CIS - 5373 - Group Paper/Presentation

INSTRUCTIONS:

- 1. Each team should select its top 3 choices from the list below, and communicate those choices in preferred order to instructor via email at eangee@cis.fiu.edu. Topics will be assigned on a first-come, first-choice basis. Deadline for topic choice is May 31. If your team fails to select a topic, instructor will assign a topic to your team.
- 2. A team may propose a new topic, but it must be approved by instructor. Include a brief explanation of the security issues involved with your proposed topic. Include your proposed topic in your list of 3 choices.

POSSIBLE TOPICS:

- 1. IoT Device Security
 - (http://www.datamation.com/mobile-wireless/75-top-iot-devices-1.html)
- 2. Security of medical devices (e.g., blood glucose monitors, pacemakers, infusion pumps, etc. you may select a single device type)
 - (http://www.fda.gov/downloads/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ UCM482022.pdf)
- 3. Air traffic control systems security
- 4. Voting systems security
- 5. Payment systems for Web applications PayPal, BitCoin, etc
- 6. Point of Sale systems security
- 7. Utilities security (SCADA systems water, power grid, dams, etc.)
- 8. Use of mobile devices in a healthcare environment

GOALS:

You are part of an organization (create a fictitious company or organization name and back story), and your team has been charged with investigating, reporting, and making recommendations to the organization related to the adoption of the technology in your topic, focusing on the security. You will be producing a "white paper" and a 15-minute management presentation to your upper management to assess the possible use of this particular technology, based on the security aspects of the technology. You will make a recommendation to either adopt or not adopt.

Suggested Team Roles:

- 1. <u>Project manager:</u> sets schedules for meetings and for delivery of member contributions; monitors progress of all members; follows up/communicates with all team members; collects final team work and submits paper and presentation into Moodle
- 2. <u>Research coordinator</u>: collects research gathered by team members; creates outline to be used for paper and presentation
- 3. <u>Presentation coordinator</u>: responsible to set theme and do final assembly of PowerPoint presentation; assembles input from all team members; edits and polishes material
- 4. White paper coordinator: responsible for final assembly of white paper; assembles input from all team members; edits and polishes written work
- 5. <u>All members</u>: Do research; write portions of the paper; create portions of the PowerPoint presentation; present portions of the topic in class.

Structure of the White Paper:

Title Page: Include a separate title page with topic title and team member names.

Table of Contents

Executive Summary: one or two paragraphs on a page by itself that provide a rapid overview of the issue and any conclusions or results you have obtained. Audience: the CEO, top executive management, and Board of Directors (who are very busy and may not read the entire report). Write this section AFTER you have finished the entire paper, then insert it at the beginning of the paper.

Main Body (titled according to your topic): In depth discussion of the issues surrounding your topic. Use APA style for inline citations. Must include the following required sections (you may also have subsections if the topic is complex):

- 1. **Introduction**: one or two paragraphs to introduce the issue and explain what will be covered in this report.
- 2. (Main body): Your section names may vary in the body, but you should be covering all of these essential areas:
 - Basic design how it works
 - Basic security mechanisms
 - Vulnerabilities and threats: attack types and reasons for vulnerabilities
 - Countermeasures and mitigation approaches
 - Industry standards used as guidelines or reference (ISO, NIST, etc.)
 - Regulatory issues (federal or state government?)
- 3. Risk assessments: should your company use this technology? Include a security risk matrix.
- 4. **Conclusion**: summarize your research.

References: List all research references in APA style on a separate page. Include web links to articles where appropriate.

Requirements:

- Use Microsoft Word for your white paper report.
- Body of the report must be at least 6 pages single-spaced. Title page, table of contents, references page, and any graphics used do NOT count toward the required 6 pages. Excessive spacing between sections will not count toward the page count. Use 1 inch margins on all sides. Font for non-headings may not exceed size 11.
- Must have at least 5 separate references for research sources. Sources must be reputable journals and information sources (NO blogs, forum posts, Wikipedia, about.com, howstuffworks.com, Yahoo answers, wikiAnswers, or similar if in doubt, send the link to the instructor for guidance). Multiple pages from the same web site count as only one source.
- No direct quotes may be used. Cite your sources for the ideas you are using, but write everything <u>in your own words</u>. TurnItIn will be used by the instructor.
- Photos, charts, graphs do NOT count toward the page count, but should be used where appropriate.
- Include a page header in the body with topic title and page number (title page should not have a header)

Deliverables:

- Presentation: You must have your report at least in final draft stage before creating the PowerPoint presentation slides. Content of slides must match the report contents in terms of organization and major points. In-class presentations will begin on July 13. Presentations MUST be submitted into Moodle by one designated team member before the start of class. Presentation schedule will be posted in Moodle. Be prepared to answer questions following your presentation.
- 2. <u>Report</u>: Final report with required formatting is <u>due two days after your team presents</u>. This allows you to correct any deficiencies that are identified during your presentation. Report MUST be submitted into Moodle by one designated team member.
- 3. <u>Team Assessment form</u>: <u>Each member submits privately a team</u> assessment form by the due date for the report.

Team Assignments:

NAME	GROUP	Topic
Aian Javier Denis		·
Alejandro Perez		
Alexander Franco Valverde	1	Security of medical devices
Aquinov Mathappan		
Carlos Xavier Arosemena		
Christopher Fernando Rodriguez	2	Voting systems
Dmita Anthony Levy		
Elissa Quispilloclla Ponce		
Giancarlo Espinoza	3	Payment systems for web applications
Gregory Jermaine Henry		
Isidro Money		
Ivana Rodriguez		
Jerry Jacob		
Jonathan A. Gomez	4	Air traffic control systems security
Jose Carlos Figueredo-Maseda		
Junior Louis		
Karina Amandi		
Leonard Torres		
Nathan Christopher Ramos	5	Use of mobile devices in a healthcare environment
Nishant Ramesh Maurya		
Paul Roberto Molina		
Rene Raymond Balbuena		
Rolando Ramos	6	Point of Sale systems security
Sanjeev Kaushik Ramani		
Saurabh Bhutda		
Shermor Gaillard		
Simon Peter Schinella		
Vladimir Beaujour	7	IoT device security
William Jesus Marquez		
William Rabelo		
Yanire D. Chow		
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