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| **<Customer Name>** | |
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| **Low Level Design Document** | |
| **for** | |
| **<Project Name>** | |
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| **Version** |  |
| **Author** |  |
| **Reviewer** |  |
| **Approver** |  |
| **Release Date** | dd-Mmm-yyyy |
| **Sign-off Date** | dd-Mmm-yyyy |

**Version History**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Ver. No.*** | ***Authors*** | ***Date*** | ***Reviewers*** | ***Review Date*** | ***Release Date*** |
|  |  | dd-Mmm-yyyy |  | dd-Mmm-yyyy | dd-Mmm-yyyy |
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**Change History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Ver.No.*** | ***Section*** | ***Date*** | ***Change Information*** | ***RFC No.*** |
|  |  | dd-Mmm-yyyy |  |  |
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# Layout

*[Depict the Logical Data Model of the system here. If the component is a GUI Screen, then insert the Screen Design Layout. If the component is a report, then insert the Report Design Layout as well as the Screen Design Layout for the selection criteria screen and the On-screen report, if any. The layout should contain all objects. The Report Layout should contain “xxxxxx” for character fields, “99999” for numeric fields and 99/99/999 to indicate date fields. Sub totals /Page Totals should be indicated in the Report layout. For components which are procedures/triggers this section is not relevant. ]*

# Screen Object Details

*[This section is applicable only to component which are GUI Screens. The table in this section should consist of all objects as defined in the Design mode for the screen. Thus, visible and hidden objects should be listed here.]*

***[Explanation of what is to be filled in columns below:***

*Sr. No. Serial Number. The numbers should be such that it identifies levels. E.g. if there are three command buttons within a frame then the frame number should be the higher level number say 7. The three command button within the frame may have numbers i , ii, iii. The container form can be given a number zero.*

*Tab Order Serial ascending number for each visible object to represent the Tab order in the screen*

*Name “Label” Name of Object . Ensure that the naming conventions are followed while defining these names. The label that appears on screen is specified here*

*Object Type Type of Object i.e. Text Box, Frame, Radio Button etc. Also if object inherited, state it here*

*Description Purpose or function that the object performs. Also if it is difficult to identify the object on screen then specify the relative position on the screen here*

*Attributes The following codes should be entered for defining the attributes for the object:*

*H or V H if object is hidden on screen, V if object is visible*

*M if object is mandatory*

*E or NE E if object is editable, NE if not editable*

*R/L/C R for Right/L for Left/C for Centre alignment justification*

*Mx Max Length*

*e.g for an object : H / M / E / L / 25*

*Separate columns may be defined for each attribute for ease of entry*

*There may exist a need for defining some more attributes.]*

| ***Sr. No.*** | ***Tab Order*** | ***Name “Label”*** | ***Object Type*** | ***Description*** | ***Attributes*** |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

*[If any special instructions/notes needed for the screen as a whole or for specific objects on the screen, then define them here]*

# Screen Event Specifications

*[This section is applicable only to components which are GUI Screens]*

*[List Object Name here. Should match object name in the table in section 4]*

**Event 1**

*[Describe the event here in plain English. Do not try to give exact platform names for events. The implementation (i.e. the how part) to be done during coding will anyway be reviewed during the Code Inspection/Review. This will solve the problem of changing specifications every time the code is changed]*

*[Define the Event specifications here]*

**Event 2**

*[Describe the event here in plain English. Do……]*

*[Define the Event specifications here]*

…

…

…

…

…

*[Repeat above for all objects which have events]*

***[Guidelines for Event Specifications:***

1. *The style of writing specifications i.e. the representation of sequential, conditional and iterative statements and indentation will have to be defined in the beginning (before writing the first specification) for the Project.*
2. *The names of Screen objects referred may be represented in capitals or bold. The names should match or can be cross-referenced with section 4. . If the object is not defined in this component, then the fact that it is an external object should be clearly specified by writing the word ext in brackets alongside the component. The document containing the other component should be listed in section 1 of this document under “references”.*
3. *If an object is linked to data fields, then the details describing which field is used to look up the master and which field is used to display the data in the object should be specified below the object and before the first event description. E.g. when an employee name from the employee master is displayed based on the corresponding employee code in a transaction table.*
4. *Field and Table names referred should exist in the Data Model document. The document/s containing the data model/ dictionary should be listed in section 1 of this document under “references”*
5. *Table names referred to should be in capitals.*
6. *Field Names should be qualified with the table name (e.g. TABLE\_A****.****field\_a)*
7. *Procedures / Routines referred to should be in italics and highlighted. If external routines/procedures (external to the component/global routines etc.) are referred to then the name of the referenced document should be listed in brackets alongside the routine/procedure. The document containing the external routines/procedures should be listed in section 1 of this document under “references”*
8. *Internal/Procedures should be specified at the end, after all the event specifications.*

*[NOTE: The events are not necessarily the development tool specific events of the objects on the screen/page. They may be conceptual/logical events pertaining to the functionality of the component]*

1. *For the form Load Event, the initial state of all the objects should be defined. One or more types of screens may be initially loaded depending on certain conditions. The following tabular format can be used to clearly specify the initial states of all the objects. All the objects specified in Section 4 should be reproduced in this table so that the initial states are precisely defined.*

| ***Sr. No.*** | ***Name “Label”*** | ***Condition I*** | | | ***Condition II*** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Hidden** | **Enabled** | **Value** | **Hidden** | **Enabled** | **Value** |
|  |  |  |  |  |  |  |  |

1. *Any validations to be performed for an event should be listed immediately below the event specification, with a heading “Validation”*
2. *For a List box, or grid which displays multiple rows, the sort order in which the rows will be displayed should be specified.]*

# Triggers

*[List the triggers to be written in the backend along with table on which it effects]*

# Procedure and Function

*[List the procedure of function to be written in the backend along with its functionality]*

# Tables / Views Accessed

*[Mark Y in the below columns if applicable for the tables listed below. For components which are reports only the “Select” column is applicable]*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Sr. No.*** | ***Table Name*** | ***Select*** | ***Insert*** | ***Update*** | ***Delete*** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

*[This template can be used for components which may be GUI Screens, Procedures/Triggers or a Report.]*

# Component Level Particulars

|  |  |
| --- | --- |
| ***Name*** |  |
| ***Purpose*** | *[main objective/function of component]* |
| ***Component Type*** | *[Screen, procedure/trigger, report etc.]* |
| ***Invoked From*** |  |
| ***Parameters Received*** | *[explain in plain english, need not match the variable name used, if global standard names then specify the exact name]* |
| ***Parameters Returned*** | *[explain in plain english, need not match the variable name used, if global standard names then specify the exact name]* |
| ***Components called with Parameter List and Type*** | *[names of other routines/procedures, stored procedures called by this component]* |
| ***Exception to Standards*** |  |
| ***References*** | *[names of other documents referred to like Data Model / dictionary, corresponding component in previous processes]* |

# Report Object Details

*[This section is applicable only to components which are Reports. The table in this section should consist of all objects viz; Titles, Column Headings, Report Body Details etc. in the Report Layout.]*

***[Explanation of what is to be filled in columns below:***

*Sr. No. Serial Number. The numbers should be such that it identifies levels. E.g. headings can be - 1, Detail Lines - 2, Sub-Total -3, Grand Totals -4. Under these the numbers can be either 1.1, 1.2 etc. or i, ii, iii etc.*

*Ref. No. The number that is written in the Report Layout to identify the object*

*Description The information provided by the object e.g. Monthly Sales.*

*Object Type Type of Object i.e. Heading, Detail Line, Sub-Total, Grand Total etc.*

*Format Format and length of the field/column*

*Indicator A number to indicate if there is a formula or processing needed to produce the information for that object i.e field/column. The specifications of the formula / process should be provided in the next section.]*

| ***Sr. No.*** | ***Ref. No.*** | ***Description*** | ***Object Type*** | ***Format*** | ***Indicator*** |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

# Report Specifications

*[This section is applicable only to components which are Reports]*

*[List Object Name here, should match object name in the table in section 4]*

*[Define the specifications for the formulas/processes here]*

…

…

…

…

…

*[Repeat above for all objects which have formulas/processes and which have been marked in the indicator column in the table in section 4]*

*[Guidelines for Report Specifications:*

1. *The style of writing specifications i.e. the representation of sequential, conditional and iterative statements and indentation will have to be defined in the beginning (before writing the first specification) for the Project.*
2. *The names of objects referred may be represented in capitals or bold. The names should match or can be cross-referenced with section 4. If the object is not defined in this component, then the fact that it is an external object should be clearly specified by writing the word ext in brackets alongside the component. The document containing the other component should be listed in section 1 of this document under “references”.*
3. *If an object is linked to data fields, then the details describing which field is used to look up the master and which field is used to display the data in the object should be specified below the object and before the first event description. E.g. when an employee name from the employee master is displayed based on the corresponding employee code in a transaction table.*
4. *Field and Table names referred should exist in the Data Model document. The document/s containing the data model/ dictionary should be listed in section 1 of this document under “references”.*
5. *Table names referred to should be in capitals.*
6. *Field Names should be qualified with the table name (e.g. TABLE\_A.field\_a).*
7. *Procedures / Routines referred to should be in italics and highlighted. If external routines/procedures (external to the component/global routines etc.) are referred to then the name of the referenced document should be listed in brackets alongside the routine/procedure. The document containing the external routines/procedures should be listed in section 1 of this document under “references”.*
8. *Internal/Procedures should be specified at the end, after all the event specifications.*
9. *Any validations to be performed should be listed immediately below the specification, with a heading “Validation”.]*

|  |  |
| --- | --- |
| ***Selection Criteria*** | *[Specify data filter criteria for the report including any mandatory criteria]* |
| ***Sort Order*** | *[Specify sort order of the data]* |
| ***Group On*** | *[Specify columns which are grouped]* |
| ***Sum On*** | *[Columns which are summed]* |
| ***Report Statistics*** | *[List statistics if to be printed on last page]* |
| ***Orientation*** | *[Specify whether Landscape or Portrait]* |