

Communication interfaces / Database / User interface - UNIT TESTS REPORT

GROUP NUMBER 1 – Doctors Simulation

NOTE:

We have 2 git repositories – one for managing the RPI and one for the web application:

web application - <https://github.com/idoisgeek/github.io>.

RPI manager - <https://github.com/idoisgeek/IoT---Doctors-Training->

	interface name and purpose	Test results	Test filename	based on
1	Wi-Fi – HTTP server – user can start simulation on an HTML web app	Successfully started simulation from an HTML page by open chat with a GPT agent as a patient.	(repo1) index.html scripts.js server.js	Node.js, GPT API
2	Wi-Fi – HTTP server - user can manage case simulation (add, delete and edit) from web app. The app manages RPI directories via ssh.	Successfully added, deleted, and edited simulation folders and files on RPI via web interface using SSH commands.		Node.js, SSH
3	Wi-Fi – working with GPT API – user can chat with a GPT agent as a patient using GPT API	Successfully sent and received messages; GPT responded as patient with context aligned with the chosen case.		OpenAI GPT API documentation
4	Wi-Fi – working with Ping – getting remote RPI status (up and connected to the same WIFI) from the local computer and web app	Correctly displayed RPI online/offline status; tested by turning off/on RPI and connecting it to the same WIFI.		SSH, ping
5	SSH – manage remote RPI directories and soundtracks files	Created, renamed, and deleted directories and files remotely from web app; verified via checking at the RPI directories.		Node.js SSH2 library
6	RFID – read RFID tags and analyze the spot on the patient’s body	Successfully read RFID tags and correctly mapped them to body spots	(repo2) GUI_Sounds_res.py	MCRF522 Module
7	Touch screen - retrieve number of existing cases from the RPI directories and display on touch screen for choosing and running simulation	Touch screen displayed accurate number of cases; user could select and run one		https://github.com/goodtft/LCD-show.git ; PyQt5
8	Sound - read corresponding wav file from specific case folder and spot number, and play through the stethoscope amplifier	Correct wav file played based on selected case and spot; audio played via stethoscope speaker		pyaudio
9	Power bank - supply power to the whole system	Successfully powered entire system	Reality	

Case Manager

HomeManagementSessionsAbout

AI Cases

admin

Active Cases

Manage and interact with your AI case collection.

case3

case2

case4

case1

Quick Stats

Your AI case management analytics.

Case Manager

HomeManagementSessionsAbout

Case Management

admin

Create New Case

Case Name:

Case Description:

Upload Soundtracks for Spots 1-4 (WAV only):

Spot 1: Choose File No file chosen

Spot 2: Choose File No file chosen

Spot 3: Choose File No file chosen

Spot 4: Choose File No file chosen

Case Manager

HomeManagementSessionsAbout

Existing Cases

Search cases...

Sort by: Newest First

case3

f

4/30/2025, 8:04:49 PM

Spot 1 Spot 2 Spot 3 Spot 4

Edit

Delete

case2

j

4/30/2025, 8:04:08 PM

Spot 1 Spot 2 Spot 3 Spot 4

Edit

Delete

case4

h

4/30/2025, 8:02:02 PM

Spot 1 Spot 2 Spot 3 Spot 4

Edit

Delete

case1

Patient Profile:

Name: Jennifer Aniston

Show more

Active Cases

Manage and interact with your AI case collection.

case1

Finish and Diagnose

Add Your Differential Diagnosis

Based on the conversation, please provide your differential diagnosis for this case. This will be saved with your session and included in AI reviews.

Differential Diagnosis

Enter your differential diagnosis here...

Submit & Close Chat

Case Manager

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Show more

