

User Management & Access Control

UC01 – Register Account

Item	Description
Use Case ID	UC01
Use Case Name	Register Account
Primary Actor	User
Goal	Allow a new user to create an account using email and password.
Preconditions	1. The user has not registered before. 2. Users can access the registration page.
Postconditions	Success: New account is created. Failure: No account is created; error message displayed.
Main Flow	1. The user opens the Registration Page. 2. The system displays the registration form. 3. The user enters email, password, and optional name. 4. The user submits the form. 5. The system validates all required fields. 6. The system checks if the email is already registered. 7. The system encrypts the password. 8. The system creates the new account. 9. The system shows success confirmation.
Alternative Flows	A1 – Invalid Email Format: System rejects with message “Invalid email format.” A2 – Weak Password: System requests a stronger password. A3 – Email Already Exists: System shows “This email is already registered.” A4 – Missing Required Fields: System prompts user to complete required fields.

UC02 – Log In

Item	Description
Use Case ID	UC02
Use Case Name	Log In
Primary Actor	User
Goal	Allow a registered user to log into the system.
Preconditions	1. The user has an existing account. 2. Users can access the login page.
Postconditions	Success: User is authenticated and logged in. Failure: User remains logged out; system shows error message.
Main Flow	1. The user opens the Login Page. 2. The system displays login form. 3. The user enters an email and password. 4. The user submits the form. 5. System validates input format. 6. System verifies credentials against stored data. 7. The system creates a login session. 8. The system redirects the user to the dashboard/home page.
Alternative Flows	A1 – Incorrect Password: System shows “Incorrect email or password.” A2 – Unregistered Email: System shows “Account does not exist.” A3 – Account Locked: System shows “Your account is locked. Contact support.” A4 – Missing Fields: System prompts user to fill required fields.

UC03 – Log Out

Item	Description
Use Case ID	UC03
Use Case Name	Log Out
Primary Actor	User
Goal	Allow the user to securely end their current session.
Preconditions	1. The user is logged in.
Postconditions	Success: User session is terminated. Failure: No changes occur if logout fails (e.g., network error).
Main Flow	1. The user selects the “Log Out” option. 2. System requests confirmation (optional). 3. User confirms logout. 4. The system clears the user session/token. 5. System redirects to the login page.
Alternative Flows	A1 – Cancel Logout: User cancels logout; stays logged in. A2 – Session Timeout: System auto-logs out after inactivity.

UC04 – Manage User Profile

Item	Description
Use Case ID	UC04
Use Case Name	Manage User Profile
Primary Actor	User
Goal	Allow users to update their personal information such as name, profile photo, or email.
Preconditions	1. The user is logged in.
Postconditions	Success: User profile is updated. Failure: Profile remains unchanged.
Main Flow	1. User navigates to Profile Settings. 2. The system displays current user information. 3. User edits fields (name, email, photo). 4. The user saves changes. 5. The system validates new data. 6. System updates user profile. 7. The system displays a success message.
Alternative Flows	A1 – Invalid Email Format: System rejects and shows an error. A2 – Missing Required Fields: System prompts user to complete them. A3 – Upload Error: System shows image upload failure message.

UC05 – Manage User Roles & Authorization

Item	Description
Use Case ID	UC05
Use Case Name	Manage User Roles & Authorization
Primary Actor	Admin
Goal	Allow Admin to assign or update a user's role and enforce access permissions.
Preconditions	1. Admin is logged in. 2. Target user account exists.
Postconditions	Success: User's role is updated. Failure: No changes are applied.
Main Flow	1. Admin opens the User Management page. 2. The system lists all users. 3. Admin selects a user. 4. Admin chooses a new role (Parent, Caregiver, Doctor, Admin). 5. System validates role assignment. 6. System updates user role. 7. The system displays a success message.
Alternative Flows	A1 – Invalid Role: System rejects selection. A2 – Unauthorized Admin: System denies action.

Child Profile Management

UC06 – Create Child Profile

Item	Description
Use Case ID	UC06
Use Case Name	Create Child Profile
Primary Actor	Parent
Goal	Allow parents to create a new child profile with basic information.
Preconditions	1. My parents are logged in.
Postconditions	Success: Child profile is created. Failure: No profile is added.
Main Flow	1. Parent navigates to “Add Child Profile.” 2. The system displays the creation form. 3. Parents enter name, gender, birthdate, preterm status, and optional photo. 4. The parent saves the profile. 5. The system validates data. 6. The system creates the profile. 7. The system confirms creation.
Alternative Flows	A1 – Missing Required Fields: System prompts completion. A2 – Invalid Birthdate: System displays error.

UC07 – View Child Profile

Item	Description
Use Case ID	UC07
Use Case Name	View Child Profile
Primary Actor	Parent / Caregiver
Goal	View complete child information and growth history.
Preconditions	1. The user is logged in. 2. Child profiles exist.
Postconditions	None. The user only views information.
Main Flow	1. The user selects a child profile. 2. System retrieves profile details. 3. The system displays personal info and growth history.
Alternative Flows	A1 – No Access Permission: System denies access. A2 – Child Profile Deleted/Inactive: System shows error.

UC08 – Update Child Profile

Item	Description
Use Case ID	UC08
Use Case Name	Update Child Profile
Primary Actor	Parent
Goal	Allow parents to update child profile information.
Preconditions	1. Parents are logged in. 2. Child profiles exist.
Postconditions	Success: Profile is updated. Failure: No changes applied.
Main Flow	1. The parent opens a child profile. 2. The parent selects “Edit Profile.” 3. The system displays an editable form. 4. Parent updates information. 5. Parents save changes. 6. The system validates data. 7. System updates profile.
Alternative Flows	A1 – Invalid Data: System rejects and shows error.

UC09 – Deactivate Child Profile

Item	Description
Use Case ID	UC09
Use Case Name	Deactivate Child Profile
Primary Actor	Parent
Goal	Allow parents to deactivate a child profile that is no longer needed.
Preconditions	1. Parent is logged in.
Postconditions	Success: Child profile is deactivated. Failure: Profile remains active.
Main Flow	1. Parent selects a child profile. 2. Parent selects “Deactivate Profile.” 3. System shows confirmation message. 4. Parent confirms. 5. System deactivates the profile. 6. System shows success message.
Alternative Flows	A1 – Cancellation: Parent cancels and no changes occur.

Growth Measurement Recording

UC10 – Add Growth Measurement

Item	Description
Use Case ID	UC10
Use Case Name	Add Growth Measurement
Primary Actor	Parent / Caregiver
Goal	Allow users to enter new growth measurements for a child.
Preconditions	1. The user is authorized to update measurements. 2. Child profiles exist.
Postconditions	Success: Measurement is stored. Failure: No new data stored.
Main Flow	1. The user opens a child profile. 2. The user navigates to “Add Measurement.” 3. The system displays measurement form. 4. The user enters weight, height, head circumference, and date. 5. The system validates all inputs. 6. The system stores measurement. 7. The system auto-calculates BMI and age. 8. The system displays confirmation.
Alternative Flows	A1 – Invalid Data: System rejects incorrect values. A2 – Missing Required Fields: System prompts completion.

UC11 – Edit Measurement

Item	Description
Use Case ID	UC11
Use Case Name	Edit Measurement
Primary Actor	Parent / Caregiver
Goal	Allow users to correct or update existing measurement data.
Preconditions	1. Measurement records exist.
Postconditions	Success: Measurement updated. Failure: Old data remains unchanged.
Main Flow	1. The user selects a measurement entry. 2. The system displays measurement details. 3. Users edit values. 4. The user saves changes. 5. The system validates data. 6. System updates measurement.
Alternative Flows	A1 – Invalid Inputs: System rejects update request.

UC12 – Delete Measurement

Item	Description
Use Case ID	UC12
Use Case Name	Delete Measurement
Primary Actor	Parent / Caregiver
Goal	Allow users to delete a measurement entry that is incorrect or unnecessary.
Preconditions	1. Measurement exists.
Postconditions	Success: Measurement deleted. Failure: No changes occur.
Main Flow	1. User selects a measurement. 2. User selects “Delete.” 3. System asks for confirmation. 4. User confirms deletion. 5. System deletes measurement. 6. System displays confirmation.
Alternative Flows	A1 – Cancel Deletion: System cancels the process.

UC13 – Auto Calculate BMI & Measurement Age

Item	Description
Use Case ID	UC13
Use Case Name	Auto Calculate BMI & Measurement Age
Primary Actor	System
Goal	Automatically compute BMI and age whenever a measurement is added or updated.
Preconditions	1. Valid measurement data exists.
Postconditions	Success: BMI and age values are saved.
Main Flow	<ol style="list-style-type: none">1. User adds or updates a measurement.2. System checks if height/weight exist.3. System calculates BMI.4. System calculates age at measurement date (corrected if preterm).5. System updates measurement record.
Alternative Flows	A1 – Missing Required Data: System cannot calculate BMI.

UC14 – View Growth Charts

Item	Description
Use Case ID	UC14
Use Case Name	View Growth Charts
Primary Actor	Parent / Caregiver / Doctor
Goal	Allow users to visualize growth charts (weight/height/BMI).
Preconditions	1. Child profile and measurements exist.
Postconditions	None.
Main Flow	<ol style="list-style-type: none">1. User opens child profile.2. User selects Growth Charts.3. System retrieves measurement data.4. System draws charts.5. System displays charts.
Alternative Flows	A1 – No Data: System displays “No measurement data available.”

UC15 – Display Percentile Position

Item	Description
Use Case ID	UC15
Use Case Name	Display Percentile Position
Primary Actor	System
Goal	Show child's percentile based on selected growth standard.
Preconditions	1. Measurement exists. 2. Growth standard selected.
Postconditions	Percentile values displayed.
Main Flow	1. System retrieves measurement and age. 2. System retrieves corresponding percentile table. 3. System computes percentile. 4. System displays percentile and growth zone.
Alternative Flows	A1 – Missing Standard: System uses default standard (e.g., WHO).

UC16 – Select Growth Standard

Item	Description
Use Case ID	UC16
Use Case Name	Select Growth Standard
Primary Actor	Admin / System
Goal	Select which growth reference dataset (WHO/CDC) to use.
Preconditions	Growth standard data is available.
Postconditions	Selected standard is applied to all percentile calculations.
Main Flow	<ol style="list-style-type: none">1. Admin opens Growth Standard Settings.2. System displays available standards.3. Admin selects desired standard.4. System validates dataset.5. System applies new standard.
Alternative Flows	A1 – Invalid Standard File: System rejects update.

UC17 – Configure Measurement Reminders

Item	Description
Use Case ID	UC17
Use Case Name	Configure Measurement Reminders
Primary Actor	Parent
Goal	Allow parents to set regular reminder schedules.
Preconditions	1. Child profile exists.
Postconditions	Reminder schedule saved.
Main Flow	<ol style="list-style-type: none">1. Parent opens reminder settings.2. System displays reminder options.3. Parent selects frequency (monthly, quarterly...).4. Parent saves configuration.5. System stores schedule.
Alternative Flows	A1 – Invalid Frequency: System rejects configuration.

UC18 – Receive Measurement Notifications

Item	Description
Use Case ID	UC18
Use Case Name	Receive Measurement Notifications
Primary Actor	System
Goal	Notify parents when it is time to record new measurements.
Preconditions	1. Reminder schedule exists.
Postconditions	Notification delivered.
Main Flow	1. Reminder date/time is reached. 2. System generates notification. 3. System sends in-app notification or email.
Alternative Flows	A1 – Notification Delivery Failure: System retries.

UC19 – Generate Growth Report

Item	Description
Use Case ID	UC19
Use Case Name	Generate Growth Report
Primary Actor	Parent
Goal	Create a report for a selected date range.
Preconditions	1. Measurement data exists.
Postconditions	Report file is generated.
Main Flow	1. Parent opens “Generate Report.” 2. System shows report options. 3. Parent selects date range and format (PDF/CSV/image). 4. System retrieves data. 5. System generates report. 6. System prepares file for download.
Alternative Flows	A1 – Empty Date Range: System shows error.

UC20 – Download Report

Item	Description
Use Case ID	UC20
Use Case Name	Download Report
Primary Actor	Parent / Doctor
Goal	Allow users to download generated reports.
Preconditions	1. Report exists.
Postconditions	Report is downloaded.
Main Flow	1. User opens report page. 2. User selects “Download.” 3. System delivers file.
Alternative Flows	A1 – File Missing: System regenerates file.

UC21 – Share Report

Item	Description
Use Case ID	UC21
Use Case Name	Share Report
Primary Actor	Parent
Goal	Allow parents to share the report with doctors or caregivers.
Preconditions	Report exists.
Postconditions	Report shared successfully.
Main Flow	<ol style="list-style-type: none">1. Parent selects “Share Report.”2. System provides sharing options (email/link).3. Parent enters recipient info.4. System sends report.5. System shows confirmation.
Alternative Flows	A1 – Invalid Email: System rejects input.

UC22 – Manage User Accounts

Item	Description
Use Case ID	UC22
Use Case Name	Manage User Accounts
Primary Actor	Admin
Goal	Admin manages user accounts (lock, unlock, reset password).
Preconditions	Admin logged in.
Postconditions	Account actions applied.
Main Flow	<ol style="list-style-type: none">1. Admin opens User Management.2. System lists all users.3. Admin selects an account.4. Admin chooses an action (lock, unlock, reset password).5. System updates account.
Alternative Flows	A1 – Unauthorized Admin: System denies access.

UC23 – Configure Growth Standards

Item	Description
Use Case ID	UC23
Use Case Name	Configure Growth Standards
Primary Actor	Admin
Goal	Allow Admin to update or upload growth reference data.
Preconditions	Standard datasets available.
Postconditions	New standard applied.
Main Flow	<ol style="list-style-type: none">1. Admin opens Growth Standards screen.2. Admin uploads or selects dataset.3. System validates dataset.4. System updates configuration.
Alternative Flows	A1 – Invalid File Format: System rejects update.

UC24 – Monitor System Operations

Item	Description
Use Case ID	UC24
Use Case Name	Monitor System Operations
Primary Actor	Admin
Goal	Allow Admin to review system logs and performance.
Preconditions	Admin logged in.
Postconditions	None.
Main Flow	<ol style="list-style-type: none">1. Admin opens Monitoring Dashboard.2. System retrieves logs and statistics.3. System displays system performance data.
Alternative Flows	A1 – No Logs Available: System displays empty state message.