1 Project Plan

Tokheim Turnhout

PRODUCTION TEST TOOL

Project Plan

Marcelina Siwka

2 Project Plan People

Important people

PEOPLE INVOLVED

Jens

Mentor

Marcelina

Intern

Laurien

Supervisor

Who

WHO?

- Dover Fueling Solutions - 24 000
- Tokheim Belgium - 60-70
- Payments Team - Team Rocket

What

WHAT?

- Crypto VGA
- Crypto NOVA
- Production Test Tool

Crypto VGA

WHAT?

- Crypto VGA - previous standalone payment terminal, fully developed and created within Tokheim (Both Software and Hardwared manufactured from the base).

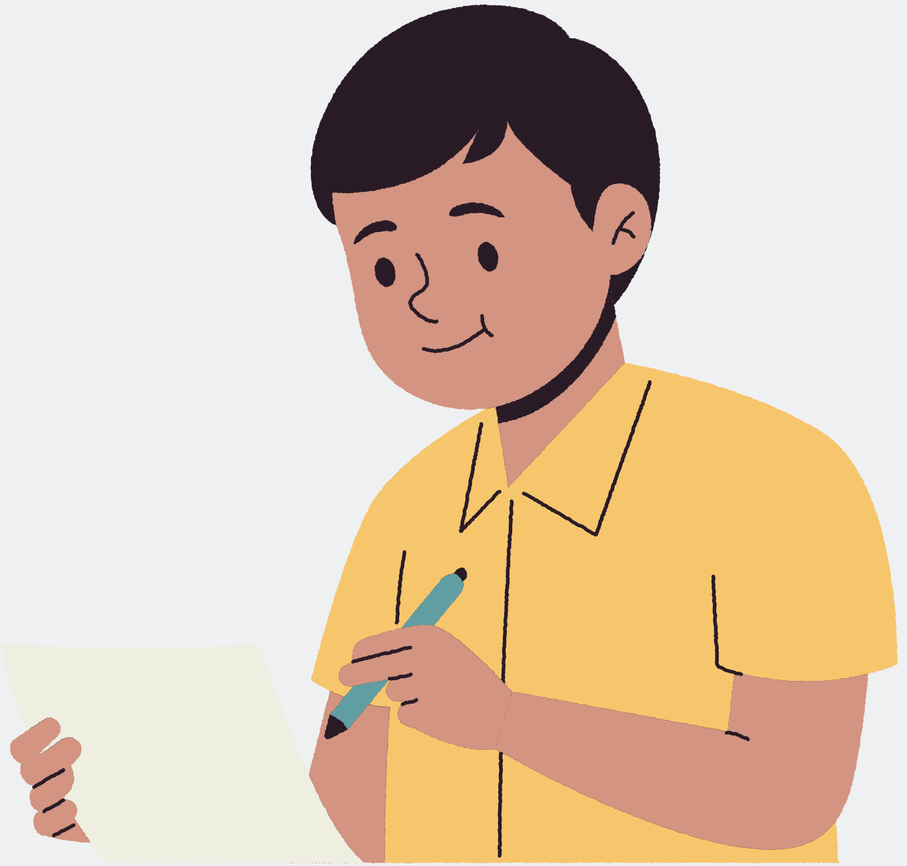
WHAT?

- Crypto NOVA - New Generation Terminal that is based on Android system. The software is created by the team in Turnhout from the scratch. The device itself is from a different company - PAX.

PAX®

WHAT?

- Production Test Tool - a process, a test that is able to check the functionalities of the device. Examples:
  - If chipcard reader works correctly.
  - If the LEDs are working
  - If the beeping can be heard well
- With this tool, manufacturing workers can say if the device is ready to be employed in the field or if it needs fixes.



WHY?

- External company
- Device testing
- Maintenance & repair

PAX

WHY?

- External company - device from a third-party company - PAX
- Unit test already present on the device - but that’s not what is wanted

WHY?

- Maintenance and Repair - Tokheim wants to make sure that the product they sell will be always sent to the customer in the top notch condition. Which involves:
  - Throughly check before the first send and if something happens
  - Be able to check the functionalities and then send it to repair or repair it themselves.

FINAL PRODUCT

The expected final product is an automated, functioning production test tool, meaning:

- There is one flow. You start the application and the test and there is a specific sequence of tests that is already put inside of the system. The user cannot skip the tests. There is only fail/pass approach. If you fail the test, you can either retry it or leave the application. This way the device can be tested for everything - checking if it is really okay to send the device to the customer. It is needed if they want to assure the quality.
- The tool is supposed to be used after the launch of the product. When somebody buys the solution then it will be tested before being sent.
- The objective and business case are really close to each other in this case.

BUSINESS CASE

- the application should contain the business logic and the UI, alongside with some unit tests to ensure the proper working of the Production Test Tool Application.
- When Production Test Tool will have been realized, the organization will be able to conduct the manual testing of the device, to check if everything is working properly.
- Putting the result into use will ensure that a properly working device will be sent to their customers and later installed in field.
- The result is intended for the manufacturing workers that are responsible for checking the state of the device.

13 Project Plan People Who/What/Why Timeline

Project Timeline

PLANNING

Project Timeline

PHASES

Phase 1	Phase 2	Phase 3	Phase 4
24/02 - 14/03	17/03 - 25/04	28/04 - 09/05	12/05 - 30/05
Initialization and project setup	• Implementation of tests • Intermediate feedback	Unit test feature	Finalization and presentation preparation

After every Sprint, there is a sprint review

PHASE 1

24/02 - 14/03

- Basic framework for the product (android studio, environment, core UI)
- Functional and Technical documentation

PHASE 2

Sprint 10.5

17/03 - 28/03

- Touchscreen test
- Display test
- LED test

Sprint 10.6

31/03 - 11/04

- Beep test
- Magstripe reader test
- Chipcard reader test

Sprint 11.1

14/04 - 25/04

- Contactless reader test
- Printer test
- Barcode test
- Camera test
- Test results

PHASE 3

28/04 - 09/05

- Unit test implementation
- Update documentation

Phase 4

PHASE 4

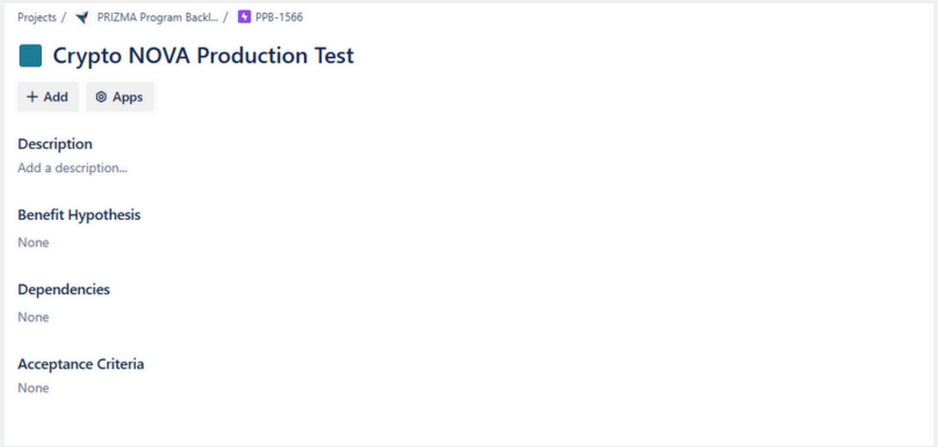
12/05 - 30/05

- Add nice-to-have features
  - Ability to read multiple types of CTLS cards
  - Ability to scan QR codes
- Prepare presentation
- Optional: Animations or pretty visuals?

RISKS AND IMPROVEMENTS

- Time could be considered the biggest risk. If I don’t manage to finish all the tests in time, then the Production Test Tool might be non-functional
- If the tests are not working correctly then it’s also a risk. Then the Production Test Tool won’t be working as intended in the requirements.
- There is already a list of tests that should be implemented but if something else is needed in the future, then it should be very easy to add it.
- What I need to do - is already clearly defined in the planning.
- There are already some “nice-to-have” features that we thought of, but they are “additional” at this moment. I will be able to finish them if I am well on time with other main functionalities.

COMMUNICATION



~~NGP-1442~~	Functional documentation
~~NGP-1453~~	Technical documentation
NGP-1509	Basic framework
NGP-1505	Touchscreen test
NGP-1506	Display test
NGP-1512	LED test
NGP-1510	Beep test
NGP-1511	Magstripe reader test
NGP-1502	Chipcard reader test
NGP-1503	CTLS reader test
NGP-1500	Printer test
NGP-1501	Barcode test
NGP-1507	Camera test
NGP-1508	Test result page
NGP-1504	Unit test feature

Description

The main goal of the test is to check the correct functioning of the touchscreen of the device. The user is presented with multiple boxes on the screen which can be clicked or swiped. When the box is triggered, it turns its color into green. Only when all fields are green the test is passed, can the user see the button to proceed to the next test which is Screen test. If the user does not finish the test within 60 seconds, it fails. Then the user has a possibility to retry the test or stop the Production Test Tool.

Acceptance Criteria

Purpose: Verify that the touchscreen registers input across the device surface.

User Interaction: User must touch all squares displayed in a grid layout. Each square turns green when touched.

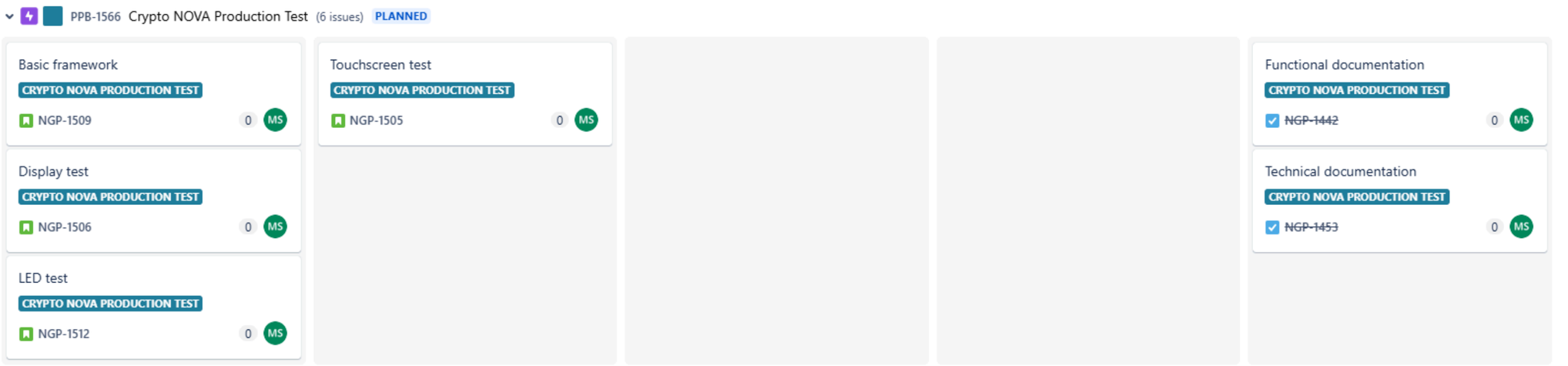
Pass condition: All squares have been touched at least once within one minute

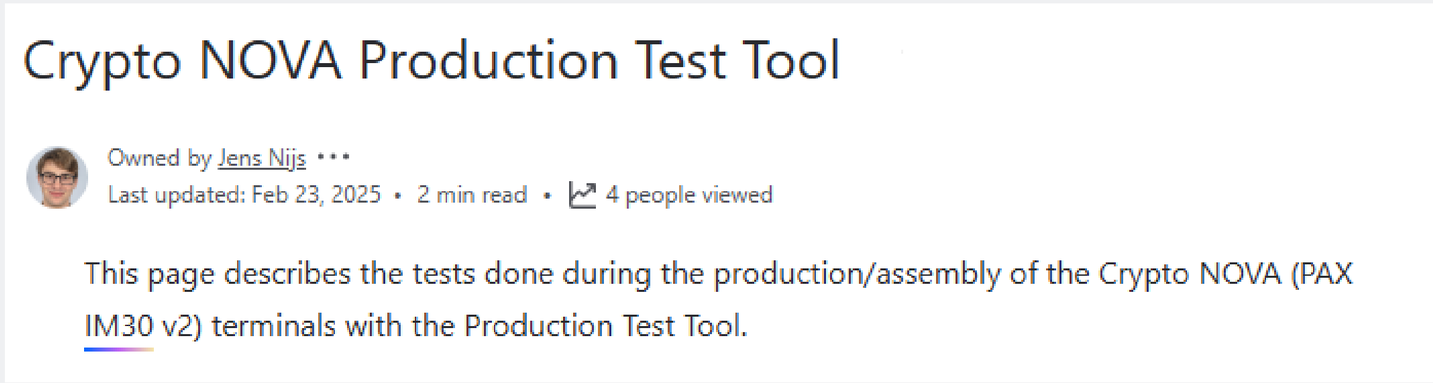
Fail condition: User does not complete all the taps within a minute and timeout happens

Communication

COMMUNICATION

- Daily stand-up





THANK YOU FOR YOUR ATTENTION!

Marcelina Siwka