

TEST CASES	Feature/Module	Test Description	Expected Result	Status
1	Homepage GET	GET / returns HTTP 200	Status code 200, no error message	 Passed
2	Static assets	Request /static/plots directory returns 200	Static files directory browsable (or 404 for missing) without crashing	 Passed
3	Template syntax	Rendering index.html with no context	No Jinja syntax errors on startup	 Passed
4	sigmoid helper	sigmoid(0), sigmoid(10), sigmoid(-10)	Approximately 0.5, ~0.99995, ~0.000045	 Passed
5	Prediction logic	Feed a known input vector where model output < 0.5 and > 0.5	Returns 0 ("No Risk") below threshold, 1 ("At Risk") above	 Passed
6	Scale & transform	Load scaler.pkl, transform dummy feature	Transformed array shape matches input (no exception)	 Passed
7	BMI chart creation	Call process_user_input with BMI=22, 30, 40	Files bmi_<ts>.png written into /static/plots; images open	 Passed
8	BP chart creation	Call process_user_input with ap_hi=120, ap_lo=80	Files bp_<ts>.png written into /static/plots; images open	 Passed
9	CSV logging	After prediction, check data/retrieved/predictions.csv exists and has appended row	CSV file exists; new line appended on each POST	 Passed
10	Form validation	Submit form with height=0 or weight=0	Rerender page with "Height and weight must be greater than zero." message	 Passed
11	Error handling on POST	POST with missing or non-numeric	Returns user-friendly error	 Passed

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12	PDF route 400	Hit /download_pdf before any prediction	HTTP 400 + “No report to export.”	 Passed
13	Voice route GET	Hit /voice when collect_user_voice_input() returns None	Renders index.html with “Voice input failed.” advice	 Passed
14	cleanNumberInput	JS cleanNumberInput ("forty five"), "thirty-two"	Returns "45", "32"	 Passed
15	Advice panel hide	Page load (no prediction)	#adviceLeft and #adviceRight panels are display: none	 Passed
16	Voice panels hide	Page load (no voice action)	#voiceLeft and #voiceRight panels are display: none	 Passed
17	Export button rendering	After a successful prediction	“Export Full Report (PDF)” button appears in the .result block	 Passed
18	Logo in PDF	Generate PDF and open it	The logo.png is embedded at top left	 Passed
19	Route / download_pdf 200	After a prediction, click Export	HTTP 200 with Content-Disposition: attachment; filename=*.pdf	 Passed
20	Type-effect function defined	JS environment on page load	typeof typeEffect === "function"	 Passed

IN PROGRESS	Feature/Module	Test Description	Expected Result
21	Hard-coded advice logic	Advice lists populated correctly for various inputs	Correct messages for cholesterol/glucose/smoke/alco/active/age appear in adviceLeft/ adviceRight
22	Advice panel show/hide	Advice panels only show on Predict, not on Voice form	#adviceLeft/ #adviceRight appear after Predict, never before
23	Voice-flow reprompt	Speak invalid choice to cholesterol (“five hundred”)	JS reprompts: “Sorry, that’s not an option-please say 1, 2, or 3.”
24	Voice panels timing	Panels appear only during runVoiceForm() steps	#voiceLeft / #voiceRight show per-question and hide afterward
25	PDF content quality	All sections (user data, charts, advice) fit one page	No overflow, readable layout