Appendix

1st Operation: Get reservations (Node of Objects)

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| NodeMCU connection time to Firebase | |
| Trials | **Get Reservation**  **(177 Bytes)** |
| 1 | 0.350258 s |
| 2 | 0.401654 s |
| 3 | 0.330333 s |
| 4 | 0.331711 s |
| Average | **0.353489 s** |

2nd Operation: Update a value

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| NodeMCU connection time to Firebase | |  |
| Trials | **Get a value**  **(15 Bytes)** | **Set a value**  **(15 Bytes)** |
| 1 | 0.306381 s | 0.383343 s |
| 2 | 0.295115 s | 0.390443 s |
| 3 | 0.296623 s | 0.387329 s |
| 4 | 0.306095 s | 0.393172 s |
| Average | **0.301054 s** | **0.388572 s** |

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| *Application connection time to* | | |
| Trials | **Post User**  **(113 Bytes)** | **Get User**  **(113 Bytes)** |
| 1 | 0.011711 s | 0.007428 s |
| 2 | 0.011810 s | 0.007435 s |
| 3 | 0.011822 s | 0.007423 s |
| 4 | 0.011734 s | 0.007430 s |
| Average | **0.011777 s** | **0.007429 s** |

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| *Application connection time to* | | |
| Trials | **Post Currently Looking**  **(52 Bytes)** | **Get Currently Looking**  **(52 Bytes)** |
| 1 | 0.011628 s | 0.007298 s |
| 2 | 0.011623 s | 0.007295 s |
| 3 | 0.011625 s | 0.007294 s |
| 4 | 0.011630 s | 0.007299 s |
| Average | **0.011627 s** | **0.007296 s** |

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| *Application connection time to* | | |
| Trials | **Post Reservation**  **(177 Bytes)** | **Get Reservation**  **(177 Bytes)** |
| 1 | 0.012106 s | 0.007584 s |
| 2 | 0.012110 s | 0.007590 s |
| 3 | 0.012109 s | 0.007588 s |
| 4 | 0.012115 s | 0.007583 s |
| Average | **0.012112 s** | **0.007586 s** |

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| *Application connection time to* | | |
| Trials | **Post Zone**  **(8606 Bytes)** | **Get Zone**  **(8606 Bytes)** |
| 1 | 0.017234 s | 0.008668 s |
| 2 | 0.017236 s | 0.008664 s |
| 3 | 0.017239 s | 0.008663 s |
| 4 | 0.017235 s | 0.008666 s |
| Average | **0.017236 s** | **0.008666 s** |

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| *Application connection time to* | | |
| Trials | **Post Spot**  **(49 Bytes)** | **Get Spot**  **(49 Bytes)** |
| 1 | 0.011525 s | 0.007122 s |
| 2 | 0.011524 s | 0.007121 s |
| 3 | 0.011526 s | 0.007120 s |
| 4 | 0.011528 s | 0.007124 s |
| Average | **0.011526 s** | **0.007123 s** |

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| *Website connection time to* | | |
| Trials | **Post Reservation**  **(177 Bytes)** | **Get Reservation**  **(177 Bytes)** |
| 1 | 0.490 s | 0.411 s |
| 2 | 0.445 s | 0.420 s |
| 3 | 0.480 s | 0.451 s |
| 4 | 0.482 s | 0.423 s |
| 5 | 0.522 s | 0.416 s |
| Average | **0.4838 s** | **0.4242 s** |

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| *Application connection time to* | | |
| Trials | **Post Currently Looking**  **(52 Bytes)** | **Get Currently Looking**  **(52 Bytes)** |
| 1 | 0.383 s | 0.370 s |
| 2 | 0.370 s | 0.386 s |
| 3 | 0.313 s | 0.406 s |
| 4 | 0.410 s | 0.360 s |
| 5 | 0.436 s | 0.323 s |
| Average | **0.3824 s** | **0.3690 s** |

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| *Website connection time to* | | |
| Trials | **Post User**  **(113 Bytes)** | **Get User**  **(113 Bytes)** |
| 1 | 0.489 s | 0.418 s |
| 2 | 0.409 s | 0.373 s |
| 3 | 0.456 s | 0.436 s |
| 4 | 0.488 s | 0.369 s |
| 5 | 0.414 s | 0.428 s |
| Average | **0.4512 s** | **0.4048 s** |

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| *Application connection time to* | | |
| Trials | **Post Zone**  **(8606 Bytes)** | **Get Zone**  **(8606 Bytes)** |
| 1 | 0.662 s | 0.722 s |
| 2 | 0.666 s | 0.716 |
| 3 | 0.656 s | 0.652 |
| 4 | 0.674 s | 0.712 |
| 5 | 0.712 s | 0.698 |
|  | 0.691 s | 0.654 |
| Average | **0. 8122 s** | **0.8303 s** |

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| *Website connection time to* | | |
| Trials | **Post spot**  **(49 Bytes)** | **Get Spot**  **(49 Bytes)** |
| 1 | 0.362 s | 0.349 s |
| 2 | 0.287 s | 0.320 s |
| 3 | 0.342s | 0.324 s |
| 4 | 0.317s | 0.328 s |
| 5 | 0.345 s | 0.328 s |
| Average | **0.3306 s** | **0.3298 s** |