Tutorial #1 (for week 4)
(Jan 30, 2004)

20th January 2004

The following questions will be considered during the tutorial sessions on Friday...

Q1: Find an example of a GUI blooper, or hall-of-shame entry from any NUS[1] web site. Briefly describe both *it*, and how it could be improved. (Pictures/screenshots and brief description).

Q2: RESEARCH: Hick's law is an empirical law which can be used to make a time estimate for how quickly a person can operate a GUI. It can be applied to individual tasks such as choosing a menu item. Research Hick's law, and discuss how it can be applied to the design of faster menu systems. Does the law suggest you should use fewer-longer menus, or more-shorter menus?

Q3: A claim was made in class that there is some *link* between OO technology and GUI programming. As justification for this *link*, the notes mention the use of libraries and reuse of code. However this sort of use of libraries is *generally* useful - it is just as useful for *any* software development, not just GUI programming. Can you identify any aspect of OO technology that is *particularly* useful in GUI programming?

Q4: Briefly outline a suitable system architecture for each of the following GUI applications:

- **(a)** A personal time management system for use by one person on a single PC.
- **(b)** A personal time management system for use by one person on either their work, home, portable PCs, or on a PDA, or remotely.
- **(c)** A ticket/sales application for a small private bus operator BUS-U-THERE-ALIVE, which will be used by the three people who work at the counter, and can be used to book trips only on a BUS-U-THERE-ALIVE bus.
- **(d)** A ticket/sales application for a small private tour operator, which will be used by the three people who work at the counter, and can be used to book trips using any airline, bus operator etc.
- **(e)** A ticket/sales application for a major international airline, which will be used by anyone with a credit card.

Q5: If you were arranging for a GUI application to have a record-and-replay option, what things would have to be recorded? If on the other hand, you wanted to develop some tool that would allow record and replay for ANY application, in what way(s) would it have to be different?

If there is time, the tutor will spend some time helping with Assignment #1.

[1] Hint: - Can you think of anything that has annoyed you when attempting to do any administrative tasks at NUS.