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1
2 @brief      Mission Statement for upcoming onsite technical presentation
3 @details    Preparation for generation
4 @auth       Justin Reina
5 @rev        6
6 @date       7/20/18
7
8
9 @section     Project Selection
10      Contract work for Ergsense - HW, FW & Design (DTECTS, 2017)
11
12 @section     Mission Statement
13      Description of contract work (Ergsense) where hardware, firmware and design work
      helped stabilize an existing proof-of-concept and move it forward towards product
      release.
14
15 @section     Presentation Contents
16      1 Challenges & Needs      (1)
17      2 Design Procedure        (2)
18      3 Development Methodology (3)
19      4 Overcome Challenges     (1)
20      5 Deliverable & Results   (2)
21      6 Learnings & Growths    (1)
22      Total (10)
23
24 @section     Statistics
25      5-6 people
26      60 min minute technical presentation
27      Deep Dive Potential for staff
28
29 @section     Key Points
30      Highlight hardware experience
31      Show direct value to team, by example
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36 //*****//
37 //                      SECTIONS                      //
38 //*****//
39 @section     Challenges & Needs
40      Stabilized Firmware Architecture
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43      Board Revisions
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46      PoC Progression, Arduino towards release
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48
49      Feature Integration
50      Debug port
51      Serial port
52      Jumper
53 @section     Design Procedure
54      Needs Identification
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57      Firmware Development
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60      Board Development
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63      Contract Completion & Transfer
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ABLE TO RELEASE ON SINKING HU V1.0  
PYTHON VM

"HOW YOU STATED THE ORIGINAL, HOW DO  
WE NOW PROVE PROOFING?"

- DISCONNECT  
"AS LONG AS I'M KNOWLEDGE, THERE  
WE'RE IN IDEA GENERATION  
THIS HORROR!"

- PUTTING ORDER  
TO ALL READS  
- DOC FOLDER

- EAGLE LIBRARY  
INTEGRATION

- ALL READS STILL IN  
V1.0

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70 @section Development Methodology  
71 Documentation  
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73  
74 Presentation  
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77 Code Syntax  
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80 Development Validation  
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83 PoC Form  
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86 Schematic Examples  
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89 Content Transfer to Ergsense  
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92 Revision Control  
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96 @section Overcome Challenges  
97 Unmet customer needs  
98  
99  
100 Work scope identification  
101  
102  
103 Espressif  
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105  
106 Satisfying ambitious, abstract design needs  
107  
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110 @section Deliverable & Results  
111 Schematics  
112  
113  
114 Documentation  
115  
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117 Board Design  
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119  
120 Espressif bare-metal scope  
121  
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123 Roadmap establish  
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126 Procedure Reference  
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129 GitHub  
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TEST POINTS  
ADDED & NEEDED

PICTURES  
- REACH OUT

RESTRICTIONS  
- NONE AT PRESENT

IOT SENSOR FOR  
MACHINERY &  
OPERATIONS REPORT

PRICE (WILL NOTE)  
SEND UNPROVEN REPORT

DEVELOPING INTERFACE (C-PIN MOVING TO JTAG)

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@section Learnings & Growths  
Communication

Customer Needs Identification

Risk Identification & Mitigation

Results Delivery to Ambitious Customer

@section Things of Value to Present  
Schematics (DTECTS\_hw/ work)

Firmware Reference (Examples Espressif work?)

Design Docs (Spec sheet, path forward)

Work Sync & Integration (Convergence of work flows)

Project Org (DTECTS\_hw org)

Content Org & Sharing (GitHub)

Challenges & Learnings (Espressif OTM)

SETTING UP REPO & STRUCTURE

SERIAL PORT, HE WANTED EVERYTHING  
R223, 485, 501-12, → MOVED TO MODULE  
OCCUR & CND  
ANALYSIS OF PCA CIALUM  
TO COMPLETE  
DIA VALUES  
RESEARCH TO JUSTIFY  
STILL PRESENT  
"WE WOULD HAVE BEEN SEARCHING FOR  
WIKI OTHERWISE"

## THE WAND

BOIL IT DOWN

TALK TO MOST IMPORTANT THINGS

\* START WITH VALUE POINTS, END WITH THE SAME POINTS

PLAN ON NOT TRYING TO FILL THE HORN  
45 MIN TALK

3 MIN SLIDE MIN (15 MIN)

\* BE REALLY SECURE IN TRUST  
YOU SAY