QDPS GUI general idea

5x screens: login (S#1), flow chart (S#2), procedure (S#3), project introduction (S#4) and press introduction (S#5)

Each screen exists in two modes – create and edit / view only

There are at least 3x roles: admin (A), researcher (R) and technician (T)

Output: 2x excel files, which are input for R/JMP module

Realization: client/server, hosted in companies (secured) server

S#1: Login

Graphical user interface, website

Description automatically generated

Functionality:

* registration using the company’s e-mail
* roles:
  + technician: view flow, edit some fields of procedure
  + researcher:
    - **Flow related**: add new templates of procedure (could be few templates for the same procedure) to library, create flow; access to other libraries
    - **Procedure related**:

During the test preparation: modify procedure before Publishing, save (optimized) procedure to the library as an own template.

During the Execution: define press configuration, confirm some (sensitive) corrections done by technician – talking about inputs here

During the analysis:

* + admin: super user. Manage access and SW settings
* login
  + user should define the project

S#2: Flow chart

Diagram

Description automatically generated

Function buttons:

* add new templates of procedure (could be few templates for the same procedure) to library,

Library section:

* choose library create flow.
* access to other libraries

Current library:

* List of procedures in chosen library

Flow chart section:

* Drag&drop procedure from the specific library
* Delete specific procedure from the flow / save the flow / publish this flow (flow is frozen, we will start editing the procedures in this specific flow)

S#3: Procedures

Timeline

Description automatically generated

Procedure consists from:

1. **Header**, which is static during the experiment (its most probably static during the flow execution). Its reflected Project and Press screens basically.
   1. General description – extracted from Project intro (S#4) + test ID automatically generated, unique integer number
   2. Press configuration – extracted from Press intro (S#5)
2. **Body**. Body is the main part, and it has its own structure described below. Body is a :
   1. ID
   2. Input – this is

<**description**: instruction to the technician what/ how to do some action>,

<**type**: fixed string, drop down menu – DDM#1>

<**value**: (float) number, belongs to some range defined by type (and ink / substrate) >

* 1. Output

<**description**: any comments that technician has and wants to share>

<**type**: fixed string, drop down menu – DDM#2>

<**value**: (float) number, belongs to some range defined by type (and ink / substrate) >

* 1. Tracker: two radio buttons {Delay and Status (done y/n)}

1. **Graph builder** – enable to visualize correlation between 2x chosen by technician parameters

Function buttons:

* During optimization:
  + Print the procedure
  + Save changes
  + Save as a template to my library
  + Add step
* During execution:
  + Print procedure
  + Edit procedure

S#4: Project introduction

Short description of the project.

General assumptions related to press tests.

Ink type for testing

S#5: Press introduction

Press configuration

Set of golden attributes: for example, ability to compare ink file on press w/ the golden version and give list of differences