# History of Edit

| # | Description | Date Modified | Author |
| --- | --- | --- | --- |
|  | First Draft - Provider’s Side User Registration Usecase | 01/07/2021 | Sweta Kumari |
|  | First Draft - Patient User Registration Usecase | 01/07/2021 | Sweta Kumari |
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# Background - User Registration

The hospital has gone paperless and started maintaining all the patient records and related data only in digital format. However, for patient’s data security, limited data is accessible to payers and providers. For this registration of users from provider’s end as well as patient is required. User registration enables a hospital management system to identify and authenticate the user. Complete and accurate user registration is crucial because it enables hospitals to keep their networks secure by permitting only authenticated users.

Admin is the owner of this functionality, where admin can store individual Physician’s detail, nurse’s details and patient’s details. This usecase includes storage of the details of hospital employees as well as Patient in a database. This usecase includes three types of registration: (1) Physician (2) Nurse, and (3) Patient.

**Provider’s Side User Registration Usecase:** The user registration of Physician, admin, and nurse will happen through ‘Admin module’. Upon completion of Provider side’s employee details capture, upon click of save button by admin, an email will be sent on the provided email with a default password.

**Patient User Registration Usecase:** The user registration of patient registration will happen through ‘Register User Screen’.

Login Screen and user registration page both lies on the same default screen, where Login screen is placed in “Already a registered user” section; whereas new user registration is placed in “New to CT General Hospital” section.

# Out of Scope

1. User Registration by any healthcare stakeholder other than nurses, physicians, admin, and patients is out of scope of this requirement.
2. Capture/Storage/retrieval of any patient identifiable data in hospital systems is out of scope.
3. Automated capture of patient data for registration is out of scope
4. Entry of Patient’s history is out of scope in user module

# Assumptions

1. The name of the hospital is CT General Hospital.
2. Patient identification details and records can be entered by the patient via Patient management system web application.
3. Patients registered have valid and verified credentials.
4. First User registration will be of admin, followed by a minimum of one Physician and one Nurse. Patient’s registration will be successful only if these minimum criteria are satisfied.
5. CT General Hospital has single admin credentials

# User Registration - Acceptance Criteria

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| # | Acceptance Criteria | Usecase Reference | Outstanding Items |
|  | Name and last name are mandatory fields | 1.6.1; 1.6.2 |  |
|  | Multiple option selection is disabled in Title field. It is selected through radio button | 1.6.1; 1.6.2 |  |
|  | Email id is in correct format and host name is not missing | 1.6.1; 1.6.2 |  |
|  | Date of Birth is in DD MM YYYY format | 1.6.1; 1.6.2 |  |
|  | Multiple option selection is disabled in Role field. It is selected through drop down menu | 1.6.1 |  |
|  | Employee ID is Unique  Employee ID don’t have missing characters | 1.6.1 |  |
|  | Contact number captures both country code and phone number | 1.6.2 |  |
|  | Password is case sensitive, alphanumeric, with minimum length of 8 characters | 1.6.2 |  |
|  | Confirm password field should accept value if it is same as Password field; otherwise prompt error | 1.6.2 |  |
|  | Registration of hospital employee and patients are separate | 1.6.1; 1.6.2 |  |

# Functional Use Case

# Provider’s Side User Registration for CT General Hospital

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| **Sr. No.** | **Description:** | This use case describes the process of the registration of Provider’s side users through the ‘Admin module’ through which user shall capture details of Physicians, nurses and admin of the hospital  Admin is the single user of Admin Module of User Registration |
| **A** | **Trigger:** | The user clicks ‘Register employee’ button in Admin module of the web application |
| **B** | **Pre-Conditions/Inputs:** | The first entry of user registration is of Admin  The user (Admin) logs into the Patient Management application - ‘Admin module’ using valid credentials.  Following details of Employee are available   * Title * First Name * Last Name * Email Id * DOB * Role   + Physician   + Nurse   + Admin * Employee ID |
| **C** | **Post-Conditions/Outputs:** | 1. Successful registration message shall appear upon click of Save/submit button 2. The Admin shall be able to view User Details after click of save button 3. After completion of Provider side’s employee details capture, upon click of save button by admin, an email will be sent on the provided email with a default password |
| **D** | **Flow:** | 1. On visiting the user registration page, the User (Admin) is directed to a dashboard 2. On the top most header of the web page the name and logo of the hospital shall be displayed using the same color scheme as the wireframe. On the same header in the right end there shall ‘About Us’ and ‘Sign out’ functions for the user. Both these functions actions shall be performed when clicked on the text. 3. On the same page there is an option ‘Register employee’, under ‘User registration section’ of Admin Module. 4. User (Admin) selects the option ‘Register employee’. 5. On selecting the ‘Register employee’ option the user is directed to a landing page where a list of fields is displayed for data input in following order.  * Title – Radio button * First Name – Text bar * Last Name – Text Bar * Email Id – Text bar * DOB – Date format DD/MM/YYYY * Role - Dropdown   + Physician   + Nurse   + Admin * Employee ID – Distinct  1. On the landing page user shall be able to perform following actions    * 1. Title Selection from these option- Mr. /Ms. /Mrs. /Dr. through Radio button      2. First Name details input – Text bar; where minimum of 2 alphabets are required      3. Last Name details input – Text Bar, where minimum of 2 alphabets are required      4. Email Id details input – Text bar where username & domain name must be captured      5. Date of birth shall be entered in correct format – the user shall be able to enter dates using the calendar icons in both the dates boxes as per DD/MM/YYYY format      6. Role – the user shall be able to choose role from the dropdown list with Physician, Nurse, and Admin options      7. Employee ID – Distinct; the user shall be able to edit the ID or use automatically suggested Unique sequential ID 2. User shall be able to save the user details in database for user registration, using Submit/save button. 3. In an event of missing values, descriptive error message shall be displayed to the user, beside respective fields in red color. Also, an error message will be shown next to submit button, that will state that the form contains one or more missing values 4. On Press of save button, a successful completion message should be displayed on the landing page. 5. Upon press of save button by admin, an email will be sent on the provided email with a default password ‘Password123@’ 6. On the landing page, there will be a navigation links pane to the left, showing the following links in the below sequence:    * + - 1. Go back to User registration          2. Go to Employee Details          3. Go to Patient Registration          4. Go to User Management (This Functionality shall be covered in different module)          5. Visit Patient History (Functionality shall be covered in different module)          6. Scheduling (Functionality shall be covered in different module)          7. Go to Homepage   User shall be able to visit the tabs in the navigation pane by clicking on any of them from the current screen. The selected tab on the navigation pane shall be highlighted in ‘green’ and the unselected tabs shall be displayed in ‘grey’   1. On the ‘Employee Details’ page the user can view the following columns with corresponding information for each User registration.    * + - 1. Employee ID          2. Full Name          3. Date of Birth          4. Role          5. Email ID 2. The user can select a single Employee detail from the list and shall be directed to the details of the selected employee. |
| **E** | **Exceptions/Error Conditions:** | In an event of missing values, descriptive error message shall be displayed to the user, beside respective fields in red color.   1. If the Title – Radio button is not selected then the following error message shall be displayed to the user.   *“Kindly select the title.”*   1. If First Name field is not filled then the following error message shall be displayed to the user.   *“First name cannot be empty.”*   1. If First Name field character length is less than two then the following error message shall be displayed to the user.   *“Please don’t use abbreviations”*   1. If Last Name field is not filled then the following error message shall be displayed to the user.   *“Last name cannot be empty.”*   1. If Last Name field character length is less than two then the following error message shall be displayed to the user.   *“Please don’t use abbreviations”*   1. If username of email-ID is missing then the following error message shall be displayed to the user. Email address example will appear in a lighter font color shade   *“Please enter your email address e.g. exampleusername@xyzdomain,com”*   1. If date of birth has missing value then the following error message shall be displayed to the user.   *“Please enter a valid date”*   1. If date of birth has a date value from future time, then the following error message shall be displayed to the user.   *“Please enter a valid date of birth”*   1. If Role dropdown has missing value then the following error message shall be displayed to the user.   *“Please select a valid role”*   1. In an event of one/more missing values, the following error message shall be displayed to the user   *“The form contains one or more missing values”*   1. Employee ID must be a distinct value, and preferably in a sequential form during employee registration. The exception should be handled, and following message should be displayed to the user   *“Duplicate Employee ID exists. Please contact the helpdesk or call on 123456 for more information.”* |
| **F** | **Assumptions:** | 1. Admin chooses Password@123 as default password for employees 2. There are only three categories of employee – Admin, Physicians and Nurses 3. There is only one Admin in the hospital |

# Patient User Registration for CT General Hospital

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| **Sr. No.** | **Description:** | This use case describes the process of the registration of patients through the ‘Register User Screen’ which will capture details of Physicians, nurses and admin of the hospital |
| **A** | **Trigger:** | The user clicks ‘‘Register Patient” OR ”Sign-Up” option of the Patient Management System application |
| **B** | **Pre-Conditions/Inputs:** | 1. The Provider side user logs into the Patient Management application - ‘using valid credentials on Login Screen (Login Screen shall be covered in another use case of this module). The Provider side user clicks on  OR  Patient clicks “Sign up” button in Register Patient Page.  2. On selecting the ‘Register Patient” OR ”Sign-Up” option the user is directed to a landing page ‘Register User Screen’ of the Patient Management System Application  3. Following details of Patient are available   * Title * First Name * Last Name * Email Id * Date of birth * Contact Number * Password * Confirm Password |
| **C** | **Post-Conditions/Outputs:** | 1. Successful registration message shall appear upon click of Save/submit button 2. The User shall be able to view User Details after click of save button 3. Upon completion of Patient’s details capture, upon click of save button by user, an email will be sent on the provided email, with welcome message for patient and a brief sales pitch from CT General hospital |
| **D** | **Flow:** | 1. On visiting the user registration page, the User is directed to a dashboard 2. On the top most header of the web page the name and logo of the hospital shall be displayed using the same color scheme as the wireframe. On the same header in the right end there shall ‘About Us’ and ‘Sign out’ functions for the user. Both these functions actions shall be performed when clicked on the text. 3. On the same page there is an option ‘Register Patient, under ‘User registration section’ of ‘Register User Screen’. 4. User selects the option ‘Register Patient. 5. On selecting the ‘Register Patient option the user is directed to a landing page where a list of fields is displayed for data input in following order.  * Title – Radio button * First Name – Text bar * Last Name – Text Bar * Email Id – Text bar * DOB – Date format DD/MM/YYYY * Contact Number – (Area Code – Phone Number) * Password – Text Bar * Confirm Password - Password Field  1. On the landing page user shall be able to perform following actions    * 1. Title Selection from these option- Mr. /Ms. /Mrs. /Dr. through Radio button      2. First Name details input – Text bar; where minimum of 2 alphabets are required      3. Last Name details input – Text Bar, where minimum of 2 alphabets are required      4. Email Id details input – Text bar where username & domain name must be captured      5. Date of birth shall be entered in correct format – the user shall be able to enter dates using the calendar icons in both the dates boxes as per DD/MM/YYYY format      6. Password – Password is case sensitive, alphanumeric, with minimum length of 8 characters      7. Confirm Password - Confirm password field should accept value if it is same as Password field; otherwise prompt error message 2. User shall be able to save the user details in database for user registration, using Submit/save button. 3. In an event of missing values, descriptive error message shall be displayed to the user, beside respective fields in red color. Also, an error message will be shown next to submit button, that will state that the form contains one or more missing values 4. On Press of save button, a successful completion message should be displayed on the landing page. 5. Upon press of save button by admin, an email will be sent on the provided email with a default “Welcome Message & Sales Pitch” 6. On the landing page, there will be a navigation links pane to the left, showing the following links in the below sequence:    * + - 1. Go back to Patient Registration          2. Scheduling (Functionality shall be covered in different module)          3. Go to Homepage   User shall be able to visit the tabs in the navigation pane by clicking on any of them from the current screen. The selected tab on the navigation pane shall be highlighted in ‘green’ and the unselected tabs shall be displayed in ‘grey’   1. On the ‘Patient Details’ page the user can view the following columns with corresponding information for each User registration.    * + - 1. Full Name          2. Date of Birth          3. Email ID          4. Date of registration 2. The user can select its own registration record – on Patients Details Page. |
| **E** | **Exceptions/Error Conditions:** | In an event of missing values, descriptive error message shall be displayed to the user, beside respective fields in red color.   1. If the Title – Radio button is not selected then the following error message shall be displayed to the user.   *“Kindly select the title.”*   1. If First Name field is not filled then the following error message shall be displayed to the user.   *“First name cannot be empty.”*   1. If First Name field character length is less than two then the following error message shall be displayed to the user.   *“Please don’t use abbreviations”*   1. If Last Name field is not filled then the following error message shall be displayed to the user.   *“Last name cannot be empty.”*   1. If Last Name field character length is less than two then the following error message shall be displayed to the user.   *“Please don’t use abbreviations”*   1. If username of email-ID is missing then the following error message shall be displayed to the user. Email address example will appear in a lighter font color shade   *“Please enter your email address e.g. exampleusername@xyzdomain,com”*   1. If date of birth has missing value then the following error message shall be displayed to the user.   *“Please enter a valid date”*   1. If date of birth has a date value from future time, then the following error message shall be displayed to the user.   *“Please enter a valid date of birth”*   1. If password has less than 8 characters, then the following error message shall be displayed to the user.   *“Password is weak. Please re-enter the password with a minimum of one Uppercase letter, one lowercase letter, one number and minimum length of 8 characters*   1. If password is not alphanumeric, then the following error message shall be displayed to the user.   *“Password is weak. Please re-enter the password with a minimum of one Uppercase letter, one lowercase letter, one number and minimum length of 8 characters*   1. If password is not case sensitive, then the following error message shall be displayed to the user.   *“Password is weak. Please re-enter the password with a minimum of one Uppercase letter, one lowercase letter, one number and minimum length of 8 characters”*   1. If two passwords (original & confirm password) are mismatch, then the following error message shall be displayed to the user.   *“Passwords do not match. Please re-enter the password”* |
| **F** | **Assumptions:** | 1. Physicians and Nurses can perform user registration, upon log-in 2. Patient has the link to sign up and perform their user registration |