Error Log Parsing
Database Design and Implementation

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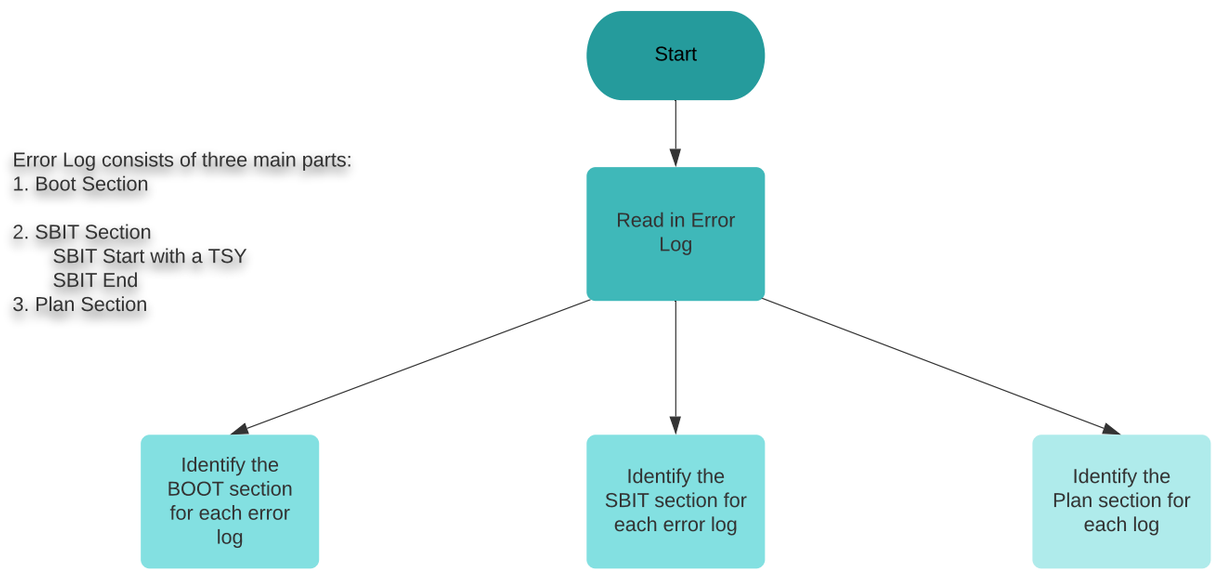
Problem:
Error logs are difficult to read.
They are suppossed to give the Engineer / Technician actionable intelligence to given issues and failures that occur in the field when the product is in use by a customer.

Once the product is fielded and sold to a customer, the software is NEVER updated, so it is not a trivial matter to increase logging or to troubleshoot.

The product is under the customers control so troubleshooting or debugging is a fragile process. Getting Errorlogs is a significant effort.

So.. once we have error logs... we must have a clear and decisive manner to parse, recognize and guide the troubleshooting and corrective action procedures that should take place.

Should provide guidance to the customer including mission planning and corrective action to take on the pod.



Error Log consists of three main parts:
1. Boot Section

2. SBIT Section
   SBIT Start with a TSY
   SBIT End
3. Plan Section

Generate list of all relevant keywords

For every file parse out the SBIT Section to Report state of pod before Mission begins.

Process

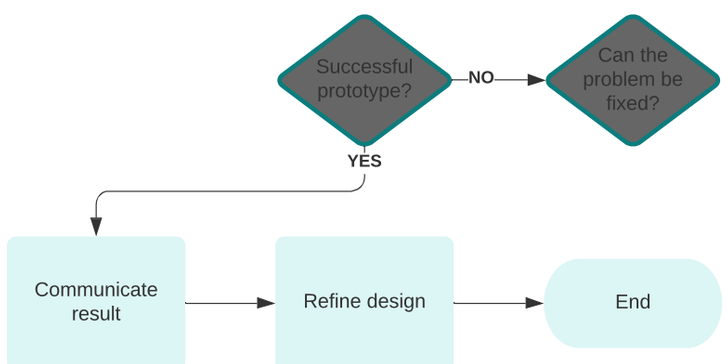
Insert into database

Use relevant keywords to create a SQL Query.

Insert into database

Identify PlanID, PlanTasks Success Failures

Insert into database



Output Report(s):

Background:
Program, SensorID, MissionPlan
Boot Section - Satisfactory / Unsatisfactory
SBIT Section - Satisfactory / Unsatisfactory
Plan Section- Satisfactory / Unsatisfactory

What is wrong?

Why?

What Immediate Corrective Action can be taken?

Long term corrective action.

IDEA for a General Report

File:
Mission Date:
Mission ID;
Sensor ID:

<Boot Section>
Tuff Serve :
AIB SW Version:
RMS SW Version:
SCU SW Version:
GEDI SW Version:
CN Version

<SBIT Section>
Total Tests
Tests Passed
Test Failed or Degraded

<List tests>
<What tests were in a failed state at the end of SBIT? >
<What test failed but subsequently passed?>

< Plan Information>

<Calibration Tasks>
< Planned Datalink Tasks>
<Planned Imaging Tasks>
<Planned EO Tasks>
<Planned IR Tasks>

How many tasks were successful?
How many tasks failed?