

This document is a brief explanation of how this application works.

This application is composed of two modules: **Rest** and **Calculator**.

The Rest module exposes a REST API that receives external HTTP requests to solve operations. These requests are converted to an object and sent to a queue on a RabbitMQ server, which are retrieved by the Calculator module. The Calculator module sends an object response for a given request to another server queue to be retrieved by the Rest module and returned to the client.

The RabbitMQ server is composed of the Queues: **queue-request** and **queue-response**.

Module Rest sends messages to the **queue-request** and retrieves them from the **queue-response**.

Module Calculator sends messages to the **queue-response** and retrieves them from the **queue-request**.

A request is an object that encapsulates the two operands and the operation.

A response is an object that encapsulates the result of the operation of a given request.

