Team 19 Phase 3 of Inspection

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Laboratory # 8: Inspection

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5   **Morgan, Laura**
6   **Miaw, Jireh**
7   **Hauser, Steven**
8   **Dworak, Catherine**
9   **Bertoglio, David**
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11
12   *Work Product*
13   **Documentation of Phase 3 of Inspection of Group 20's source code**
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15   *Document Revision Information*
16   **April 26, 2013 – Document created, Phase 3 inspection documented**
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Approval Sheet

All group members whose names are listed below approve of the document and contributed fairly.

Member Names

Morgan, Laura
Miaw, Jireh
Hauser, Steven
Dworak, Catherine
Bertoglio, David

Pledge

On my honor, as a student, I have neither given nor received unauthorized aid on this assignment.

Names

Morgan, Laura
Miaw, Jireh
Hauser, Steven
Dworak, Catherine
Bertoglio, David

Contents

94 **Inspection Schedule**
95 Phase 3 – Functional Correctness
96 Between Wednesday April 24 and Friday April 26
97 Inspector – Laura, David, Steven, Jireh, Catherine

98 **Checklists Used**

99 **Phase 3**
100 Functional Correctness (single inspector).
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102 - Methods
103   - All methods return what they are supposed to return
104   - All methods execute what they are supposed to execute
105 - Variables
106   - All variables exist for the purpose for which they are named
107 - All specified functionality is implemented
108 - Implements communication protocol fully
109   - sends acks, command and error message to the robot
110   - receives and processes properly formed messages
111   - Handles checksum generation and validation correctly according to
112   communications protocol.

113 **Results of Inspection**
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115 - Switch statements
116   - Switch statements used rather than if-else-if blocks
117   - *BaseStation lines 72-92: If-else-if block should be switch-case*
118   *block*
119   - *GUI lines 468-700: if-else-if blocks should be switch-case blocks*
120 - Variables
121   - All variables initialized prior to use
122   - *GUI lines 246 & 247: txtConnectionButtonOn and*
123   *txtConnectionButtonOff background set before textFields*
124   *initialized (lines 257 and 265)*
125   - *GUI lines 525, 543, 560, 577: wIsPressed, aIsPressed, sIsPressed,*
126   *dIsPressed used in conditionals before initialized – consider*
127   *initializing them all to false in initialize()*
128   - *GUI line 652: Boolean isSent never initialized*
129   - *GUI line 470: int speed used before initialized on line 475*
130   - All variables declared at top of function
131   - *BaseStation line 71: String message declared in middle of*
132   *function*
133   - *BaseStation line 216: byte[] checksum should be declared at top*
134   *of function*

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135   ▪ *GUI line 643: Boolean valueHolder declared twice (also declared*
136   *on line 25)*
137   ○ All loop variables initialized just before loop
138   ▪ *BaseStation line 30: Initialize readFlag on line 62 (just before*
139   *loop) rather than at declaration*
140   ○ No variables initialized that are not used
141   ▪ *GUI line 28: private static GUI window never used*

142 **Observations**
143 Phase 3 of the inspection has been completed. Defects sent to Team 20 on
144 4/26/2013.
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146 Note: Auto-generated GUI code was not inspected as thoroughly, as directed by
147 Instructor.
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