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**AMA Computer College Naga City**

**Panganiban Dr, Camarines Sur, Naga**

**Documentary Requirement Presented**

**to the Senior High School Department for Work Immersion**

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In Partial Fulfillment of the Requirements

For

**Information Communication and Technology (ICT) Strand**

**PROGRAMMING**

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I would like to express my thanks of gratitude to our teacher online as well as our principal in our branch for their guidance and for allowing me to showcase the fruit of my skills throughout this whole school year which helped me learn new things and grow as a better student, for that, I am thankful for it.

I would also like to thank my parents for their time and effort in taking care of me while I work hours and days on this project and to my supported friends that helped me create ideas, advice, test, and give proper feedback on my project, their time and effort are greatly appreciated as it helped me balanced my project that made it better.

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1. **COMPANY NAME AND BRIEF DESCRIPTION**

This project is targeted to small companies that are Game Studios. Preferably Indie Game Studios such as Hyperbeard.

Hyperbeard is a Game Development Company mostly known for their simple and minimalistic android games such as *Adorable Home, KleptoCats, Bunny Buns* and many more all of which doesn’t really use any online interaction features yet.

Through the success of their games, they have also come to be known by the top platform for publishing really high quality and a highly rated casual game all of which can be found on Google Plays and the Apple Appstore.

1. **SYSTEM BRIEF DESCRIPTION**

This project is a chat system designed for any use of online interaction either by a system that can be used as a public chat/world chat or a private chat by using the library Photon Network; a Unity package library for multiplayer games. This project uses Unity Engine which is used mostly for Game Development and uses a programming language called C-Sharp; An Object-Oriented Language similar to Java which uses classes and objects for handling data.

**LOGIN\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**INPUT:** User first gets to login and input their username to identify and display in the chat room.

**PROCESS:** gets stored in a key under the function PlayerPrefs(key); a function in Unity C#. And checks if the username is valid, if so redirect to Lobby room.

**LOBBY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  
**INPUT:** Find available rooms in the Photon Server. Using the Find Button.

**PROCESS:** If the user did not find or failed to join a room then the user automatically creates a new room and wait for other users to come. Where in the “Lobby.cs” script it checks if the number of players inside the room is greater than 2 then they can get redirected in the “Main Scene (Chatroom)”.

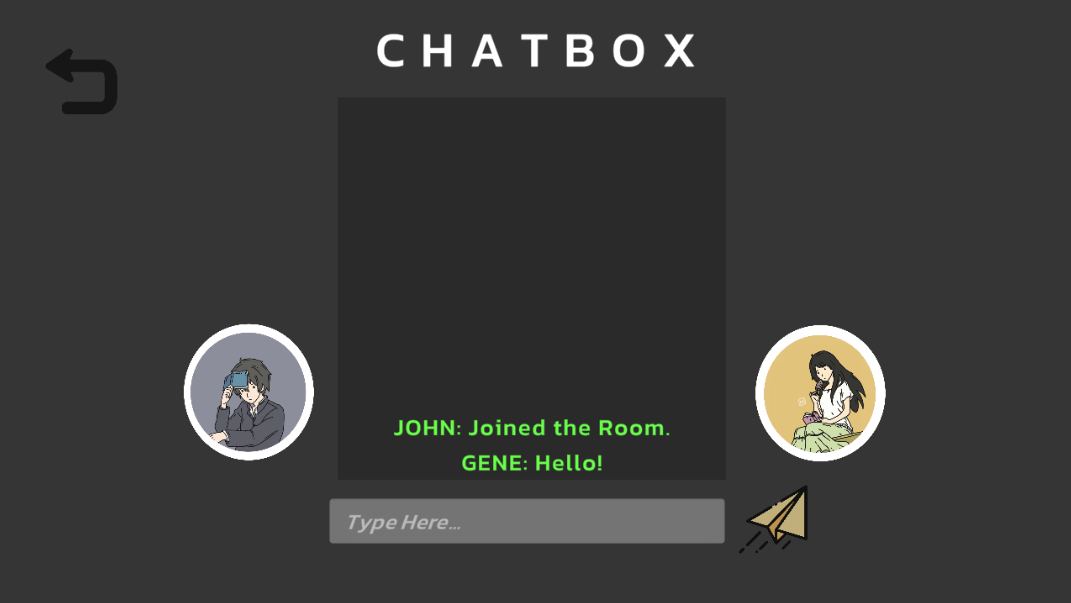
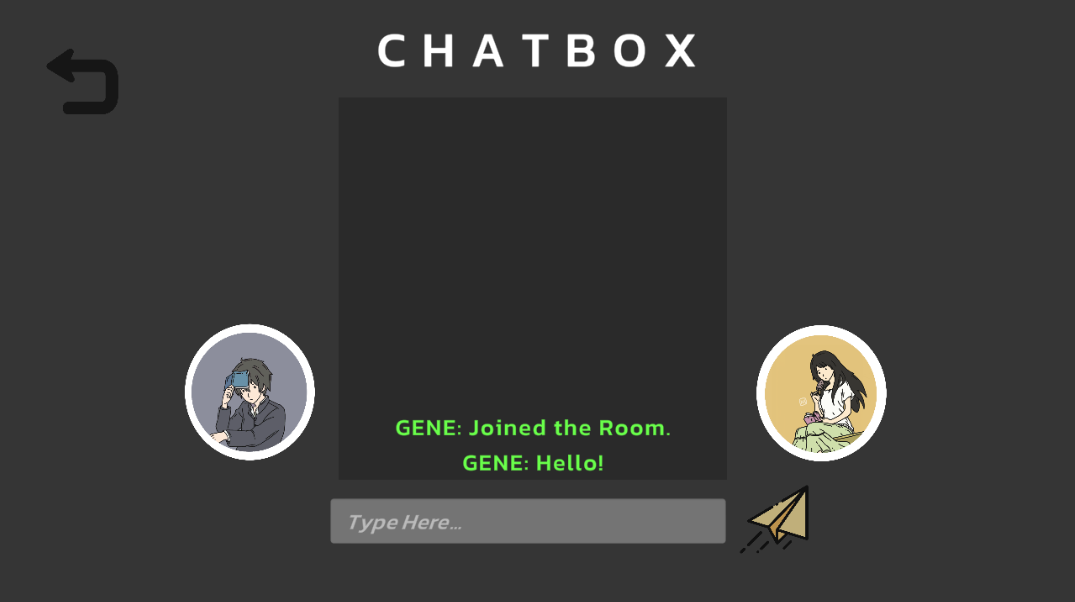
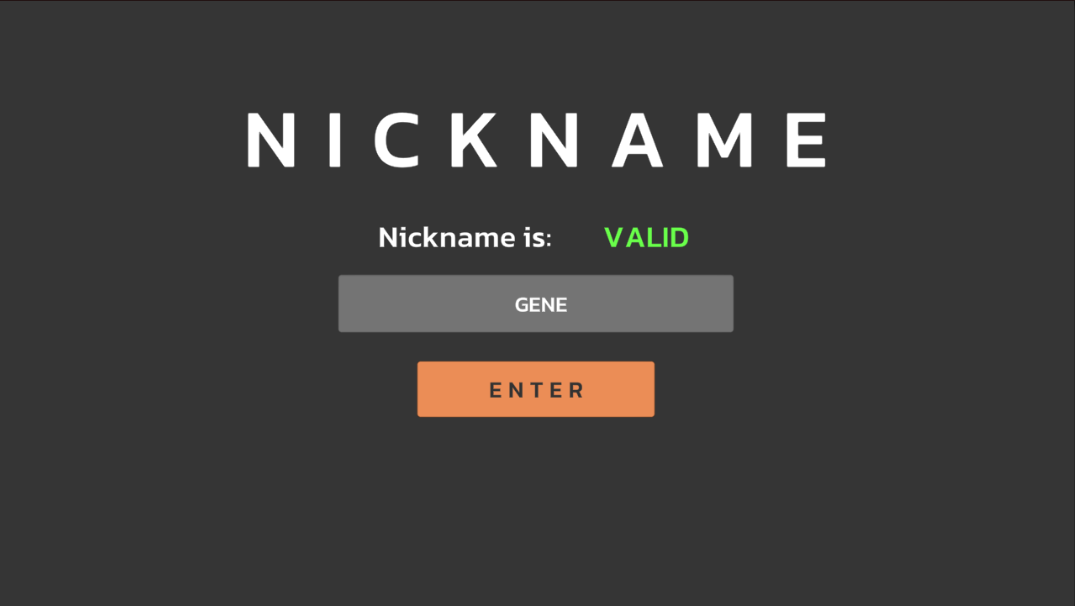
**CHATROOM\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**INPUT:** Type messages in the message field that the user wants to say.

**PROCESS:** The value in input field gets stored in a variable that will be used to sending messages across the network and into the recipient screen.

**OUTPUT:** Using the PublishMessage(message); used in sending message over the network using the function on library Photon, both user gets to receive the same message logs in their screen with their name on display when chatting and the sender name attached used by getting the name key in PlayerPrefs(key); thus making sending and receiving messages across clients is made possible.

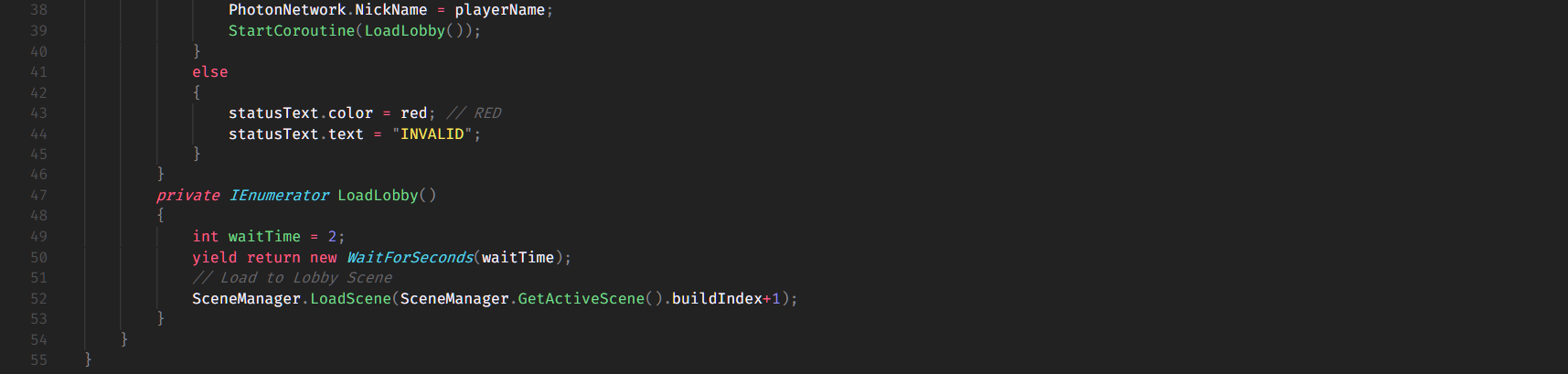
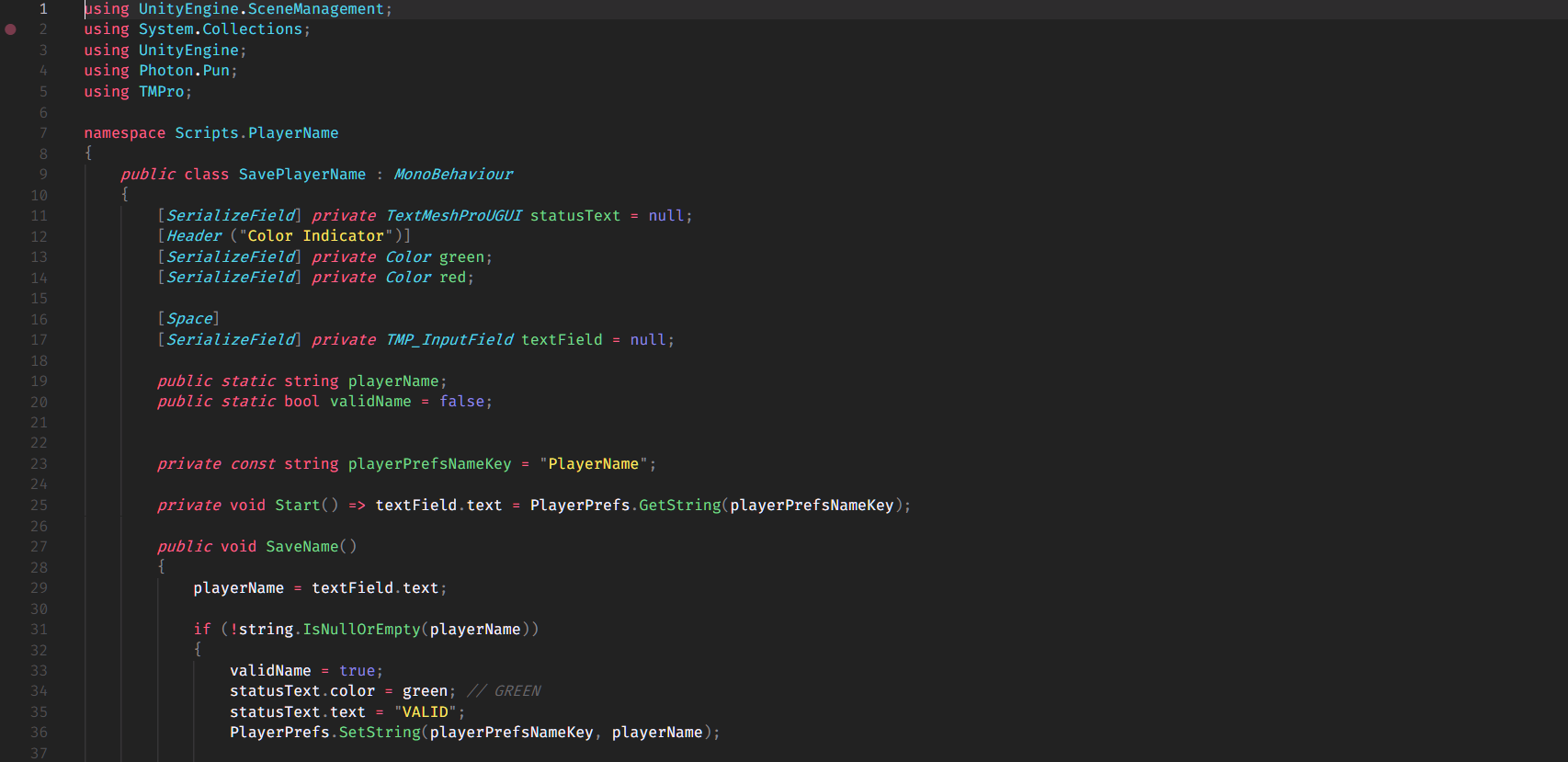
1. **SCREENSHOT OF SYSTEM**



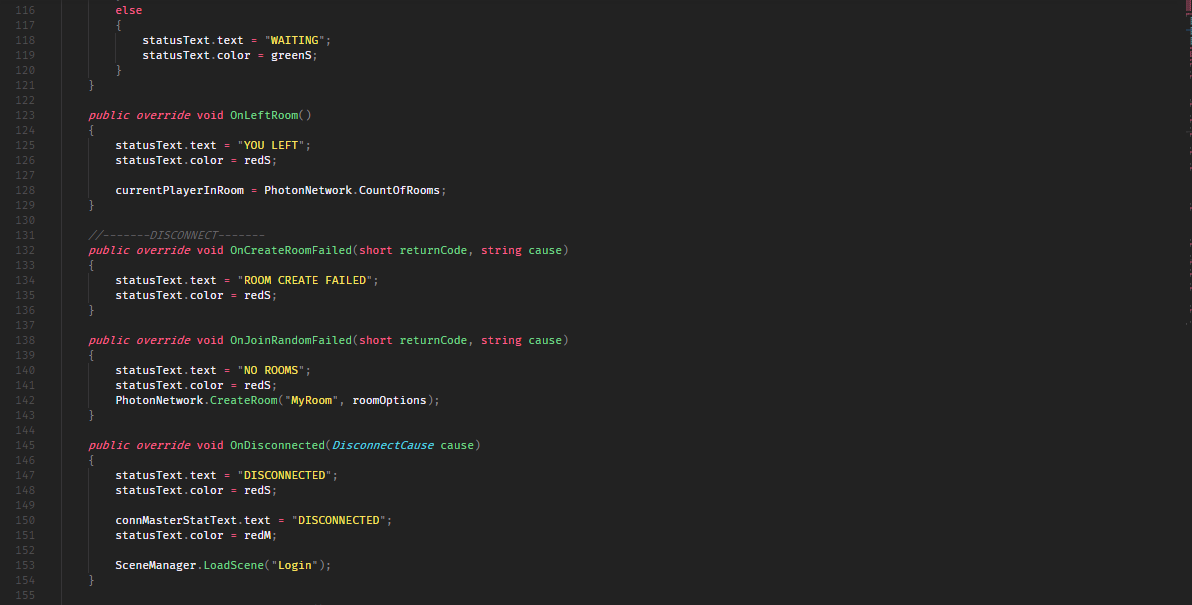
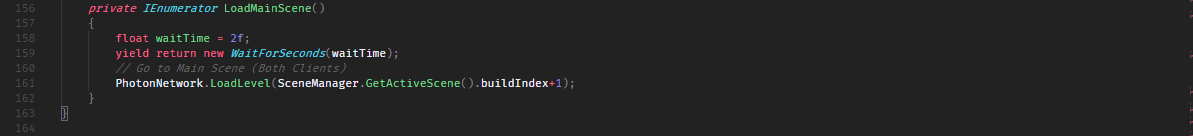
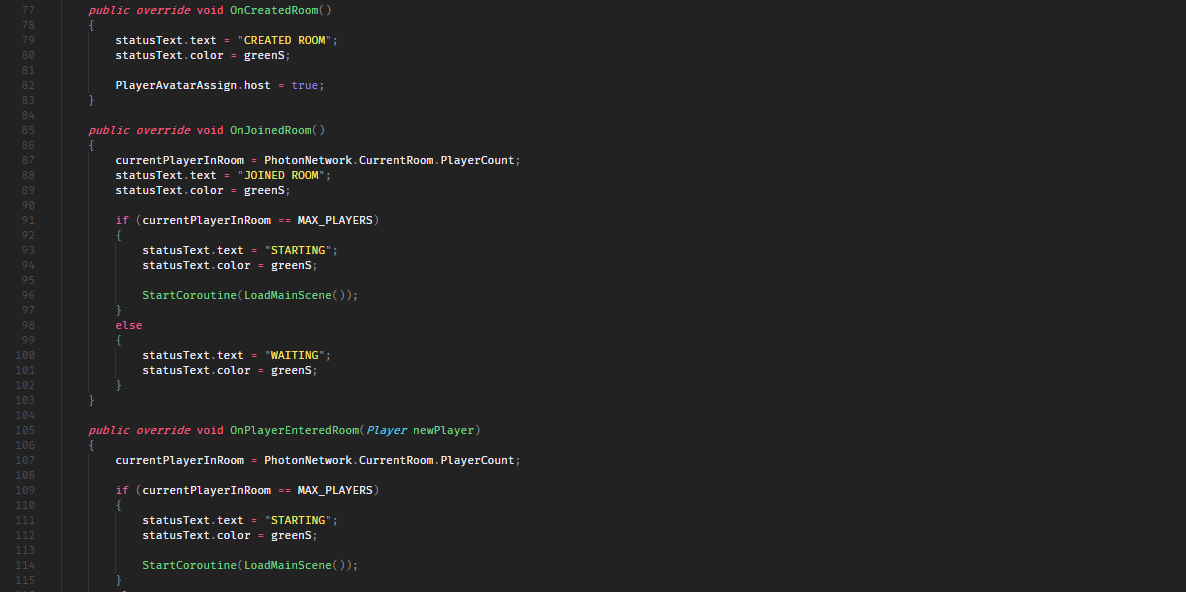
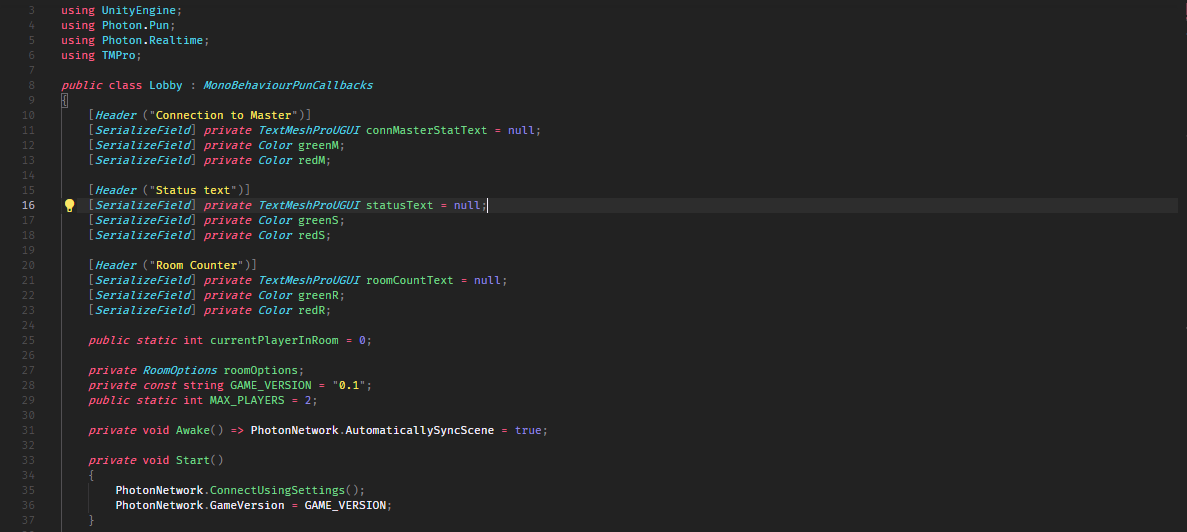
**CLIENT A SCREEN CLIENT B SCREEN**

1. **PROGRAM CODE**

**LOGIN SCRIPT**



**LOBBY SCRIPT**



**CHAT MANAGER SCRIPT**

**V. RESUME**

