COMP2225 Software Engineering

Laboratory 4
Document Inspection
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In this laboratory students will engage in a practical document inspection exercise. This laboratory has two parts.

Part I

Each project team is required to analyse the following statement and determine (with the necessary justifications) if they are able to design a software system given this information alone.

"Only one person is allowed at the pay window"

Part II

In the second part of this laboratory, the document inspection process will be described. Project teams are required to write two functional requirements (specifications) for their project and have them inspected by the class using the Generic Software Engineering Document Rule Set (Gilb, Tom, Dorothy Graham, and Susannah Finzi. *Software inspection*. Addison-Wesley Longman Publishing Co., Inc., 1993, p.423-424) listed below. For each inspected requirement, the number and type of issues raised shall be reported and recorded.

A Generic Software Engineering Document Rule Set

Version 2.1 July 1992 TG. Tag=RULE.G

G1 (CONSISTENT).[†] Statement must be consistent with other statements in the same or related documents.

G2 (UNAMBIGUOUS). All documents shall be unambiguous to the intended readership, unless clearly marked (for example,

using the <angle parentheses>).

G3 (NOTE). All form of comment, note, suggestion, idea which does not form an official part of the document shall be clearly distinguished as such (for example, by 'quotes', italics, footnotes,‡ for example, prefacing words.)

G4 (BRIEF). All documents shall be as brief as possible, to support their purpose.

G5 (CLEAR). All documents shall be crystal clear to all possible readers as to intent. The burden is on the producer, not the

G6 (HEAD). All documents shall contain producer, date, source document codes, rule set codes, quality status (exited or not), identification tag, revision code.

G7 (UNIQUE). Ideas shall be stated once only in documents and thereafter referred to by their unique tag. Use comments (") to paraphrase ideas elsewhere.

G8 (SOURCE). Statements shall contain information about their exact and detailed sources. Normally use the '<-' source arrow, but also 'evidence' and comments.

G9 (EL). Statements shall be broken up into their most elementary form (to permit separate analysis, costing, implementation).

G10 (TAG). All elementary statements shall have their own identity tag for direct reference from other parts of any larger document set. Parameter name and qualifiers can be used as subtags, for example, USABILITY.PAST[1991].

GI1 (HIER). Documents shall be organized into clear hierarchical structures, with tagging reflecting the structure.

G12 (CHANGE). Date and unique author initials (or employee code) of any change shall be indicated at the level of change, for example, PLAN 60%<-{REQT-R, TG, FEB-15-91} Inspection rework.

G13 (RISK). Any known or suspected uncertainty or risk shall be clearly indicated using devices such as { <vaguely defined>, ?, ??, 60->70, 70%± 20) and suitable comments.

G14 (STATUS). A document shall show its Inspection status clearly. In particular EXITED (from the Inspection process), NOT EXITED. Not exited shall be assumed until other status is claimed. The number of maximum major issues probably remaining per non-commentary full page shall be noted next to the exit declaration.

G15 (SPECIFIC). Statements must be specific and avoid unwarranted generality which might lead to unintended interpretations.