Test Evaluation Logging and Analysis Tool (Project Scribe)

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Test Evaluation Logging and Analysis Tool

- Automates the process of recording, saving, and analyzing reliability data during System Operational Readiness Tests (SORT)
- The System Operational Readiness Tests include
  - A stage that represents a mission area
  - A header that represents the overall type of checks the tester will be performing
  - A subheader that provides actions to take before completing test steps
  - The test steps themselves that give a fine-grained course of actions for the tester
  - A space to determine whether a test step passed, failed, or wasn't tested
  - A space for comments for each test step
  - A column for the variant that the test step falls under

Practical SORT Example

- House Inspection

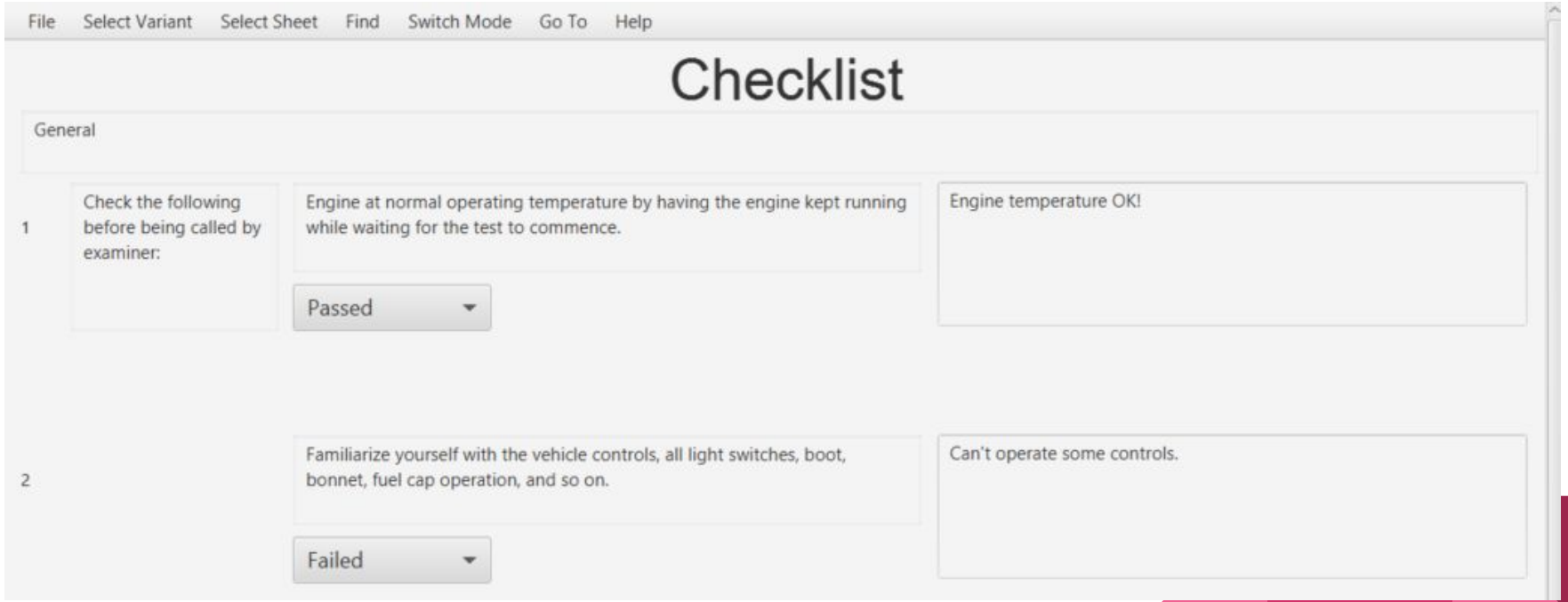
Structural Integrity	Electrical	Plumbing
Visible foundation in good condition	Lights and switches functional	Visible pipes show no sign of damage/leaking
Sides of house appear straight	Visible wiring in good condition	Water heater showing no signs of rust
No cracks, dents, or rotting on house siding	No fuses in electrical panel overheating	Water heater producing sufficiently hot water

System Operational Readiness Test (SORT)

Stage
Subheader
Result
Header
Test Step
Comment Area
Variant

Stage 1						
General			P/F/NT	Comment	Variant	Variant
	Check the following before being called by examiner:				ALL	V(1) - 86 Coupe
		Engine at normal operating temperature by having the engine kept running while waiting for the test to commence.			ALL	V(2) - Avalon Hybrid Sedan
		Familiarize yourself with the vehicle controls, all light switches, boot, bonnet, fuel cap operation, and so on.			ALL	V(3) - Corolla Sedan
		Make sure that any headlamp levelling device is set in the correct position for a vehicle without a load (usually a small wheel control on the dash which is numbered and in most cases the correct position will be at 0).			ALL	V(4) - Camry Sedan
		Have vehicle registration certificate, appointment card, and previous MOT certificate (if applicable) readily available for examination.			ALL	V(5) - C-HR SUV
	Upon being called by examiner:				ALL	V(6) - Prius Hatchback
		Drive vehicle to allotted parking space and keep it in park with the parking brake on.			ALL	V(7) - Mirai Sedan
		Make sure the blinker works.			ALL	V(8) - Tundra
		Make sure the installed GPS can find your location.			All	V(9) - Yaris

SORT Represented by TELAT



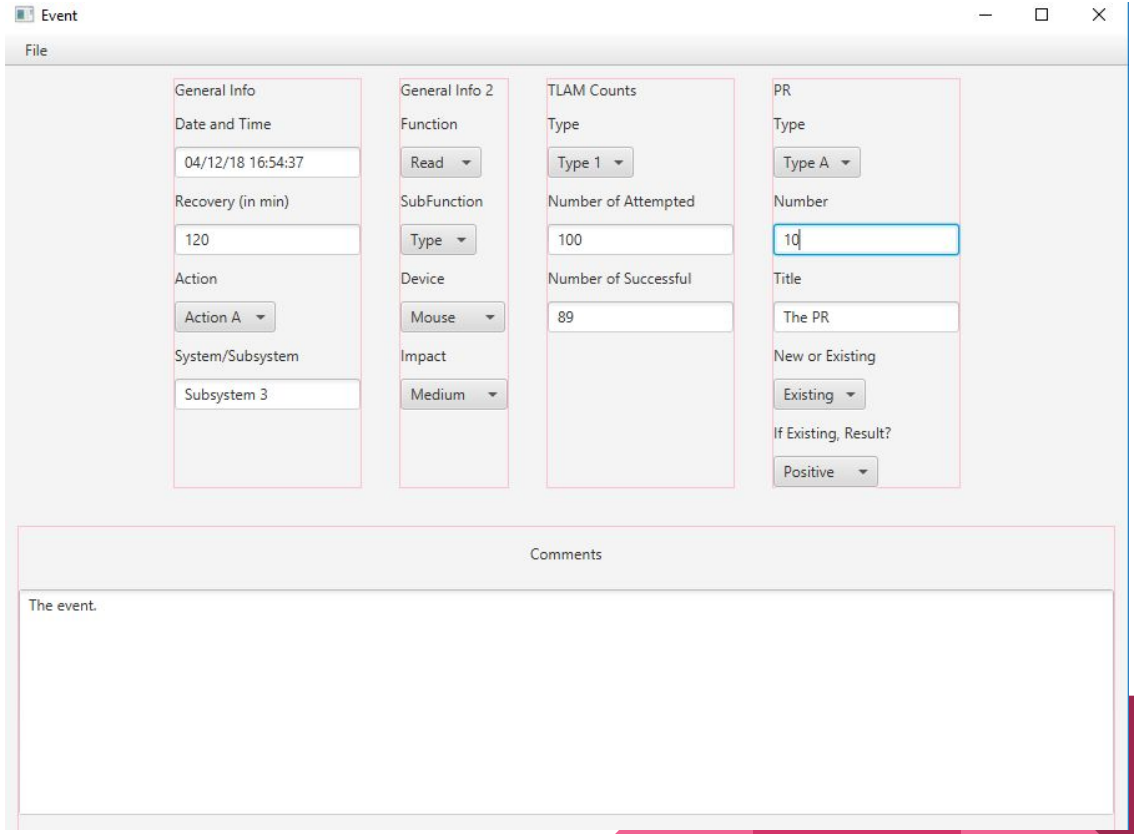
CCLog

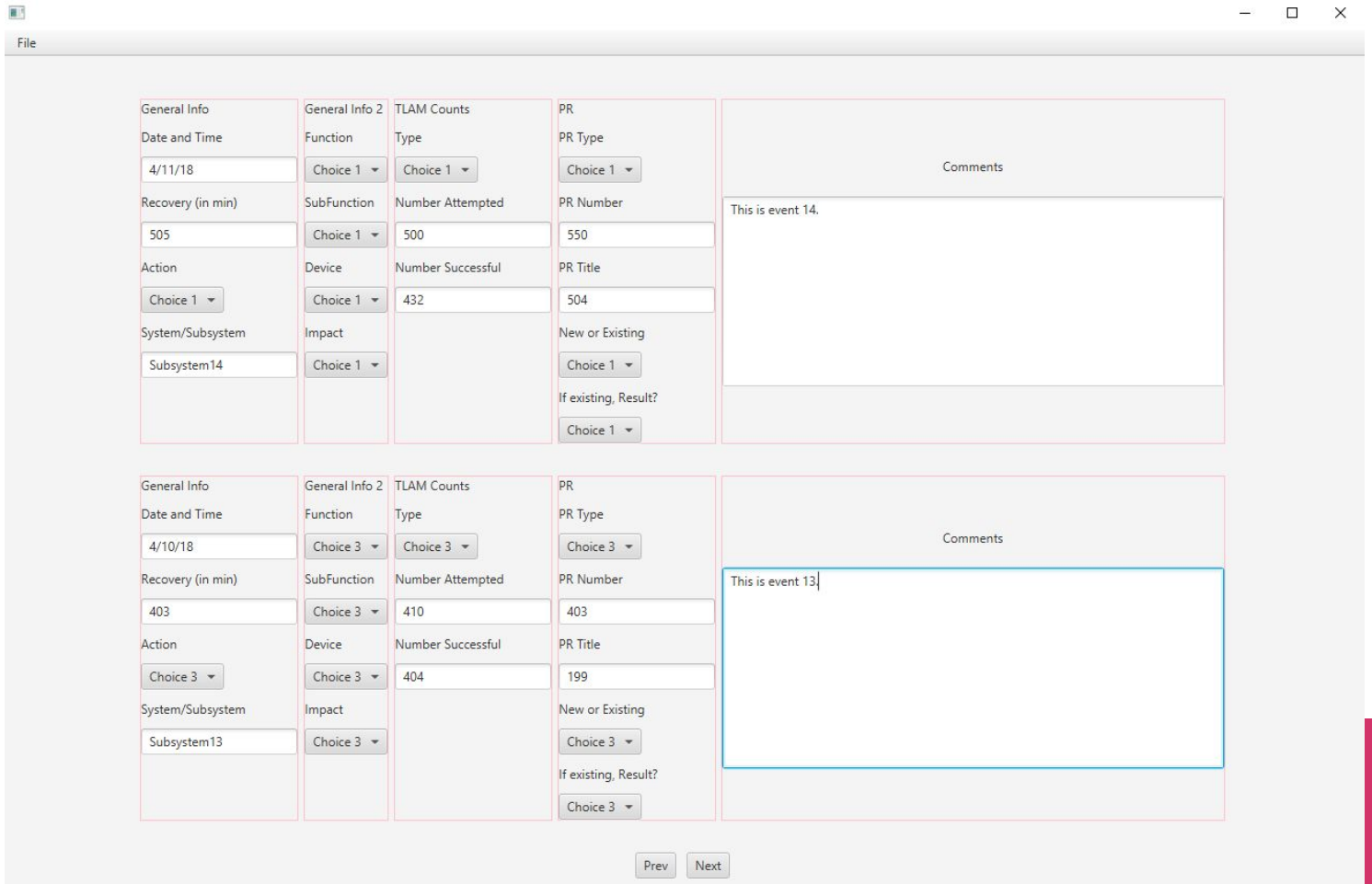
Keeps track of events during a test:

- Date, System in question, action taken
- Functions, Device affected, impacts

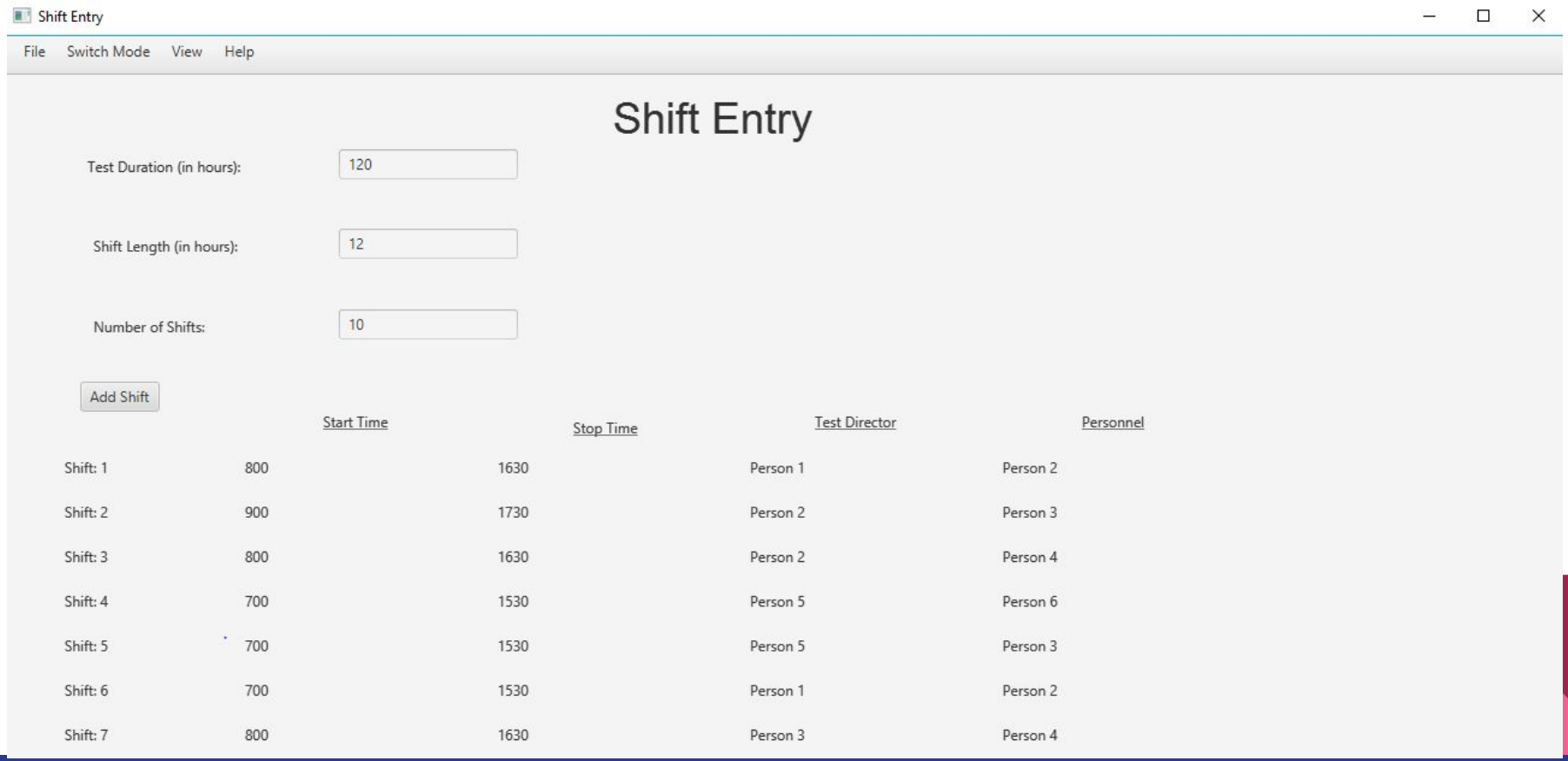
Problem Reporting

- Number of attempts to fix problem
- Number of times successful
- New or existing problem?

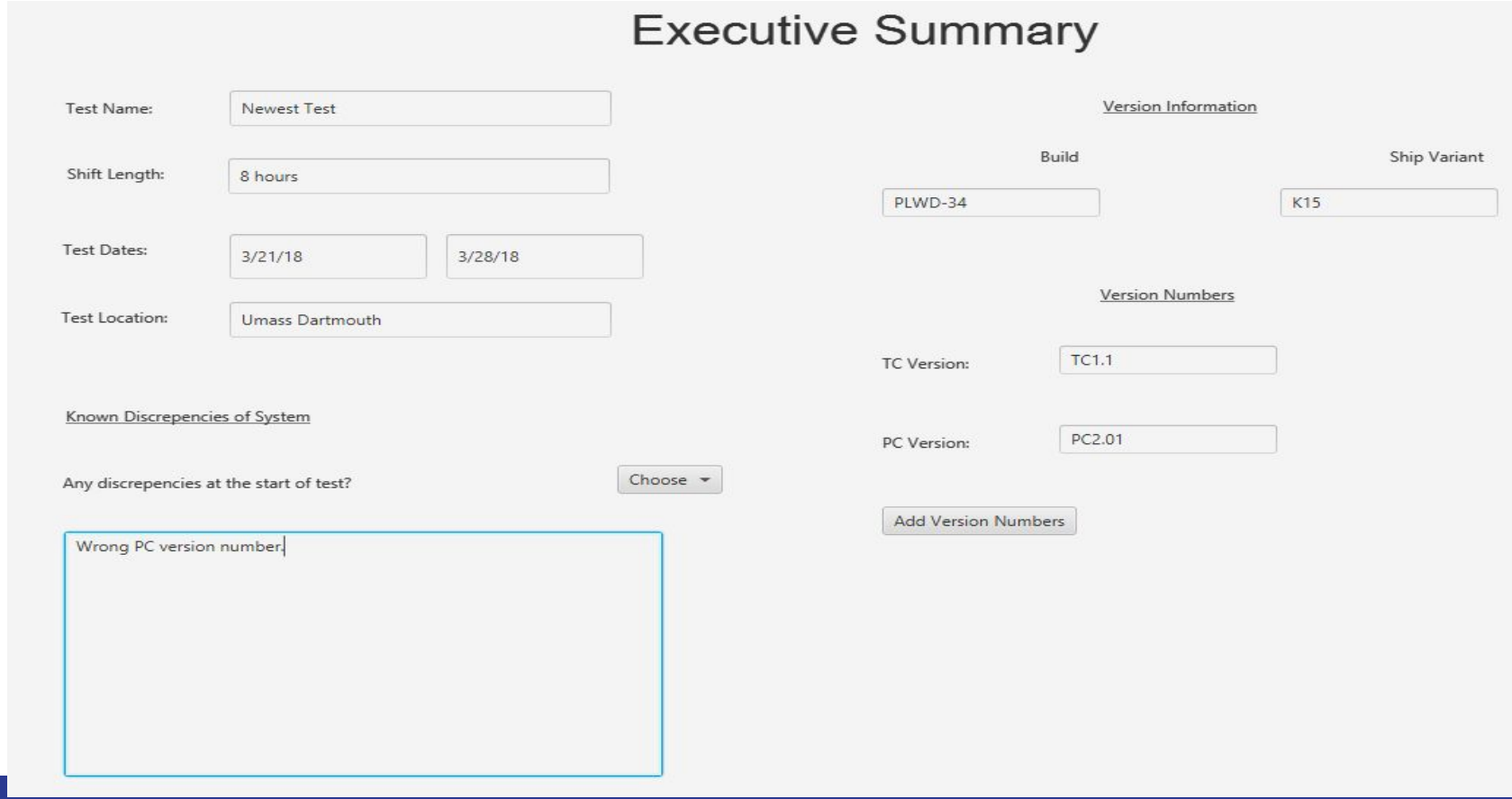



File
General Info
Date and Time
4/11/18
Recovery (in min)
505
Action
Choice 1
System/Subsystem
Subsystem14
General Info 2
Function
Choice 1
SubFunction
Choice 1
Device
Choice 1
Impact
Choice 1
TLAM Counts
Type
Choice 1
Number Attempted
500
Number Successful
432
PR
PR Type
Choice 1
PR Number
550
PR Title
504
New or Existing
Choice 1
If existing, Result?
Choice 1
Comments
This is event 14.
General Info
Date and Time
4/10/18
Recovery (in min)
403
Action
Choice 3
System/Subsystem
Subsystem13
General Info 2
Function
Choice 3
SubFunction
Choice 3
Device
Choice 3
Impact
Choice 3
TLAM Counts
Type
Choice 3
Number Attempted
410
Number Successful
404
PR
PR Type
Choice 3
PR Number
403
PR Title
199
New or Existing
Choice 3
If existing, Result?
Choice 3
Comments
This is event 13.
Prev
Next

Time-keeping

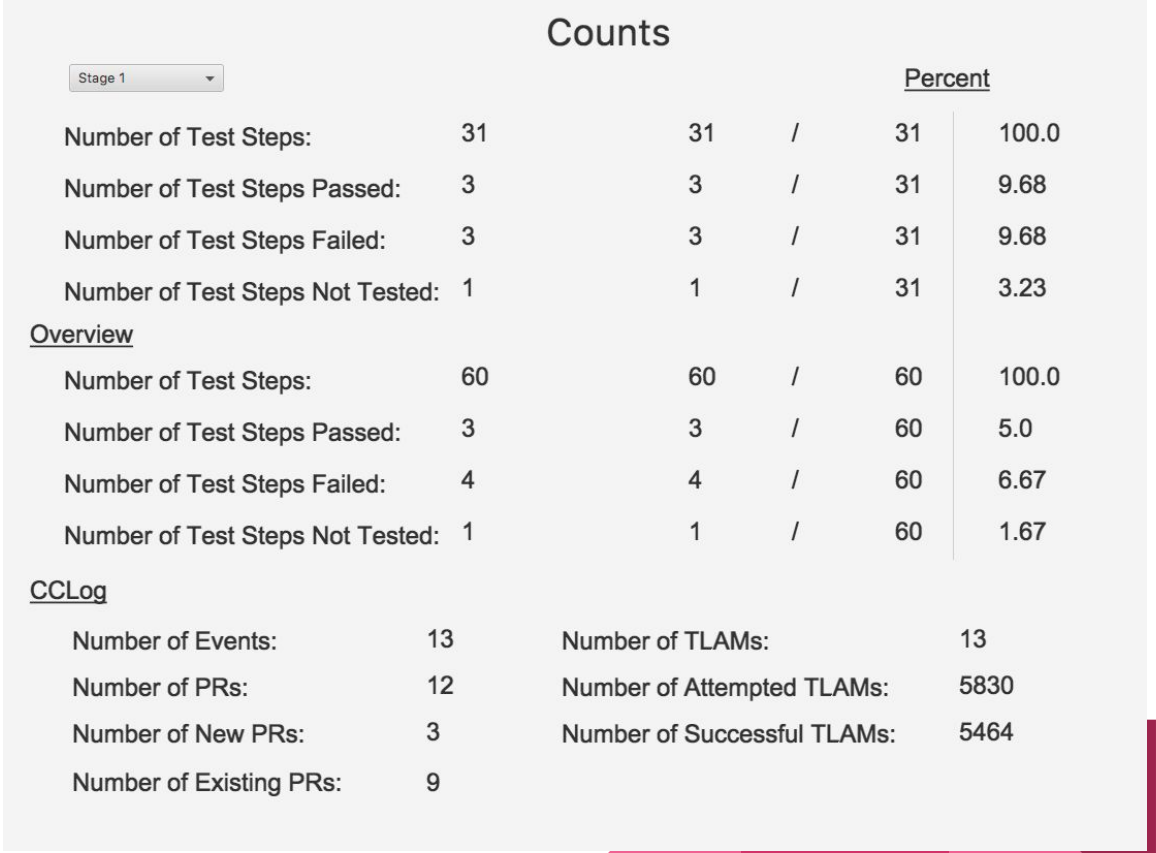


Test Overview



Counts

- Provides metrics of a test
  - Number of steps
  - Steps passed
  - Steps failed
  - Steps not tested
- Calculates percentages
  - Percentage of steps passed, failed, etc. on the selected sheet
  - Percentage of steps passed, failed, etc. across all sheets



The Development Process

- 2 week sprints
- 2-3 meetings a week
- Weekly client meetings
- Weekly progress reports
- Weekly testing reports

https://checkback.co.uk/services/bs7858-security-vetting/

Tools Utilized

- Programming language: Java 8
  - JavaFX
  - Scene Builder
  - Apache POI
- HTML
  - CSS
  - Bootstrap
- Version control: Git
- Remote repository: Github
- File storage: Google Drive

https://git-scm.com/downloads/logos

https://en.wikipedia.org/wiki/JavaFX

http://apache.org/foundation/press/kit//

https://www.seeklogo.net/google-drive-eps-crd-ai-file6716-download.html

https://github.com/logos

Testing

- Issue/Bug tracker
- Test cases
- Acceptance
- Integration
- Regression
- Unit Test
  - JUnit 4 and test runner

https://junit.org/junit4/

http://elasticstar.com/index.php/our-services/software-testing/

Demonstration

Questions?