

Muhammad Nauman Tariq | [Course Title] | October 27, 2017

Report

Project 2

**Introduction:**

I will cover major programming languages and their uses. There are hundreds of languages out there and all of them can’t be covered here so I’ll try to cover some of the major languages of all time. Also I’ll try to explain some of the most popular developments tools for different languages.

**Methods:**

* *void createSocket();* This method is used to create socket.
* *void connectReadWrite();* This method is used to establish connection and Read and write data to and from client.
* UI class instantiates Client class and connections is established inside Client’s constructor.

**Searched through the internet:**

I faced difficulty while writing data from client to server and vice versa so I searched on the internet to find a way how to read and write data between client and server. It wasn’t that difficult but for novice like me it was a bit hard.

**Book:**

There is amazing book named “Java how to program” by “Paul Deitel”. I performed some of the exercises from this book to understand some of the key concepts.’

**Implementation:**

I have implemented this this task in three classes.

* UI: This class contains console based GUI.
* Client: This class is instantiated when there is new person to check in.
* Server: All of the core work is performed by this class. It chekcs whether room is available or not. At the end it shows status whether room is allotted or not.

**How to get started:**

Its simple. We didn’t used threads. Same server can communicate with multiple clients at the same time but that can be achieved via threads. In this task we were instructed not to use threads so its implementation was simple. I started from UI then Server and then Client.

**Development Tool:**

NetBeans IDE

**Interesting part:**

For me catching exceptions via printStackTrace() was interesting.

**Conclusion:**

* **Java**

Java is most popular and isused for building server-side applications, video games and mobile apps and much more. It's also the core foundation for developing Android apps. Popular IDE’s for Java are NetBeans and Eclipse.

* **C**

C is a low level programming language. You had to do everything manually. There are so many C compilers, you can write stuff in C and have it run pretty much anywhere.

## **C#**

C# is used to develop Microsoft apps. C# is identical to Java. You can built windows apps using C#. Popular IDE for C# is Visual Studio.

**Program output:**

