

1.0 Glossary

AIO: All-in-one-solution
ASTM: American Society for Testing and Materials
API: Application Programming Interface
BOM: Bill of Materials
BP: Border Patrol
BTN: Button
CG: Center of Gravity
CSC: Computer Software Component
CSCI: Computer Software Configuration Item
DB: Decibel
ESC: Electronic Speed Controller
FAA: Federal Aviation Administration
FR: First Responder
FT: Feet
GED: General Education Development
GPIO: General Purpose Input/Output
GPS: Global Positioning System
GUI: Graphical User Interface
HD vid: High Definition Video
HRs: Hours
HMI: Human-Machine Interface
I/O: Input and Output
IR: Infrared
ISR: Intelligence, Surveillance, and reconnaissance
LAN: Local Area Network
Lbs: Pounds
LD vid: Low Definition Video
LiPo: Lithium-Polymer
LWIR: Long Wave Infrared
MIL-STD: Military Standard
MVP: Minimum Viable Product
N: Newtons
OS: Operating System
OV: Operational Viewpoint
PDR: Preliminary Design Review
PODBot: Print-on-Demand Bot
RESTful APIs: Representational State Transfer Application Programming Interfaces
SCM: Source Code Management
SDD: Software Design Document
SRD: System Requirements Documentation
SW: Software

SWAT: Special Weapons and Tactics
TBD: To Be Decided
TBR: To Be Reviewed
TCP/IP: Transmission Control Protocol/Internet Protocol
TD: Tandem
UHF: Ultra-high frequency
UML: Universal Modeling Language
USB: Universal Serial Bus
WiFi: Wireless Fidelity
3D: 3 Dimensional

2.0 Appendix

Architecture/Design: Description of the software design. Includes relationship to an environment and construction principles to be used in design of software components.

Class: A model or blueprint or a software object that defines the properties of the object.

Code: Source code of the implemented design, algorithms, interfaces, and APIs.

Configuration Item (AKA Executable): Executable image of the computer program that runs on a computer.

Function: A software subroutine that allows you to perform a specific set of operations. A function is essentially equivalent to a method.

GitHub: A web hosted service for tracking and managing software projects.

Jira: A web service for project management. Widely used for software project management.

Listener Function: Fundamental concept in event-driven programming, where the behavior of the program is determined by events such as user interactions, system signals, or external data. The listener function is designed to "listen" for a particular event and then execute specific logic when that event occurs.

Method: Equivalent to a software subroutine (or function) that performs a specific set of operations.

Object: A software entity that has attributes, behavior, and properties.

Object Oriented Design: Design principle that focuses on capturing the structure and behavior of the software. Software is broken into small modules that combine both data and process.

Requirements: Statements that identify attributes, capabilities, characteristics, or qualities of the software. This is the foundation for what will be or has been implemented.

Software Test Plan / Description: Test plan and associated test descriptions specific to the software for verification of SW requirements.

Source Code: File(s) that captures the software or firmware program written code in a specified programming language.

Use case: Represents a high-level system function that yields a measurable result or capability.

Users Manual: Description of how to use the software for the end-user, system administrators, and support staff.