# IS446 – Systems Analysis and Design Non-Functional Requirements Practice Assignment Instructions

#### Overview

You will be creating a categorized list of non-functional requirements and preferences for the iSchool Webstore System. If you choose to submit the Challenge Exercise, you will also be creating a list of *Extended Non-Functional Requirements*.

#### **Assignment Details**

Using the same project scope that we have been using for the last several skills practice assignments, create a list of non-functional requirements and preferences for the iSchool Webstore System.

Use the word processing template file provided or follow the template document when authoring yours. This template provides an effective checklist for identifying non-functional requirements.

Note that you are allowed to use your imagination in this assignment. So, you might include a requirement or preference here that was not specifically mentioned in the iSchool Webstore case description. My goal is to drive an interesting discussion when we review this assignment in class. So, some amount of dramatic license is encouraged on this assignment.

Please remember to include only non-functional requirements. If you think of another functional requirement while doing this exercise, make note of it. Functional requirements should be documented by adding further details to existing use cases (or user stories) or by creating completely new use cases (or user stories). Just because you think of a requirement during this exercise doesn't mean that it is a non-functional requirement. In fact, it is common to think of further functional requirements during the exercise. Please resist the urge to include them in this document.

#### Exercise 1 (Regular)

Using the outline of categories of non-functional requirements that I covered in the lecture, create a list of non-functional requirements (and preferences) for the iSchool Webstore System. Follow the practices that I demonstrate in the tutorial video.

#### Exercise 2 (Challenge)

An author of a text on non-functional requirements identifies even further categories of these requirements (Paradkar 2017) that were not covered in my lecture. Among them, he has included the following:

- Security Security is the ability of an application to avoid malicious incidences and events outside
  of the designed system usage, and prevent disclosure or loss of information. Improving security
  increases the reliability of an application by reducing the likelihood of an attack succeeding and
  impairing operations.
- 2. Manageability Manageability is the ease with which the administrators can manage the application, through useful instrumentation exposed for monitoring.
- 3. Interoperability Interoperability is the ability to exchange information and communicate with internal and external applications and systems.

Beginning on a separate page, create a document entitled *Extended Non-Functional Requirements*. Considering the three additional categories identified above, list at least 3 and no more than 6 additional non-functional requirements for the iSchool Webstore System that relate to these new categories.

Paradkar, S. (2017). *Mastering non-functional requirements: Analysis, architecture, and assessment*. Packt Publishing.

#### **Format**

Please submit a single PDF document. Even if you submit the Challenge Exercise, combine your pages into one PDF document before submitting.

## **File Naming**

The document that you submit should be named according to the following scheme:

surname givenname non functional requirements.pdf

If I were completing this assignment, I would name the file as follows:

trainor\_kevin\_non\_functional\_requirements.pdf

PLEASE NOTE: All file names must be in lower case. Deductions will be made for submissions that do not conform to this standard.

### **Due Date**

Please see the Weekly Schedule for the date and time when this assignment is due.

Last Revised 2022-10-27