

## Bruegge 99, Analysis, Chapter 5

Bernd Bruegge

Quiz No. 5 – Answer Key

September 14<sup>th</sup>, 1999

Considering the following use case, which could be use case in the STARS Inspection Team:

<i>Use Case Name</i>	Generate Discrepancy
<i>Participating Actors</i>	Inspector
<i>Entry Condition</i>	1. The inspector notices a defect and activates the "Generate Discrepancy" function of his wearable computer.
<i>Flow of Events</i>	2. STARS presents the inspector with his Discrepancy form. 3. The inspector fills out this form by dictating to his unit. The form includes fields such as his name (prefilled), the plane's tail number (prefilled), and the type of defect. 4. The inspector may optionally activate the "Generate Sticky" use case, to associate a visible location with this discrepancy.
<i>Exit Condition</i>	5. When the inspector is done dictating, he speaks a code word, "finished", and the discrepancy and sticky are logged to his machine.
<i>Special Requirements</i>	The inspector can cancel the discrepancy while dictating by instructing his wearable to "cancel".

1. Apply Abbott's heuristics to the flow of events to identify object model components . Identify at least 4 different parts of speech. (3 points)

Common Nouns : Inspector, Discrepancy, Sticky, Form, Wearable Computer  
= Classes

Doing Verbs : Notices, Activates, Presents, Fills, Dictates (Speaks, Instructs)  
= Operations

Having Verb : Includes = Aggregation

Adjective = Type of Defect = Attributes

2. Sketch the sequence diagram for the participating objects in the use case. If necessary, use the space on the other side (3 points).

Entity Objects:           Inspector  
                                   Discrepancy  
                                   Sticky

Boundary Objects:       GenerateDiscrepancyFunction  
                                   GenerateDiscrepancyForm  
                                   GenerateStickyFunction

Control Objects:         GenerateDiscrepancyControl  
                                   GenerateStickyControl

