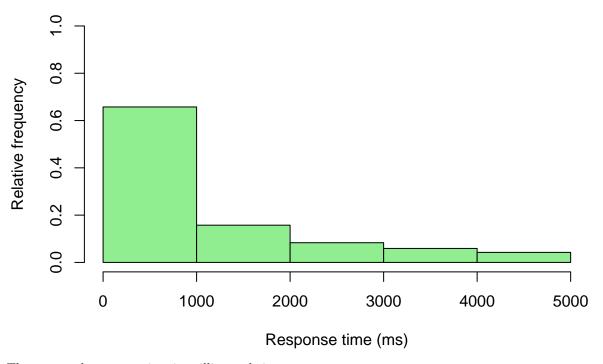
Quoteserver response time analysis

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We sent a large number of request to quoteserve.seng.uvic.ca:4443 and recorded the delay of the response.

quoteserver response times, n = 1200



The expected response time in milliseconds is

[1] 563.2367

The above historgram uses one second buckets and hides the fact that the delays are clustered after whole second values. Removing the constant delay portion from each bucket yields the distribution of variable network and processing delays.

```
## Min. 1st Qu. Median Mean 3rd Qu. Max.
## 7.000 9.000 9.000 9.414 10.000 26.000
```

The tail values are

```
tail(sort(allDelays), 10)
```

```
## [1] 16 16 16 16 16 16 17 17 20 26
```

Choosing an initial response timeout of 20 milliseconds and 5 millisecond exponential backoff requires 6 iterations to exceed the expected delay. This event has a likelihood of 0.1614%. Exceeding 1 second total delay has a likelihood of 0.0299%