**Protocol Description**

Team: 25조

Member: 김현지, 박서연

**1. Service Description**

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| *Summary of your item using socket programming*  TCP/IP Socket을 이용해서 크레이지 아케이드 게임을 구현해봤습니다. |

**2. Specification**

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| Protocol: TCP/IP  Language: Python  *Ex) TCP, Python, etc.* |

**3. Network Structure**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| *Ex) Physical links of server, clients, NAT router*   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | *Internet* | | | |  |  | |  |  |  |  |  |  |  |  | |  |  |  | *NAT Router* | |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  | | *Server* | |  | *Client 1* | |  | *Client 2* | | |

**4. Protocol**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| *Define at least* ***Five*** *types of the proposed protocols.*  *로그인, 회원가입, 비밀번호 찾기, 아이템 먹기, 이동하기*  *Ex)*  *1. First Connection (Client 🡪 Server)*   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | *Header (unit: Byte)* | | | | | | *Body (unit: Byte)* | | | *Encryption Code* | | | | *Service Code* | | *ID* | | | *16* | | | | *4* | | *12* | | |  |  |  |  |  |  |  |  | | *Body (unit: Byte)* | | | | | | | | | *Password* | | | | *CRC* | | | | | *16* | | | | *16* | | | |   *Encryption Code: 0xA9 0x7E 0x5A …*  *Service Code: 0x00 0x00 0x02 0x01 (Connection request)*  *CRC: 0xBF 0x6D 0x83 …*  *2. Confirmation (Server 🡪 Client)*  … |

**5. Scenario**

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| *Describe the detailed process with respect to each service with packet flow and protocol.*  *Ex)*  *1. Login*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | *Client* | |  | *🡪* |  | *Server* | | |  |  | ***Protocol 1.*** *First Connection* | | |  |  | |  |  |  |  |  |  |  | |  |  |  | *🡨* |  |  |  | |  |  | ***Protocol 2.*** *Confirmation* | | |  |  | |  |  |  |  |  |  |  | |  |  |  | ***Finish*** |  |  |  | |