Test Plan

This is the test plan document for Vega-P2P file transfer software developed by Hardik(CE - 100), Kaushal(CE -105) and Sameer(CE – 107) in the curriculum of Software Development Principles. This documents consists of every detail taken into consideration while developing the test cases and the test cases themselves. It is assumed throughout the document that the tests will be performed on a single device by creating a virtual network using localhost but different ports. We have used the unit testing approach which suits our system and environment very well. After running our test suites, if they all pass, we ensure a production ready software which can be distributed publicly.

Test Scenarios

## Transfer of objects from one machine to another:

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| **Case ID** | **Scenario** | **Steps** | **Input** | **Expected Output** | **Actual Output** | **Pass/Fail** |
| 1. | Sending a Ping Object | 1. Ping object is instantiated.  2. Ping object is serialized.  3. Ping object is deserialized. | Ping object with parameters: | Ping object with parameters: | Ping object with parameters: | Pass |
| 2. | Sending a Pong Object | 1. Pong object is instantiated.  2. Pong object is serialized.  3. Pong object is deserialized. | Dummy Ping | Pong object with parameters: | Pong object with parameters: | Pass |
| 3. | Sending a Query Object | 1. Query object is instantiated.  2. Query object is serialized.  3. Query object is deserialized. | Query object with parameters: | Query object with parameters: | Query object with parameters: | Pass |
| 4. | Sending a QueryHit Object | 1. QueryHit object is instantiated.  2.Files from dummy Query are searched in the system and added to QueryHit.  3. QueryHit object is serialized.  4. QueryHit object is deserialized. | Dummy Query | QueryHit object with parameters: | QueryHit object with parameters: | Pass |

## Simulation of multiple Nodes:

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| **Case ID** | **Scenario** | **Steps** | **Input** | **Expected Output** | **Actual Output** | **Pass/Fail** |
| **1.** | Establishing connection between multiple nodes | 1. Nodes are created on a single machine by using different ports.  2. Server and Client are connected. | Dummy Clients and Servers | Successful connection between intended Clients and Servers. | Successful connection between intended Clients and Servers. | **Pass** |