

Weapon System Support Software

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Client: Harlan Mitchell, Laurel Enstrom: Northrop Grumman Corporation



Team Controller
NORTHROP GRUMMAN

Motivation

WHO

Northrop Grumman engineers who are required to travel to diagnose their client's equipment

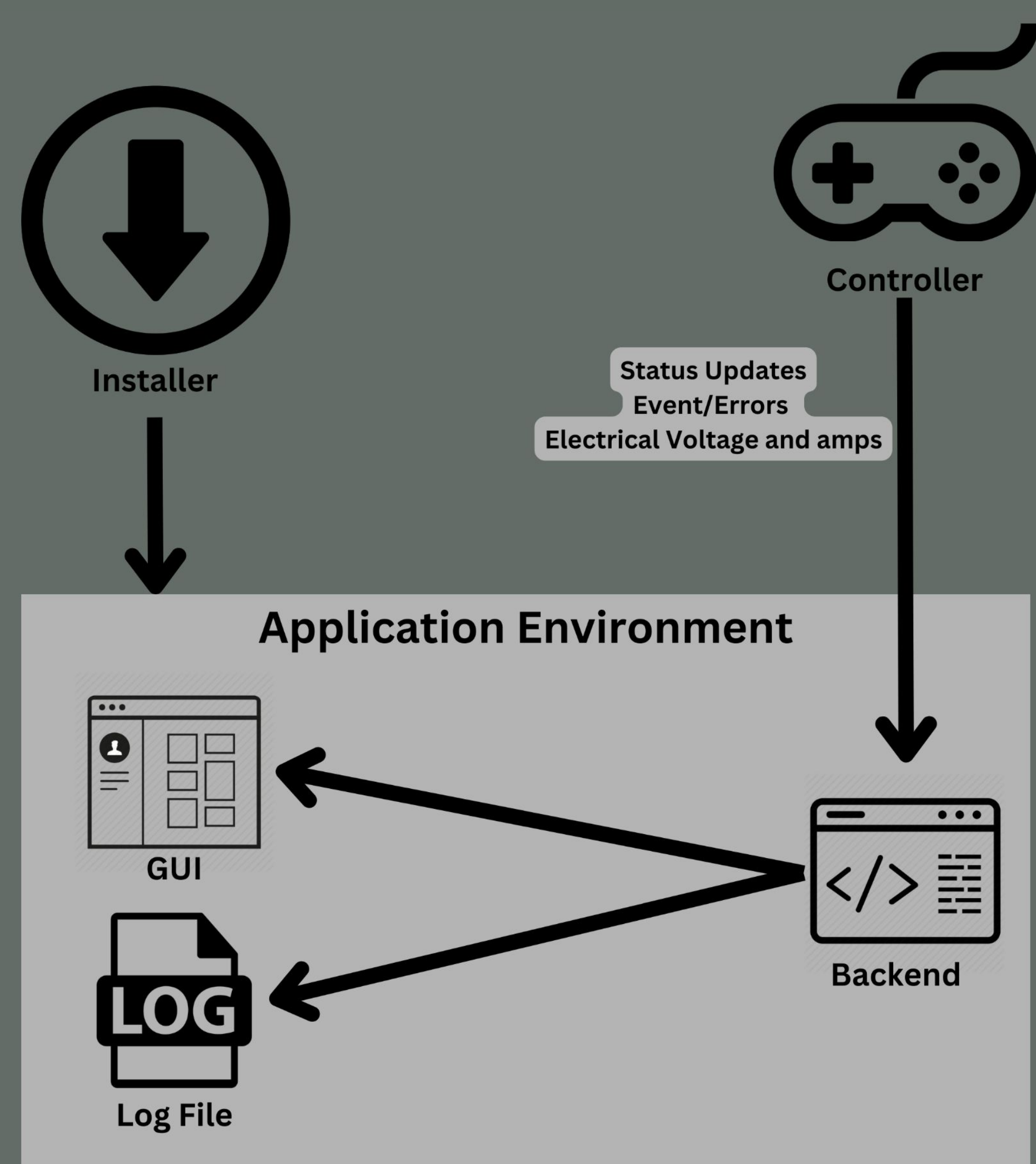
WHAT

A desktop application that will allow Northrop Grumman's client's to be able to **diagnose equipment** without an engineer present

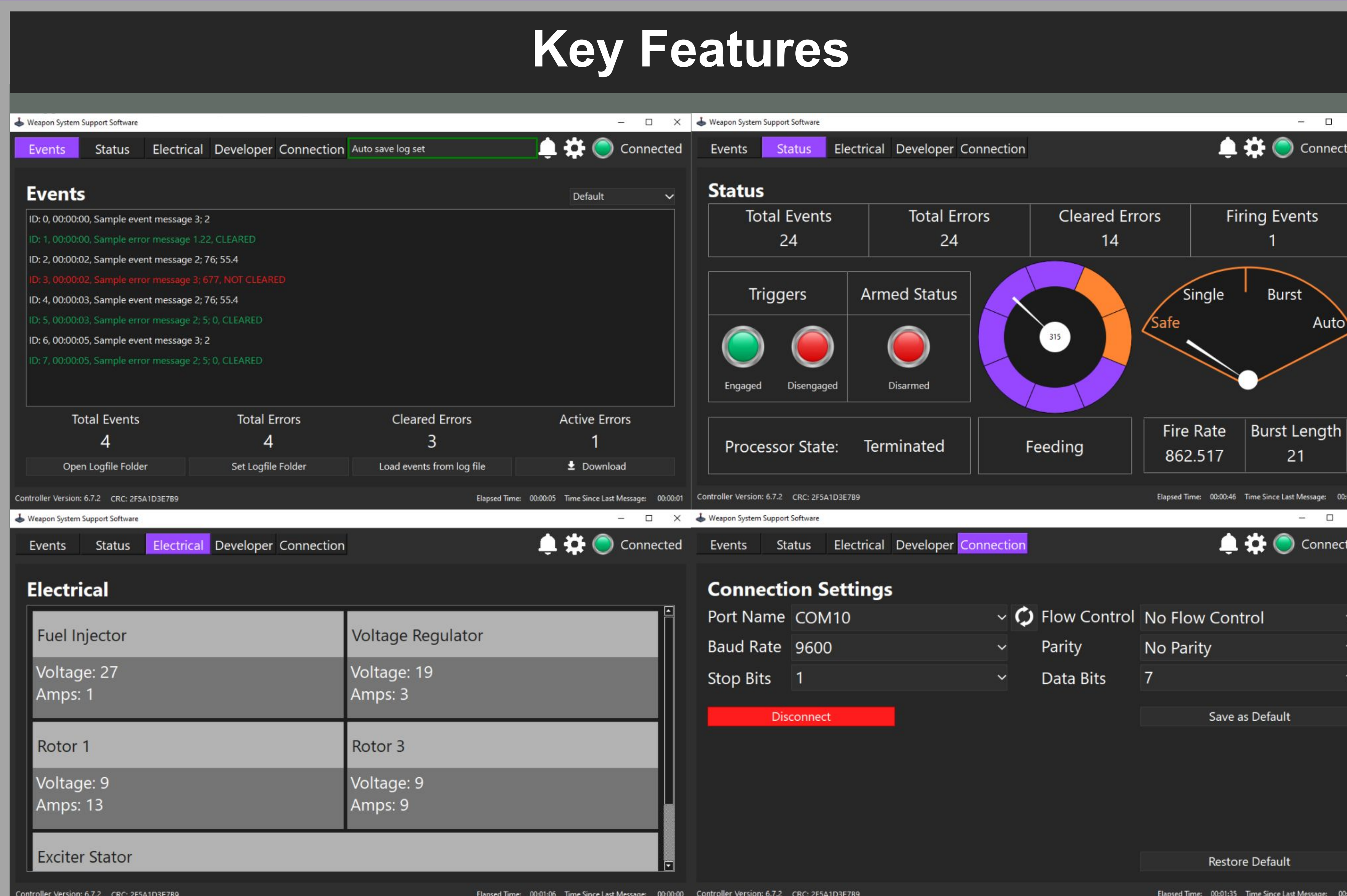
WHY

This software product will **save time and money** when diagnosing their client's equipment

Architecture

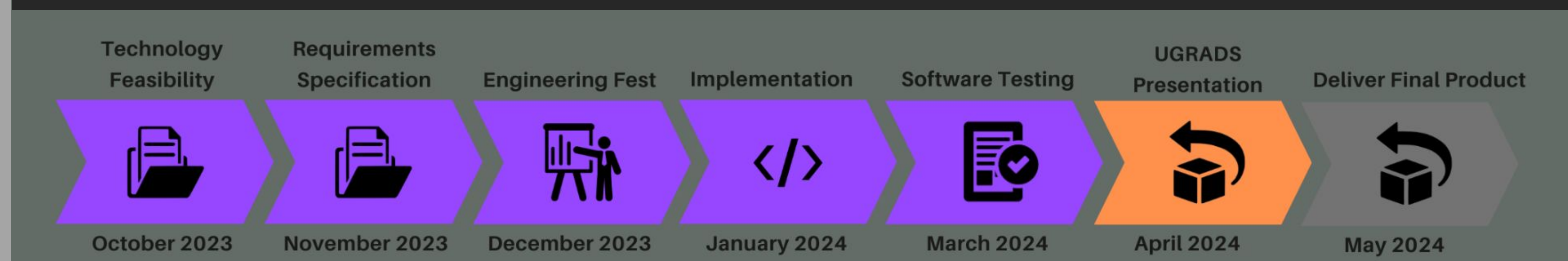


Key Features



- Interactive graphical user interface
- Displays electrical components associated with weapon
- Customizable connection settings for device to device connection
- Customizable user settings
- Connection to device/controller via RS-422 serial communication
- Automatic log file
- Manual log file
- Filtering based on events and errors

Timeline



Testing

To effectively test all outcomes of our software, we created test cases that test the inverse of what the given function expected. This gives greater test coverage and helps improve the error handling of the functions.

Technologies Used



Outcomes

- NG engineers will no longer have to travel onsite to diagnose a weapon
- Time, money, and resources will be saved
- Maintenance technicians will be able to send data log directly to engineer for diagnostic analysis



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