al-Ashour]

[6:44 AM](247) Add Selected Color Indicator to CP View [Amal-Al-Ashour]

[6:44 AM](233) Add audio for when navigation buttons are pressed [RulerOfTheUniverse]

[6:44 AM](235) Add audio reading of questions [RulerOfTheUniverse]

[6:44 AM](231) Create a placeholder "story" view in XCode [RulerOfTheUniverse]

[6:44 AM](232) Add navigation menu to game pages [RulerOfTheUniverse]

[3:03 PM](1505) Amal-Al-Ashour: Meeting 9 (1505)

[3:40 PM](1510) Anton-Ridgway: Meeting 9 (1510)

Feb 17, 2014

[5:26 PM](254) RulerOfTheUniverse: SoftwareProjectRiskList

[5:40 PM](255) RulerOfTheUniverse: SoftwareProjectRiskList

[5:42 PM](275) RulerOfTheUniverse: Meeting 10

[5:42 PM](1517) RulerOfTheUniverse: Audio and Risks Done (1517)

[5:43 PM](224) RulerOfTheUniverse: Risk_List.docx

[11:17 PM](258) Anton-Ridgway: Start

[11:18 PM](259) Anton-Ridgway: Start

[11:21 PM](57) Anton-Ridgway: ProductExecutionInstructions

[11:21 PM](260) Anton-Ridgway: ProductExecutionInstructions

[11:50 PM](269) Anton-Ridgway: ProductExecutionInstructions

[11:56 PM](1548) Amal-Al-Ashour: Meeting 10 (1548)

Feb 18, 2014

[12:00 AM](1550) Anton-Ridgway: SO, we meet again (1550)

[12:03 AM](1551) Anton-Ridgway: Color Picker (1551)

[12:44 AM](1552) Joanna: last one (1552)

[1:10 AM](1553) Anton-Ridgway: Use Case Diagram (1553)

[1:12 AM](284) Anton-Ridgway: Start

[1:25 AM](1554) Anton-Ridgway: Never mind (1554)

[1:39 AM](285) Anton-Ridgway: UseCases2

[1:40 AM](286) Anton-Ridgway: UseCases2

[1:51 AM](62) Anton-Ridgway: SprintReview

[1:51 AM](287) Anton-Ridgway: SprintReview

[11:17 AM](248) RulerOfTheUniverse: Gambit_-_Sprint_1_Presentation.pdf

[11:21 AM](1561) Anton-Ridgway: Use Case Diagram Sharing (1561)

[7:13 PM](295) RulerOfTheUniverse: Start

[7:14 PM](296) RulerOfTheUniverse: Start

[7:20 PM](297) RulerOfTheUniverse: ProductExecutionInstructions

[7:20 PM](298) RulerOfTheUniverse: ProductExecutionInstructions

[7:35 PM](299) RulerOfTheUniverse: SprintReview

Feb 19, 2014

[12:45 PM](283) Joanna: Pres... Current app status

[12:45 PM](1579) Joanna: Co... longer launch (1579)

[12:47 PM](1580) Joanna: Ani...

[1:05 PM](1582) RulerOfTheUn... Sound Pause Implemented (15...

[6:45 PM](1596) Anton-Ridgwa... Test (1596)

[6:50 PM](1597) Joanna: App ... (1597)

[11:02 PM](1599) Anton-Ridgw... (1599)

[11:39 PM](316) Joanna: Sprin...

[11:44 PM](1601) Joanna: dem...

Update

CYBERTRUST

a secure client-side web application that serves as a simulation platform for neuroscientists and psychologists to capture subject data about trust cues. It features data capture techniques like eye and decision tracking.

CYBERTRUST PLATFORM

Hello demo-user   Log out

CYBER TRUST

Home | Email 6 | Web 4 | bVerse Social Network 4 | Your status

Inbox

	bVerse	Account Compromised - Your bVerse account has been compromised. Please following the link below to upd...	3:07 pm
	Jimmy Smith	Join My Network - Jimmy Smith wants to add you as a friend on your social network. To accept his i...	3:07 pm
	Paul Bunyan Personnel Service	Temporary Lumberjack Agency - I would love to sell you some lumber. Sincerely, Paul Bunyan	3:07 pm
	Ann Howard	Inventory Control - You are running low on nails. Would you like me to purchase more from the same v...	3:07 pm
	PaperMe	Corporate Friend Request - I'd like to invite you to join my social network. -Paul BunyanAccept invitation...	3:07 pm
	Your friend	Left your credit card - You left your credit card at Wal-Mart. Go to my website http://helpyouforreal.c...	3:07 pm

© SEAT/CyberTrust 2013

Mutual partners: none

+ Business Partner Request

10 9 8 7 6 5 4 3 2 1   (Trust, Follow) (Trust: Accept invite) Follow   (Don't trust) (Don't trust) Ignore

How trustworthy is this?

© SEAT/Cyb

CYBERTRUST PLATFORM

https://www.youtube.com/watch?v=8FMemUlOtfc

Who am I and why should you trust me?

But...despite being a 'maker' my dissertation was all about policy, security controls, and how they impact systems in the "cloud."

Introductions

We'll probably talk about some of that work later in the class

Some stuff I'm working on now.

Identifying trust cues and predicting phishing victimization

Testing and securing wearable devices (e.g. fitbit, Jawbone, Nike Fuel)

Promoting Cybersecurity in STEM ed.

Introductions

Enough about me…

Who are you?

Preferred Pronoun / Name

Interesting fact about you that not many people know
(NSFW not allowed)

+

Introductions

Ice breaker activity
(this class is a no shyness zone)

Some Takeaways

- Stacking cups is hard
- Teamwork is a give and take
- Collective vision is essential for success
- Building Policies based on stakeholder needs and interests isn't all that different.

Today's topics:

Introductions
- What is this class?
- Who am I?
- Who are you?

Class Overview
- Syllabus (tedious, I know)
- Topic Roadmap

What is Governance and why should you care?
- Risk
- The role of governance
- Benefits of good governance
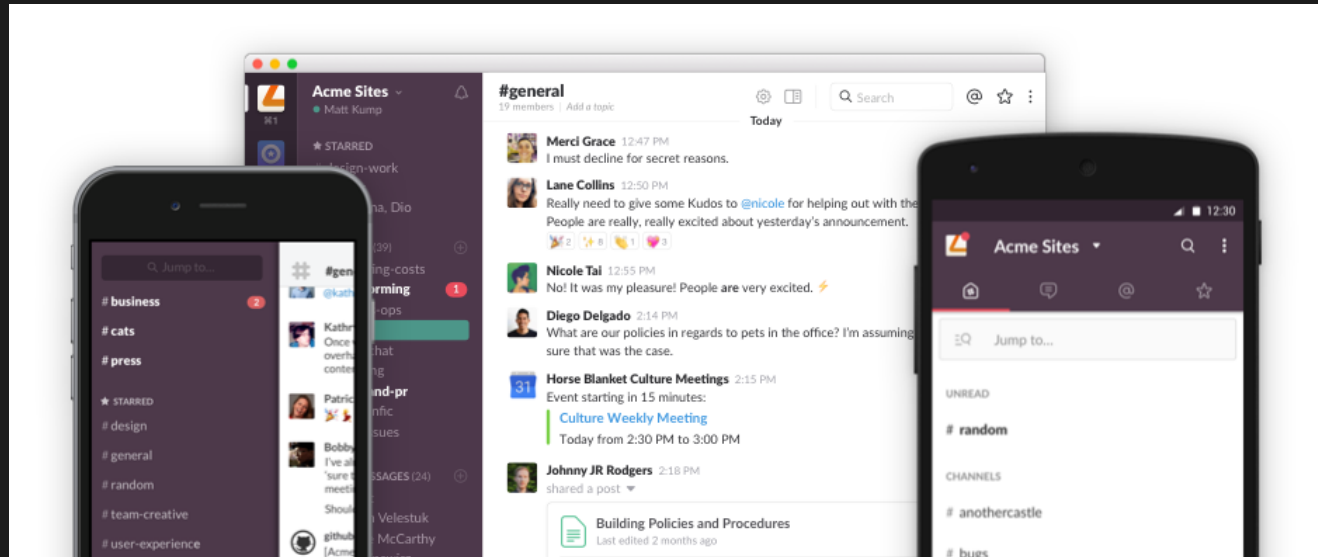
GO TO *Syllabus*

Topics Covered

- Risk Analysis
- Information Governance
- Security Policies and Procedures
- Regulatory Security Standards and Compliance
- Security Awareness and Training
- Legality and ethics of security practices
- Social Engineering and Phishing Prevention

Class Overview

What is slack

What is information security governance?

What you get when you google "Governance"

Thanks for nothing wiki…

"all processes of governing, whether undertaken by a government, market or network, whether over a family, tribe, formal or informal organization or territory and whether through laws, norms, power or language"

Risk & Governance

What governance really means

the mechanisms, processes, rights, responsibilities, policies, decision making, and objective setting that determine how an entity (e.g., a company) is controlled and directed.

Risk & Governance

Now apply this definition to information security

What is information security governance (ISG)?

a set of practices in an organization that align security strategies with business objectives to ensure objectives are achieved, verify that resources are used responsibly, and define responsibility and accountability so that the organization can achieve an acceptable level of risk

Key elements of ISG

- Defined Organizational structure
- Policies and procedures
- Awareness and training
- Technical Security Controls and countermeasures
- Auditing, Monitoring, and Metrics

Risk & Governance

Maintain…

- Confidentiality – Disclose information only to approved entities
- Integrity – No unauthorized modification
- Availability – Information can be accessed by those that need it when they need it
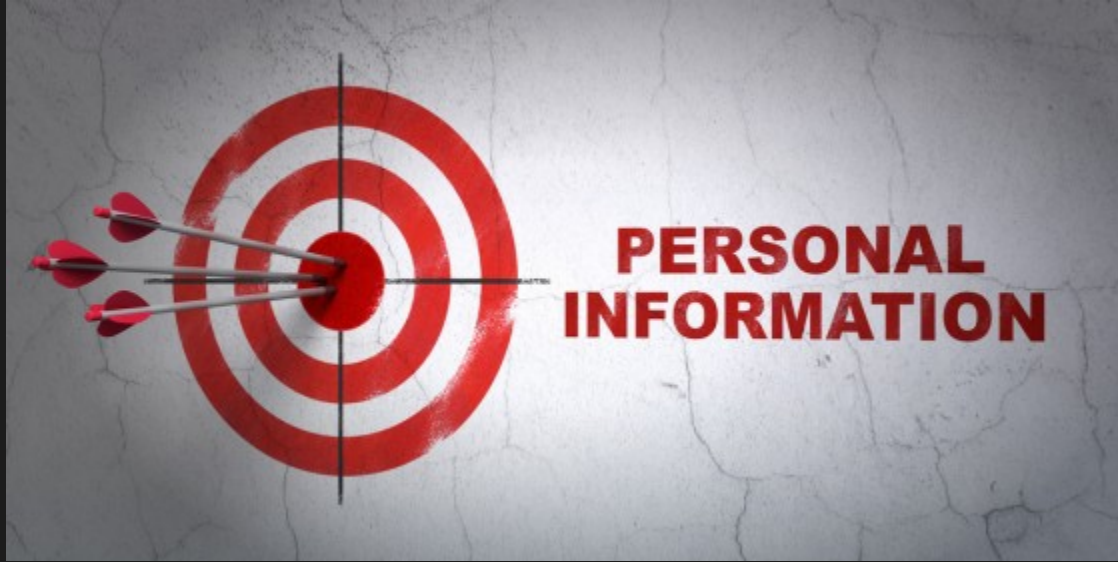- Nonrepudiation – No one can say that they didn't do something when they did. Provides accountability of actions

…Across all info., systems, employees, and physical resources in the entire organization

Risk & Governance

Effective governance prevents or limits…

UN-Happy supreme leaders

Risk & Governance

Easy Targets

Risk & Governance

Other data breach puns…

…benefits of effective IS governance

- Strategic Alignment – security supports business strategy

  Ex. integrity is more important for banks, while availability might be more important for facebook

- Risk Management – mitigate or minimize risk by limiting exposure or reducing impact

- Business process convergence – increase effectiveness and efficiency through integrating related security activities

  Ex. single sign-on (active directory), ubiquitous auditing, etc

- Resource and performance management – understand resource usage for increased efficiency and effectiveness

Risk & Governance

Reading

Read Ch. 1 in Brotby
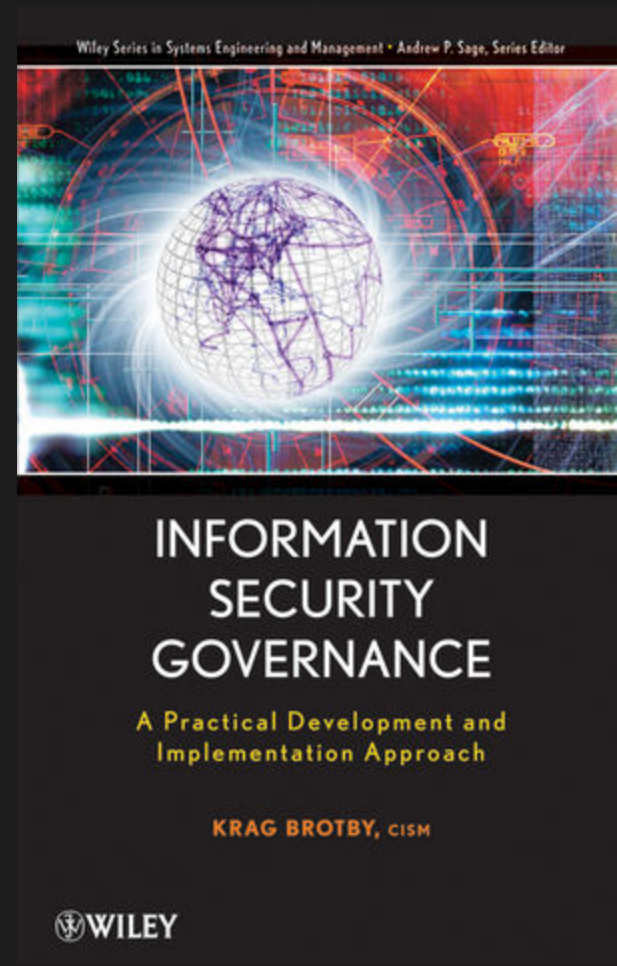
Homework

None

Risks

Questions?

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