



# Code Review

Presented by Kevin Oran on July 17, 2019



# Project Schedule

## Changes

- Moved F' Unit testing forward to last week.
- Prepared small Ref App Demo this week.

F' Integration Test Framework Project Schedule										2019
Wk	Task	Days	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
1	Learn how the F' Framework works	1	June 2	3 F' Workshop	4 F' Workshop	5 F' Workshop	6	7 RDO	8	
2	Initial design work and project planning	5	9	10	11	12	13	14	15	
3	Design review and begin coding	3.5	16	17	18	19	20	21	22	
	Implement Integration Test API	5	23	24	25	26	27 Half Day	28 RDO	29	4 Implement
	API Done	2	30 July 1	2	3	4	5	6		5 Test AP
	Tests for the Test API	5	7	8	9	10 JPL Holiday	11 JPL Holiday	12 RDO	13	6 Unit tes
	Example tests	4	14	15	16	17	18	19	20	7 Ref app
	Example tests	5	21	22	23	24	25	26 RDO	27	8 Ref app
	Implement Test Runner CLI	4	28	29	30	31	August 1	2	3	9 Impleme
	Integration and final documentation	5	4	5	6	7	8	9	10 Last Day	10 Present

# Project Progress

## What is done?

- Test History
  - Implementation, doc-strings, and unit tests
- Predicates
  - Implementation, doc-strings, and unit tests
  - I have yet to add Event Severity as a field in the API. This will get done.
- Test API
  - Implementation, doc-strings, and most unit tests
  - I have yet to add auto-logging all evrs to the test log. This will also be added.
- Test Logger
  - Implementation, doc-strings, no tests

# Project Progress

What is in progress?

- Test API Unit Tests
  - Finishing test cases for Event Assert and Await methods. Unit tests for `get_latest_time` and `clear_histories` still need to be added
- Ref App Tests
  - Have currently connected API to ref app and prepared several example tests for demo. The demo will also generate a test log.

# API Demo

## Reference app example tests

- For today, I have prepared a demo on the Ref app. The demo includes an API log and a couple example tests.
- This demo will be expanded to integration tests for the Ref app.

	A	B	C
1	Time	Sender	Message
2	17:21:47.517860	Test API	[STARTING CASE] test_is_streaming
3	17:21:47.519156	Test API	Clearing Test Histories
4	17:21:47.520846	Test API	Awaiting a count (5) of telemetry updates.
5	17:21:47.622510	Test API	Count search counted another item: 2019-07-11 17:21:46: SendSta
6	17:21:47.623427	Test API	Count search counted another item: 2019-07-11 17:21:46: BD_Cycl
7	17:21:48.662241	Test API	Count search counted another item: 2019-07-11 17:21:47: BD_Cycl
8	17:21:49.675888	Test API	Count search counted another item: 2019-07-11 17:21:48: SendSta
9	17:21:49.676921	Test API	Count search counted another item: 2019-07-11 17:21:48: BD_Cycl
10	17:21:49.677827	Test API	Count search found
11	17:21:49.679099	Test API	Telemetry Count Ass assert F(5), where F(5) x == 5
12	17:21:49.683080	Test API	[STARTING CASE] te
13	17:21:49.684617	Test API	Clearing Test Histori
14	17:21:49.686941	Test API	Sending Command:
15	17:21:49.691277	Test API	[STARTING CASE] te
16	17:21:49.693060	Test API	Clearing Test Histori
17	17:21:49.696824	Test API	Sending Command:
18	17:21:49.701142	Test API	Awaiting a sequence
19	17:21:49.806110	Test API	Sequence search fou
20	17:21:49.807222	Test API	Sequence search fou
21	17:21:49.808242	Test API	Sequence search fou
22	17:21:49.809140	Test API	Sequence search fou
23	17:21:49.810416	Test API	Event Sequence Asse

Sample of the API Log output

## Notes for reviewers

- July 17, 2018

## framework



# API Overview

## How is the API organized?

- There are three fundamental searches: item, count, and sequence.
  - All searches can specify a timeout to await
  - All searches can specify a starting point in a history
  - Most searches can substitute a user-created, filtered history
- There are two versions of each search: await and assert.
  - By default await begins the search at the end of the current history (can be changed)
  - By default asserts only search on the current history (can be changed)

Category	Methods
API Functions	7
Command Functions	4
Command Asserts	2
Telemetry Functions	5
Telemetry Asserts	3
Event Functions	5
Event Asserts	3
History Searches	3
Total	32



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