

Worksheet 2: Networking

Version 1.0

Creative Computing

COMP280

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|  | Introduction For this worksheet, you are going to develop HTTPServer applications that can be integrated into Unreal Engine, allowing you store persistent game data on a server such that it can be shared between multiple users. This is an ideal architecture for managing shared data systems such as player accounts, high score tables, portable players progression data (to allow player progress to be maintained across multiple machines) and other player and game related data. Worksheet Activities The goal of the activity is to create a body of knowledge that you can all reference for cybersecurity related information and references for academic writing.  To do this:   1. Create a simple Python-based client/server that uses HTTP as its transport protocol 2. Extend the solution from part (A) so that data is encoded and decoded using JSON 3. Build a standalone sqlite testbed as a framework for experimenting with sql commands 4. Link sqlite to the Python server to start storing persistent data 5. Replace the Python HTTP client with Unreal Engine 6. Implement JSON in Unreal Engine C++  Additional Guidance |

# Rubric

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| **Learning Outcome Name** | **Learning Outcome Description** | **Criteria** | **Weighting** | **Clear Fail** | **Near Pass** | **3rd** | **2:2** | **2:1** | **1st** | **>1st** |
| Code / Process | Implement working and maintainable software components. |  |  | . | . | . | . | . | . | . |
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