

ID	Requirement	Test	Use Case	Implemented By	Tested By
1	Simulate home screen to show functional buttons, battery, time, date, insulin and graph.	Buttons navigate to the correct screen, and the graph is active	Use case 1	Home.cpp, options.cpp, profilespage.cpp	All sequences
2	Power button turns off device	Power button removes everything from display and pauses battery	N/A	home.cpp	N/A
3	Manual bolus input via calculator and CGM data	Using bolus features to calculate insulin	Use case 4	bolus.cpp	Sequence 2
4	Create, Read, Update, Delete personal profiles (basal, carb ratio, etc.)	Create a profile or update a profile in the profile screen	Use case 3	profilespage.cpp	Sequence 3,4,5
5	Start, stop, or resume insulin based on profile or CGM input	Pause/resume buttons operate	Use case 6	home.cpp	Sequence 3
6	Visualize insulin data and glucose patterns	The graph depicts the insulin rate accurately	Use case 9	home.cpp	Sequence 1
7	Error handling for low battery, low insulin, occlusion	Low battery label and low insulin labels show	Use case 2	home.cpp	Sequence 1
8	Display alerts and notifications clearly	Alerts are visible	Use case 8	home.cpp	Sequence 3
9	Logging of events	Every time an event happens, a log is displayed	Use case 8	home.cpp	N/A
10	Time simulation	The simulation simulates time as if the device is	Use case 5	home.cpp	N/A

		being used			
11	Security protects user settings	There is a PIN required to access settings	Use case 10	MainWindow.cpp	Sequence 5
12	The extended bolus applies after the immediate	The user can select the extended bolus option and administer an extended bolus	Use case 4	bolus.cpp	Sequence 2
13	IQ-technology	The system detects low or high glucose in 30 minutes and displays a warning and corrections	Use case 5	home.cpp	Sequence 5