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| **0** | **DocuPath System** | **Modelled:** **For Typical Actor Involved (Which Is Also Lowest Access Level)** |

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| **Team:** |  | C:\Google Drive\CLDRM\Branding\Logos\CLDRM\CLDRM_LETTERS_LOWRES.jpg | **Author(s):** |  | Luke Voigt | **Version:** |  | 1.3 |
| **Subsystem:** |  | 7. User | **Creation Date:** |  | Tue, 23 May 2017 | **Last Review Date:** |  | Sun, 23 Jul 2017 |

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| **USE CASE NAME:** | **LOG-IN** | | | | **USE CASE TYPE:** |
| **USE CASE ID:** | **7.1** | | | | **Business Requirements:** |
| **PRIORITY:** | **▲ High** | | | | **System Analysis:** |
| **SOURCE:** | **Requirements List, Requirements Description & Detail, Functional Specification** | | | | **System Design:** |
| **PRIMARY BUSINESS ACTOR:** | * **User (PBA)** | | | | |
| **PRIMARY SYSTEM ACTOR:** | * **None** | | | | |
| **OTHER PARTICIPATING ACTORS:** | * **None** | | | | |
| **OTHER INTERESTED STAKEHOLDERS:** | * **None** | | | | |
| **DESCRIPTION:** | **This use case *describes the process* of a User logging into of the system. The *use case starts with* the User navigating to the DocuPath website, *runs through the process of* confirming that they want to log off *and concludes with* the system displaying the login page and an Audit Log entry being created.** | | | | |
| **PRE-CONDITION:** | * The User has a valid User Profile. | | | | |
| **TRIGGER:** | The User wants to log in. | | | | |
| **TYPICAL COURSE** | **Actor Action:** | | **Manual Action:** | **Automated Action:** | |
| **OF EVENTS:**  **(SHADED STEPS**  **HAVE ALTERNATE COURSES)** | 1. The User navigates to the DocuPath website. | |  | 1. The system displays the ‘**LOGIN**‘ page with the following controls and layout:  |  |  |  | | --- | --- | --- | | ***Label / Text:*** | ***Control:*** | ***Other Information:*** | | ***PAGE HEADER*** | NavBar |  | | DOCUPATH | n/a |  | | ***GENERAL CONTROLS*** |  |  | | Log In | Label | Page heading | | Username | TextBox |  | | Password | TextBox |  | | Log In | Button | Below the Username and Password textboxes with a Login icon. | | FORGOT YOUR PASSWORD? RESET HERE! | Button |  | | ***PAGE FOOTER*** | NavBar |  | | DocuPath Copyright Info | Label | Hard-coded | | Current Date & Time Info | Label | dd MMM YYYY HH:mm:ss,  Determined by system | | |
|  | 1. The User enters their Username and Password. | |  | 1. The system validates the provided Username by checking that it matches an existing **[Username]** in the **USER\_LOGIN** table. | |
|  |  | |  | 1. The system retrieves the **[Password]** value in the **USER\_LOGIN** table | |
|  |  | |  | 1. The system generates a 32bit hash from the provided Password. | |
|  |  | |  | 1. The system interweaves a 16bit salt randomly into the generated hash. | |
|  |  | |  | 1. The system validates the provided Password by removing the salt from both the hash generated in **Step 3** and the retrieved **[Password]** and comparing the result. | |
|  |  | |  | 1. The system creates an Active Login entry in the **ACTIVE\_LOGIN** table with the **[UserID]** matching the currently logged in User, **[DeviceIPAddress]** matching the device currently in use and **[LoginTimestamp]** & **[LastActionTimeStamp]** of the current system date and time. | |
|  |  | |  | 1. The system creates an entry in the **AUDIT\_LOG**  table, using the layout and format outlined in the section introduction and the ID corresponding to ‘**Login Operation**’ in the **AUDIT\_TX\_TYPE** table. | |
| **ALTERNATE COURSES:** | **ALT 4a:** | The username and password provided do not match a valid user account; the system displays a ModalDialog (to notify the User of the failed login attempt) with the following properties:   |  |  |  |  | | --- | --- | --- | --- | | ***Title Text:*** | ‘**ERROR**’ | ***Icon:*** | Error | | ***Message Text:*** | ‘The Username was incorrect. Please try again.’ | ***Button(s):*** | ‘**OK**’ |     The User clicks the ‘**OK**’ button; return to **Step 3.** | | | |
| **ALT 8a:** | The result of the password comparison indicates that the passwords do not match; the system displays a ModalDialog (to notify the User of the failed login attempt) with the following properties:   |  |  |  |  | | --- | --- | --- | --- | | ***Title Text:*** | ‘**ERROR**’ | ***Icon:*** | Error | | ***Message Text:*** | ‘The Password was incorrect. Please try again.’ | ***Button(s):*** | ‘**OK**’ |     The User clicks the ‘**OK**’ button; return to **Step 3.** | | | |
| **CONCLUSION:** | This use case concludes when the User has logged in successfully and an Active Login entry has been created. | | | | |
| **POST-CONDITION:** | * An Active Login entry has been added to from the system. * The system displays the DocuPath Homepage. | | | | |
| **BUSINESS RULES:** | * None | | | | |
| **IMPLEMENTATION CONSTRAINTS & SPECIFICATIONS:** | * None | | | | |
| **ASSUMPTIONS:** | * Audit trail evidence is kept, and information in these logs is retained for a maximum of 3 months before the log is archived. | | | | |
| **OPEN ISSUES:** | |  |  |  |  | | --- | --- | --- | --- | | * No open issues at current date. | ***Author Sign-off:*** |  | Luke Voigt | | | | | |