Team 19 Design Document Verification

Laboratory # 5: Design

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

Work Product
Verification of the Design Document

Document Revision Information
3/24/13 Document created

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

88 # Contents

96
97

Time and Duration

10:15 pm 3/24/2013

Attendees
Catherine Dworak

Roles
Catherine Dworak – use the checklist to verify the design document

Check Lists Used

The following check list was used to inspect the document:

Are the following properties and qualities included?
- comprehensive document structure
    - face page - yes
    - approval - yes
    - contents - yes
- high-level system architecture overview
    - in natural language - yes
    - liberal use of graphics – graphics included in following sections
- UML class diagram notation
    - all classes are identified, included subclasses - yes
    - relationships between classes - yes
    - links - yes
    - fields and field types for classes - yes
- UML sequence diagram
    - objects - yes
    - function calls - yes
- UML state machine
    - start state - yes
    - states - yes
    - transitions
        - action – no actions necessary
        - event - yes
        - guard conditions - yes
- concurrent structure of the design
    - in graphical notation – yes
- class interfaces
    - written in Java - yes

137	o comments that document design decision that each class is hiding -
138	yes
139	o functions included
140	▪ comment explaining purpose of function - yes
141	▪ comment explaining what each parameter is for - yes
142	o fields included - yes
143	o private data member
144	▪ constructors - yes
145	▪ destructors – not needed in java
146	▪ getter methods – may be necessary to add more later
147	▪ setter methods – may be necessary to add more later
148	• communication
149	o are design decisions associated with communications protocol
150	suitably hidden - yes
151	o was the protocol design included - yes
152	• natural language text
153	o necessary - yes
154	o concise - yes

155 **Defects Located**
156
157 Defects were located in the UML class diagram, the UML Sequence Diagram, and the
158 class interfaces

159 **Corrective Action Required**
160
161 Changes to be made in each of the classes and the interface:
162
163 Driver
164 • in setSpeed parameter speed must be changed to newSpeed
165 • in read parameter sensNum must be changed to sensorNumber
166
167 Activator
168 • NXTComm field type must be changed to NXTConnection
169
170 MessageHandler
171 • verifyCheckSum must be made private and changed to verifyChecksum
172 • getCheckSum must be made private and changed to getChecksum
173 • add method private method Boolean isNumeric(String number)
174
175 All field types of arrays must be changed to ArrayLists
176

Results of Follow Up

All changes that were identified in the above section (Corrective Action Required)
have bee corrected.