# **User Acceptance Testing (UAT) Template**

Date	28 June 2025
Team ID	LTVIP2025TMID35624
Project Name	Revolutionizing Liver Care: Predicting Liver Cirrhosis
	Using Advanced Machine Learning Techniques
Maximum Marks	

#### **Project Overview:**

Project Name: Revolutionizing Liver Care: Predicting Liver Cirrhosis Using Advanced Machine Learning Techniques

Project Description: Liver cirrhosis is a life-threatening condition that often goes undetected until it reaches an advanced stage. Early diagnosis is critical for effective treatment and improved survival rates, yet traditional diagnostic methods are invasive, time-consuming, and costly. This project aims to transform liver care by applying advanced machine learning techniques to predict liver cirrhosis from non-invasive clinical and laboratory data. By uncovering hidden patterns in patient data, the system provides accurate, early-stage predictions-enabling timely interventions and personalized healthcare solutions.

Project Version: LTVIP2025TMID35624

Testing Period: [27-06-2025] to [28-06-2025]

#### **Testing Scope:**

**Tested Functionalities:** 

Prediction Endpoint (/api/predict)
Contact Form (/api/contact)
Form Validations
Navigation
Responsive UI

Requirements to be Tested:

Postman (Tool) for api testing

Browser for navigation, form validation, Navigation testing

## **Testing Environment:**

URL:

Backend: <a href="https://predicting-liver-cirrhosis-using.onrender.com/">https://predicting-liver-cirrhosis-using.onrender.com/</a>

Frontend: <a href="https://predicting-liver-cirrhosis.netlify.app/">https://predicting-liver-cirrhosis.netlify.app/</a>

Final Demo link: <a href="https://predicting-liver-cirrhosis.netlify.app/">https://predicting-liver-cirrhosis.netlify.app/</a>

Credentials (if required): No

**Test Cases:** 

Test Case ID	Test Scenario	Test Steps	Expected Result	Actual Result	Pass/Fail
TC-001	Prediction Endpoint (/api/predict )	Step 1: Go to the postman tool Step 2: Select post Step 3: enter  https://predicting-liver-cirrhosis-using.onrender.com/api/predict  step 4: go to body->row->enter input as below [55.0,1,1,12.0,2.0,2,1,32,1,1,9.2,40.0,3.3,9070351758794,88.0,30.527397260273,972,31.9010791366,90647,11000.0,60.0,35.0,2.0,3.0,0.0,1.5,4.0,3.0,6.0,3.0,4.0,1,50.0,56.0,0]  Step 5: Click on send  Repeat step 4 with below input again: [52.0,1,1,8.0,3.0,3,0,6,0,1,13.0,36.0,3.39,070351758794,94.0,30.52739726027397,2,31.901079136690,647,7000.0,60.0,20.0,3.0,1.0,1.0,2.45,1.0,2.0,7.1,4.2,2.5,56.0,110.0,1]	Case 1: {     "messa     ge": "Liver     Disease     Detected" } Case 2: {     "messa     ge": "No     Liver     Disease     Detected" }	Case 1:  {     "messa     ge": "Liver     Disease     Detected" } Case 2:  {     "messa     ge": "No     Liver     Disease     Detected" }	Pass
TC-002	Contact Form (/api/contac t)	Step 1: Go to the postman tool Step 2: Select post	{ "messa ge":	{     "messa ge":	Pass

		Step 3: Enter  https://predicting-liver-cirrhosis-using.onrender.com/api/contact  step 4: go to body->row->enter input as below {     "name":     "TEswarReddy",     "email":     "thathieswarreddy@ gmail.com",     "subject": "i want help to build an Ai",     "message": "give some suggestions" }  Step 5: Click on send	"Message sent successful ly!" }	"Message sent successful ly!" }	
TC-003	Form Validations	Step 1: Go to the below link  https://predicting- liver- cirrhosis.netlify.app/	Ensures required fields are filled, with correct data types and limits	Ensures required fields are filled, with correct data types and limits	Pass
TC-004	Navigation	Step 1: Go to the below link  https://predicting- liver- cirrhosis.netlify.app/	All site links (Home, About, Prediction, Contact) redirect properly	All site links (Home, About, Prediction, Contact) redirect properly	Pass
TC-005	Responsive UI	Step 1: Go to the below link  https://predicting- liver- cirrhosis.netlify.app/	Application works across desktop and mobile devices	Application works across desktop and mobile devices	Pass

# **Bug Tracking:**

Bug ID	Bug Description	Steps to reproduce	Severity	Status	Additional feedback
BG-001	Incorrect Predictions	Step 1: Change present(KNN) model to Random Forest model	High	close	Random Forest – handles imbalance & noise well and also working in high dimensional data
BG-002	communicati on errors between frontend & backend	Implemented proper CORS policy	Medium	close	It allows the frontend port or request to the server
BG-003	New versions Library are used for extracting model, but that are not useful for extracting Random Forest Model	Used older Stable version for extracting Model	low	close	Older version are stable

# Sign-off:

Tester Name: Thathireddy Eswarreddy

Date: 28-06-2025

Signature: Eswarreddy

### Notes:

• Ensure that all test cases cover both positive and negative scenarios.

- Encourage testers to provide detailed feedback, including any suggestions for improvement.
- Bug tracking should include details such as severity, status, and steps to reproduce.
- Obtain sign-off from both the project manager and product owner before proceeding with deployment.