

Code Review Check list

Date: 13.2.14

Reviewer: Martin Oehler
Use Case: #10 TCP Packet

| Description | Comment | check |
|---|--|-------|
| Structure | | |
| Does the solution only cover the modules task? | | X |
| Is the code well-structured, consistent in style and consistently formatted? | | X |
| Is there unreachable code? | | X |
| Are there any leftover stubs or test routines? | | X |
| Is there any redundant code? | | X |
| Are any modules excessively complex? | | X |
| Documentation | | |
| Are the comments consistent? | | X |
| Are the comments sufficient and understandable? | <ul style="list-style-type: none">- “receive” multiple times written as “recieve”- method 'setFlags', no explanation of the flags or the ordertcppacket.hpp::119 something is wrong in that sentence- Class comment is not sufficient, give explanation how to use the class e.g. that you have to call 'calculateChecksum'- Comments for private member variables are missing | |
| Variables and Methods | | |
| Are all variables/methods properly defined with meaningful, consistent names? | tcppacket.cpp::292: 'vec' is not a sufficient name tcppacket.cpp::338: no abbreviation ('ins') | |
| Are there any redundant or unused variables/methods? | | X |
| Loops and Branches | | |
| Are all cases covered in IF-blocks? | | X |
| Are logical structures nested correctly? | | X |
| Are loop termination conditions achievable? | | X |
| Are indexes properly initialized? | | X |
| Defensive Programming | | |
| Are indexes and pointers tested against array bounds? | tcppacket.cpp::410 size of 'vec' isn't tested. error if vec is shorter than 32. | |

| | | |
|---|--|---|
| Are imported data and input arguments tested for validity and completeness? | tcppacket.cpp::337: no test if <i>end</i> is bigger than <i>start</i> . negative value leads to error. | |
| Are all output variables assigned? | | X |
| Is every memory allocation deallocated? | | X |
| Code Conventions | | |
| Are the Code Conventions fulfilled? | | X |
| Do the tests have statement coverage? | | X |