# National University of Singapore School of Computing

# IS4231 Information Security Management Semester 1, Academic Year 2021/2022

#### **Learning Objective**

In this group project work, each group will select one information security management related topic and do research on it. By researching the chosen topic, the students are expected to have deeper understanding of the security topic (e.g., what it is, why it is important, typical methodology, relevant applications, current challenges, and potential solutions) and prepare themselves for advanced information security management study. The groups are expected to do a thorough research of their selected topics and write up a comprehensive and detailed report.

#### Tasks (20 Marks)

### 1) Research Proposal (2 Marks)

- Select an information security management related topic that you are interested in.
- You could include components such as
  - o Brief description of the topic: what topic you are going to investigate.
  - Research motivation: why you choose this topic, why you find this topic interesting and worth studying.
  - Research outline: what you are going to research regarding this topic, what is the potential content you are going to cover in the final report.
  - Format: no specific requirement, limited to 2 pages.

#### 2) Report (18 Marks)

- In this report you are *recommended* to cover the following sections:
  - Introduction of this topic
    - What it is about
    - Applications in organizations
  - Motivation/Importance of this topic
    - Why this topic is important
  - Current state of the art
    - Current tools
    - Current management methods
  - Current challenges and issues in this area
    - E.g., technical challenges
    - E.g., managerial challenges
      - InfoSec policy
      - Education
      - InfoSec governance
      - Reporting structure
      - Security management practices
    - E.g., regulatory challenges
      - Laws

- Industry regulatory
- Policy vacuum (if any)
- Potential solutions addressing the challenges
  - E.g., technical solutions
  - E.g., policy solutions
  - E.g., education solutions
- o Future Trend
  - Future direction of this area
- References

#### **Report Requirements:**

Please format the written report based on the following settings:

- Paper size: A4.
- Margin: 1 inch all around.
- Orientation: Portrait.
- Line Spacing: 1.5 spacing.
- Font Type for Main Text: Times New Roman.
- Font Size for Main Text: 11pt.
- File Format: PDF.
- File Name: Group ID (e.g., T1\_G1, T2\_G2) as the file name.
- Cite the sources/references from where you have taken them.
- Page limit: maximum 20 pages without cover page, reference, and appendix.
- Your report structure does not need to exactly follow the section sequences recommended above, you can adjust it and write in a way which makes the whole report information flow fluent.

Please provide a simple cover page that includes the full name and student number of all group members as the first page of your written report. You are also required to include a references section at the end of the written report.

### **Important Dates and Key Deliverables:**

## 1) Project Proposal -2%

 Submit your proposal in doc, docx or pdf format to Project Proposal Submission folder on IVLE by 26 Sep 2021 2359hrs (Sunday Midnight, Recess Week).

#### 2) Report -18%

- Submit your completed report to Project Report Submission Folder on IVLE by 12
   Nov 2021 2359hrs (Fri Midnight, Week 13). Each group should only make one
   submission. Do not submit more than one document.
- Clicking on this submission folder in IVLE will redirect you to the **Turnitin** Assignment submission web page. You must upload your submission via Turnitin. You are allowed to view the originality report immediately and make resubmissions anytime up till the submission deadline. Typically, the similarity rate should be kept within 10%. Otherwise, penalty mark will be applied.

## **Grading Criteria:**

- 1) Proposal 2%
- 2) Report -18%
  - Depth 15%
    - Whether the topic has been researched and discussed in depth
      - Clear problem investigation
      - Thorough discussions of current situations
      - Comprehensive and Innovative solution exploration and discussion
      - Implications
  - Writing 3%
    - o Report structure
    - Writing clarity
    - o Formatting

#### **References and Citations in Your Written Report**

- Please cite all references at the end of your paper (both proposal and final report). You should include references for facts, figures and any other information that you obtained through various sources. References from relevant papers in the NUS Digital Library are preferred over Internet sources as Internet sources may not always be reliable.
- Whenever you quote, paraphrase, summarize or refer to ideas, facts, figures or findings from another source (e.g. research paper, book, website), you should cite the source, with appropriate formatting, in the sentence that mentions these ideas or figures. It is not sufficient to just provide a list of references at the end of your paper. The source that you use should be cited in the text of your paper, either in parentheses or as part of the text itself. We suggest the use of APA style for referencing.

## **Plagiarism and Academic Honesty**

• The University takes a serious view against any forms of plagiarism. Please refer to the NUS Plagiarism Notice (http://www.comp.nus.edu.sg/cug/plagiarism) for more information. All submitted deliverables will be subjected to a plagiarism check via Turnitin. Any student who is found guilty of committing an act of academic dishonesty, e.g., plagiarism or soliciting external help, will be severely dealt with. You may be given a **FAIL** grade.

#### **Teamwork**

Teamwork is very important for this project. Please meet regularly with all your group members and ensure that everyone contributes towards the report and the presentation. Please discuss with your lecturer if your group is facing any problems. There will be a **peer review** at the end of the semester to gauge your contribution in your respective groups. Despite good intentions and effort, it happens that some group members fail to take their role within the group seriously. If your group is experiencing such challenges, please follow this procedure:

a. Active members should make significant effort to contact the slacking member(s) by all means; for example, e-mail, phone, locate him/her at lectures etc.

- b. Maintain a paper trail of interactions between the group members and the slacking member (e.g., keep a proper log of communications and events), in order to substantiate the claim of "significant effort" mentioned in paragraph (a) above.
- c. Contact the lecturer to report and discuss the group's problems in a meeting. You should do this early and not wait until the last minute. Bring all supporting evidence to the meeting. The lecturer will investigate the problem and take appropriate action. Please note that the lecturer will not mediate in all other cases (e.g., social incompatibility, skills mismatch, etc).