

API Documentation: Blood Test Analyser

This document outlines the usage of the /analyze API endpoint for the Blood Test Analyser application.

1. /analyze Endpoint

This endpoint allows users to upload a blood test report in PDF format and submit a natural language query for analysis by the CrewAI agents.

- **URL:** /analyze
- **Method:** POST
- **Description:** Uploads a PDF blood test report and a text query to trigger an AI-powered analysis of the report. The system uses a local Llama 3 model orchestrated by CrewAI to extract information and provide insights.
- **Request Body:** multipart/form-data
 - **file** (Type: file / application/pdf, **Required**): The PDF file of the blood test report to be analyzed.
 - **query** (Type: string, **Required**): A natural language question or request for analysis related to the blood test report (e.g., "Summarise my Blood Test Report", "What are the abnormal values?", "Provide dietary recommendations").
- **Example curl Request:** (Run this from your project's root directory, e.g., blood-test-analyser-debug).

Bash

```
curl.exe -X POST "http://127.0.0.1:8000/analyze" \  
  -H "accept: application/json" \  
  -H "Content-Type: multipart/form-data" \  
  -F "file=@data/blood_test_report.pdf;type=application/pdf" \  
  -F "query=Summarise my Blood Test Report"
```

- **Response Structure (JSON):**

JSON

```
{  
  "status": "string",           // Indicates the status of the request (e.g., "success")  
  "query": "string",           // The original query submitted by the user  
  "analysis": "string",        // The result of the blood test analysis from the AI agents  
                                // Note: May indicate "Agent stopped due to iteration limit"  
                                // if the analysis did not fully complete within the allowed time  
  "file_processed": "string"   // The filename of the PDF that was processed.  
}
```

- Example Successful Response:

```
JSON
```

```
{
  "status": "success",
  "query": "Summarise my Blood Test Report",
  "analysis": "Agent stopped due to iteration limit or time limit.",
  "file_processed": "blood_test_report.pdf"
}
```

- Error Responses (Examples):

```
JSON
```

```
{
  "detail": [
    {
      "type": "missing",
      "loc": ["body", "file"],
      "msg": "Field required",
      "input": null,
      "url": "https://errors.pydantic.dev/2.5/v/missing"
    }
  ]
}
```

Other HTTP errors: May occur if the server is not running or an internal server error occurs (e.g., 500 Internal Server Error).