1. Requirements: Validations

Validations are rules set in place to evaluate the data that was entered on a record, this includes create & change screens. It is an after the fact check, after data was inserted check.

The Validations are a mechanism to prevent users from inserting incorrect data into the system. The system can review a user’s input on a field, then evaluate it against set conditions defined. The system will assist the user in the expected input on a field by displaying an error message.

Roles:

* Super User: sets up the screens
* Normal On Key user will navigate to desired screen (depending on their role they would have different screens)
* Normal user: would have set validations triggering per screen. The only way to get around the pre-set validations would be to navigate to another screen (depending on user rights of user)

Use case:

* A field could be marked on as required
* If two predefined fields (eg. site & location) on a task equal to a predefined value (eg. A11) then a set other field (eg. Is Mandatory) should be set to a predefined state (eg. True)
* If a supplier is marked as VAT registered then the Tax Number field should not be null and should be of data type Integer, containing 10 digits
* If an inspection failed than the number of defective modules should be recorded on the task (field may not be NULL) and the field should be an integer data type4
* When creating an regular asset type that is linked to a specific site fault find questions becomes mandatory
* If a work order’s UDF ‘estimate cost’ >= than R5000, then the notes field is required

Trigger:

* Trigger is per field
* Update as focus moves to next field

Error displayed:

* When validation fails an error should appear instructing the user to fix the inserted data.
* It should be visible to the user where the error has occurred.
* When creating the validations there should be an error msg field, this field will be used to insert the custom error the user will receive when failing a validation.
* The error msg field does not have to be a mandatory field, if left blank a system generated error msg based on the condition will be displayed

Types:

* Is required / mandatory
* Conditional

Mechanism:

* Conditions are based on the standard expression builder design
* Only fields defined in the dataset will be available to select in the expression builder (?)

Steps:

* Navigate to designer to create custom page layout
* Set dataset for page
* Create layout of page
* Set validations per field
* Validations can override each other, the last set of validations for a field will be the ‘final’ set

Facts:

* Conditional validations are defined per page in the designer
* Validations are done per field; it could be based a single condition or on multiple conditions
* Conditions are set by making use of the expression builder
* The expression builder will only look at the dataset for the specific page
* Each validation is ‘evaluated’ when focus is moved away from a field
* Validations cannot be overruled by a user
* When a specific condition becomes true then another field could become visible/editable

1. Requirements: Defaults

When users are creating or editing a record the system will guide the user through the process by suggesting default values for fields based on certain conditions. These conditions will be based on the data the user has inserted or edited on the record.

Roles:

* Super User: sets up the screens
* Normal On Key user will navigate to desired screen (depending on their role they would have different screens)
* Normal user: would have set defaults triggering per screen. The user will have the capability to override ‘proposed’ defaults based on set conditions.

Use case:

* If a work order’s asset is still under warranty then the responsible supplier should be defaulted to the asset’s supplier, else the responsible supplier should be based on the trade required and the sites’ linked suppliers
* If the location of a work order = Warehouse, then the responsible Staff Member should always be Jeff Glass.
* If a work order’s UDF ‘estimate cost’ >= than R5000, then the responsible section defaults to Finance

Trigger:

* Trigger is per field
* Update as focus moves to next field

Facts:

* There are three different types of defaults:
  1. System defaults set on other places (?)
     + User set defaults, for example:
       - task classifications
       - work order, type of work
       - work order responsible staff member
  2. Defaults per screen
     + These are defaults set per screen layout, per field.
     + It is a flat default, it will always apply to a field, it does not first need to be validated
  3. Conditional Defaults
     + This default value will only apply if set conditions are met.
     + One default value could have multiple conditions linked to it
* There is the option to override a default. The ‘Can Override’ option should be set in the designer per field.
* One field could have multiple defaults
* Defaults can override each other, the last set of conditions that are met will set the ‘final’ default value

Info displayed:

* When the system sets a default: no msg is required to inform the user of change made by system
* When system overrides a field (that was already set by the user) with a new default value (defined in the designer) a msg is required to inform the user that a field was changed.
* The msg can be displayed in the ‘side bar’

Mechanism:

* Conditions are based on the standard expression builder design
* Only fields defined in the dataset will be available to select in the expression builder
* Defaults can be manually inserted OR set to another field’s (in the dataset) value

Steps:

* Navigate to designer to create custom page layout
* Set dataset for page
* Create layout of page
* Set defaults per field by making use of one of the three types of defaults (defined in ‘Facts’ section)

*Een ding waaroor ek & Juan nie saam gestem het met Rabie nie was die opsie waar n user die system default kan override. Ek dink dit moet wees dat daar n opsie op n veld is om te se: “Can Override”, dat as dit getick word kan die user die proposed default override, en as dit false is is dit n ‘forced’ default op die user. (Ilse)*