This Word document contains screenshots of the key outputs.

Results:

A screen shot of a computer

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Figure 1 :

* This image shows the execution of dashboard.py, which runs the Flask web application for visualizing task execution metrics.
* Running on [**http://127.0.0.1:5002**](http://127.0.0.1:5002)
* The warning in red suggests using a production WSGI server instead of Flask’s built-in server for deployment.
* Multiple GET /metrics requests from 127.0.0.1, showing that the dashboard is continuously fetching real-time metrics.
* HTTP response code 200 confirms successful retrieval of data.
* A debugger PIN (838-776-734) is displayed, which allows debugging in development mode.

A screenshot of a computer

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Figure 2

* Fig 2 shows the tasks for five patients who have been sent to Celery Task Queue. We can also see that the output confirms that each patient task was successfully sent and displays their IDs.

A computer screen shot of a black screen

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Figure 3

* Fig 3 shows that the RabbitMq node is running in PC - rabbit@Heisenberg. Uptime is 83 seconds.

A computer screen shot of a black screen

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Figure 4

* Fig 4 shows a PowerShell terminal executing two commands related to terminating Celery and starting a new celery. The queue **"celery"** is active and ready to process tasks.

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Figure 5

* Fig 5 shows the running celery worker. It also notifies with starting and completion of a task.

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Figure 6

* Fig 6 shows a Redis Cli terminal displaying stored task execution metrics.

A graph with a line

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Figure 7

* This is a **Task Execution Time Monitoring Dashboard** where the **shaded area** represents task execution duration over time.
* The X-axis is the Time strap, which represents the time at which each task was executed.
* The Y-axis is Execution Duration in Seconds, represents task processing time.
* To gain this, these steps needs to be fulfilled without errors. [celery -A tasks inspect active 🡪 GET task\_metrics 🡪 python trigger\_task.py]

A graph with a line going up

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Figure 8

* Fig 8 shows the output of visualize\_metrics.py. It represents the execution durations of tasks over different timestamps.
* X-axis: Timestamp when tasks were executed.
* Y-axis: Task execution duration (in seconds).

Thank You.

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