

Advanced Distributed Systems

Assignment 1

Assignment given on: 5th Sept 2020

Due Date: 10th Sept 2020, on Moodle

Assignment 1 – UDP Programming using Golang

This assignment is intended to get you started with programming in the Go language: to solve this assignment you will need to install Go, figure out how to compile, run, and debug a Go program. The logic of the program itself is simple.

Write a client program that takes 0 arguments, sends a UDP message to a "fortune" server, receives a UDP message in response, and prints out the contents of the server's response to the screen. The server is listening on 10.250.1.101:8090

Client should send message to the server in the below format

```
My name is xx, My roll no is x, What is the sum of numbers in  
my roll no?
```

Server response:

```
The sum of digits for rollno x calculated on 'date' at 'system  
time' is yy
```

As an example, the output will be as follows:

```
$>go run udpclient.go  
  
Connected to UDP Server 10.250.1.101:8090  
  
Enter the message to UDP Server  
  
>> My name is ABC, My roll no is 1234, What is the sum of  
numbers in my roll no?  
  
SERVER RESPONSE: The sum of digits for rollno 1234 calculated  
on 09-03-2020 at 39:51:39 is 10
```

Grading – 10 Marks

UdpClient.go – 9 Marks

Readme.txt – 1 Marks

Note:

1. Penalty of 10% per day will be issued if the deadline is not met
2. If found copied, you will fetch 0 score.

Submission Details:

1. Please read the questions carefully and complete it.
2. Make a directory with name <Your_Roll_Number> and copy your all program (source code) and output file to that folder.
3. Implement the solution using GoLang.
4. Please take screen shot of output, name it with its question number and put it in a same folder.
5. Test well before submission. Follow some coding style uniformly. Provide proper comments in your code.
6. Submit only through moodle and well in advance. Any hiccups in the moodle/Internet at the last minute is never acceptable as an excuse for late submission. Submissions through email will be ignored.
7. Please attach a readme.txt file
8. Please zip your folder and submit to moodle within 10-09-2020 (23:55 PM)

GoLang Reference:

<http://golang.org/doc/>

<http://www.golang-book.com/books/intro>

