

Connect Module (connect and receive)

Unit	Status	Inputs	Expected	Outcome	Problem	Recorder	Time
deviceConnected(deviceID)	Pass	Polar device ID	Chest strap is connected to the system, and show the relative notification.	Connect to Polar device	None	Rongjiang Yang	Apr. 7th, 2021
deviceDisconnected(deviceID)	Pass	Polar device ID	Chest strap is disconnected from the system	Disconnect from Polar device	None	Rongjiang Yang	Apr. 7th, 2021
scaleConnectButton.onClick(deviceAddr)	Pass	Scale device MAC address	Scale is connected to the system, and show the relative notification.	Connect to scale device	None	Rongjiang Yang	Apr. 7th, 2021
scaleDisconnectButton.onClick(deviceAddr)	Pass	Scale device MAC address	Scale is disconnected from the system	Disconnect from scale device	None	Rongjiang Yang	Apr. 7th, 2021
Capture heart rate data	Pass	The "Start Capture Data" switch is checked	Show captured heart rate data in text and visualized graph	As expected	None	Rongjiang Yang	Apr. 7th, 2021
Capture ECG data	Pass	The "Start Capture Data" switch is checked	Show captured ECG data in visualized graph	As expected	None	Rongjiang Yang	Apr. 7th, 2021
Capture ACC data	Pass	The "Start Capture Data" switch is checked	Can record captured ACC data	As expected	None	Rongjiang Yang	Apr. 7th, 2021
measureButton.onClick()	Pass	None	Show instruction to measure weight with connected scale and capture measured data	As expected	None	Rongjiang Yang	Apr. 7th, 2021

Data Process Module (record and export)

Unit	Status	Inputs	Expected	Outcome	Problem	Recorder	Time
loadHrValue()	FAIL	void	A output string	Null	The output string is null	Yiyang Li	Feb. 3th, 2021
loadHrValue()	FAIL	void	A output string	Wrong time type	The output string cannot follow the time	Yiyang Li	Feb. 3th, 2021
loadHrValue()	PASS	void	A output string	Successfully load	\	Yiyang Li	Feb. 4th, 2021
loadHrValue()	FAIL	void	A concatenated string	Successfully load	\	Yiyang Li	Feb. 10th, 2021
saveLog()	FAIL	A concatenated string	A csv file as output file	Error	The FileWriter() cannot work	Yiyang Li	Feb. 10th, 2021
saveLog()	FAIL	A concatenated string	A csv file as output file	No output	No output	Yiyang Li	Feb. 10th, 2021
saveLog()	PASS	A concatenated string	A csv file as output file	Correct output	\	Yiyang Li	Feb. 11th, 2021
saveLog()	FAIL	A concatenated string	A csv file as output file containing recordings	Wrong recordings	wrong recordings	Yiyang Li	Mar. 1th, 2021
saveLog()	FAIL	A concatenated string	A csv file as output file containing recordings	Wrong time	wrong time	Yiyang Li	Mar. 1th, 2021
saveLog()	FAIL	A concatenated string	A csv file as output file containing recordings	Incorrect time	unreadable code of time	Yiyang Li	Mar. 1th, 2021
saveLog()	PASS	A concatenated string	A csv file as output file containing recordidngs	Successfully output a csv file	\	Yiyang Li	Mar. 1th, 2021
saveLog()	FAIL	A concatenated string	A file stored in proper directory	No output file in correct address	the file stored in the default address	Yiyang Li	Mar. 10th, 2021
saveLog()	PASS	A concatenated string	A file stored in proper directory	Successfully output a csv file in the correct directory	\	Yiyang Li	Mar. 10th, 2021
openAssignFolder()	FAIL	void	Open the proper directory in the phone	System error	no permission from the phone	Yiyang Li	Mar. 10th, 2021
openAssignFolder()	FAIL	void	Open the proper directory in the phone	Cannot open the selected directory	open the default directory page	Yiyang Li	Mar. 10th, 2021

Unit	Status	Inputs	Expected	Outcome	Problem	Recorder	Time
openAssignFolder()	FAIL	void	Open the proper directory in the phone	Cannot open the selected directory	open the default directory page	Yiyang Li	Mar. 10th, 2021
openAssignFolder()	PASS	void	Open the proper directory in the phone	Open the correct directory	\	Yiyang Li	Mar. 10th, 2021

Report Module

Unit	Status	Inputs	Expected	Outcome	Problem	Recorder	Time
sendNotification	Pass	Application context	"The device has not worn properly!"	"The device has not worn properly!"	None	XiaotianXia	Apr. 7th, 2021
getInstance	Pass	Application context	null	null	None	XiaotianXia	Apr. 7th, 2021
getInstance	Pass	Application context	GRPNotification	GRPNotification		None	Apr. 7th, 2021

Storage Module

Unit	Status	Inputs	Expected	Outcome	Problem	Recorder	Time
insertData	Pass	timestamp, data value, table name	Insert one item into database	Same as expected	None	Hudie LIU	Apr. 3th, 2021
insertHRdata	Pass	a list of heart rate data and timestamp	Insert a set of data into database	Same as expected	None	Hudie LIU	Apr. 3th, 2021
getMaxHrDay	Pass	None	Get the maximum heart rate data of today	Same as expected	None	Hudie LIU	Apr. 3th, 2021
getMinHrDay	Pass	None	Get the minimum heart rate data of today	Same as expected	None	Hudie LIU	Apr. 3th, 2021
getMaxHrWeek	Pass	None	Get the maximum heart rate data during the past 7 days	Same as expected	None	Hudie LIU	Apr. 3th, 2021
getMinHrWeek	Pass	None	Get the minimum heart rate data during the past 7 days	Same as expected	None	Hudie LIU	Apr. 3th, 2021
getMaxHrMonth	Pass	None	Get the maximum heart rate data during the past 30 days	Same as expected	None	Hudie LIU	Apr. 3th, 2021
getMinHrMonth	Pass	None	Get the minimum heart rate data during the past 7 days	Same as expected	None	Hudie LIU	Apr. 3th, 2021
getDailyData	Pass	None	Get the average heart rate data for every hour of today	Same as expected	None	Hudie LIU	Apr. 3th, 2021

Unit	Status	Inputs	Expected	Outcome	Problem	Recorder	Time
getWeeklyData	Pass	None	Get the average heart rate data for every day during past 7 days	Same as expected	None	Hudie LIU	Apr. 3th, 2021
getMonthlyData	Pass	None	Get the average heart rate data for every day during past 30 days	Same as expected	None	Hudie LIU	Apr. 3th, 2021
clearDatabase	Pass	None	Clear all of the data in the database	Same as expected	None	Hudie LIU	Apr. 3th, 2021
exportHrData	Pass	None	Export a csv file of whole data in the heart rate table	Same as expected	None	Hudie LIU	Apr. 3th, 2021

Setting Module

Unit	Status	Inputs	Expected	Outcome	Problem	Recorder	Time
connectPolarButton	PASS	onClick()	Polar dialog	Polar dialog	/	Haonan CHEN	Apr. 3th, 2021
connectScaleButton	PASS	onClick()	scale dialog	scale dialog	/	Haonan CHEN	Apr. 3th, 2021
cancelPolarButton	PASS	onClick()	Polar connection break	Polar connection break	/	Haonan CHEN	Apr. 3th, 2021
cancelScaleButton	PASS	onClick()	Scale connection break	Scale connection break	/	Haonan CHEN	Apr. 3th, 2021
simulationSwitch	PASS	onClick()	simulator turn on/off	simulator turn on/off	/	Haonan CHEN	Apr. 3th, 2021
receiveNotification	PASS	onClick()	notification turn on/off	notification turn on/off	/	Haonan CHEN	Apr. 3th, 2021
exportButton	PASS	onClick()	export DB	export DB	/	Haonan CHEN	Apr. 3th, 2021
clearButton	PASS	onClick()	clear DB	clear DB	/	Haonan CHEN	Apr. 3th, 2021
viewData	PASS	onClick()	open file	open file	/	Haonan CHEN	Apr. 3th, 2021