## **Test Design Assignment**

This assignment will give you some practice in analyzing a specification and in generating test ideas.

## **Preparation:**

- Download the free version of XMind from <a href="http://www.xmind.net/">http://www.xmind.net/</a>. This is a mind mapping tool that is available for Windows, OSX and Linux.
- Download the Heuristic Test Strategy Model from: <u>http://www.satisfice.com/tools/htsm.pdf</u>
- Create a mind map in XMind to represent the HTSM.
  - Call the root topic "HTSM"
  - Create a sub topic on the mindmap for each of the headings in the HTSM (e.g. "Project Environment" etc.)
  - Within each of these subtopics, create additional subtopics for each of the sub headings in the HTSM (e.g. "Customers", "Information", etc.)
- The resulting mindmap should look something like this:



## Assignment

Your task is to analyze specifications for the Slides component of Google Drive and to identify tests that you might choose to perform.

Use the following as your specification: https://support.google.com/drive/bin/topic.py?hl=en&topic=2811739&parent=2799627&ctx=topic

You can use your knowledge of other presentation products (e.g. PowerPoint, Impress, Keynote) as reference oracles.

NOTE: You are NOT required to actually test the program against the specification, although you might have to play with the program to figure out what the specification is saying.

Here are some additional details:

- Work through the Google Slides specification, populating the HSTM with subtopics.
- Use reference oracles for ideas about features that appear to be in Google Slides but are not documented there.
- Every sentence of a specification should be telling you what the product is (Product Elements), in what way it is good or bad or needs to get better (Quality Criteria), or how it will be built and the context in which it will be built (Project Environment).
- As you find information about the product, note it under one of the topics or subtopics under these main headings. Most of your entries will be in Product Elements and Quality Criteria.
- In some cases, you might see two places to note an item. That's OK. Choose whichever one feels most appropriate to you or put your note in both places.
- Notation: When I say, "Product Elements | Data ", I mean that "Data" is a subtopic of "Product Elements." So, for example, the Position and Size of a table could be two sub-topics of Product Elements | Data | Persistent Data. You would add your testing ideas about Size to your subtopic on Product Elements |Data | Persistent Data | Size.
- When you enter a piece of information, think of the risks that might be associated with that. For example, consider Elements | Data | Persistent Data | Size. If there are several risks, I would create a series of subtopics to Size, one for each risk.
  - Examples of risks: The table might be too large for the slide. The table might have too many rows or columns and so it might be impossible to display the data on the slide. The table might have too many rows and so entering anything takes impossibly long, as does refreshing the screen.
  - For each risk, I would then enter one or more testing notes, either as a Note or as another subtopic. For example, if I am worried about performance consequence of a table with too many rows, I might have test ideas like this:
    - what is the maximum number of rows?
    - what is max number of cells (rows x columns)?
    - does performance change if I add data to the cells?

Adapted from BBST Test Design, Cem Kaner: <u>http://www.testingeducation.org/BBST/testdesign</u>

• Allow about an hour to install XMind and create the HTSM in XMind. After that, do the specification analysis for a maximum of 3 hours and then stop. You won't be finished, but you'll have a lot of analysis complete.

Note: this assignment will form the basis of group work during the Test Design lecture on 19 March. Please complete this assignment by then, and bring a copy of your mindmap with you for reference (hard copy not required, but if you bring electronic copy please ensure that you have a suitable device with you with which you can reference it).