

Do networking?

Work-in-progress page, just wanted to capture some trickiness Jack came across.

- In `net_bind()`, `IPPROTO_TCP` as the third parameter gives the cryptic error -81, which is not really defined anywhere. This really needs to be `IPPROTO_IP` instead.
- Get your port number right!

Example

```
int32_t listen_tcp(uint16_t port)
{
    // Create server socket.
    int32_t sock = net_socket(AF_INET, SOCK_STREAM, IPPROTO_IP);
    if (sock == INVALID_SOCKET)
        return -1;
    struct sockaddr_in server;
    memset(&server, 0, sizeof(server));
    server.sin_family = AF_INET;
    server.sin_port = htons(port);
    server.sin_addr.s_addr = INADDR_ANY;

    // Bind server socket.
    int32_t ret = net_bind(sock, (struct sockaddr *)&server, sizeof(server));
    if (ret < 0)
        return ret;

    // Listen on server socket.
    ret = net_listen(sock, 10);
    if (ret < 0)
        return ret;

    // Create client socket.
    struct sockaddr_in client;
    memset(&server, 0, sizeof(server));
    uint32_t client_len = sizeof(client);
```

```
// Create receive buffer.
char buffer[1024];

while (true)
{
    printf("\x1b[%d;%dH", 4, 0);
    printf("Waiting for data...");
    int32_t csock = net_accept(sock, (struct sockaddr *)&client, &client_len);
    if (csock < 0)
        return ret;

    // Reset buffer and receive contents.
    memset(buffer, 0, 1024);
    int32_t bytes = net_recv(csock, buffer, 1024, 0);
    printf("\x1b[%d;%dH", 5, 0);
    printf("Received %d bytes.", bytes);

    // Print buffer to screen.
    printf("\x1b[%d;%dH", 6, 0);
    printf(buffer);

    net_close(csock);
}

return 1;
}
```

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