

ITS 413 – QUIZ 7 ANSWERS

First name: _____ Last name: _____

ID: _____

Total Marks: _____

out of 10

Question 1 [3 marks]

Do the closed instant messaging systems (such as MSN and Yahoo) use peer-to-peer or client/server architectures? Explain why you gave your answer, and what is the advantage of the architecture for the IM system.

Answer:

Client/Server. Because clients connect to a central IM server (or set of servers). Messages between clients are sent from client to server, and then server to destination client. The advantage of this is the control that the IM operator (e.g. MSN, Yahoo) can have over the system: authentication, quality of service, additional services like integration with email,

You could also argue that a peer-to-peer architecture is used for voice/video application.

Question 2 [3 marks]

- a) What does it mean for an instant messaging system to use “asymmetric servers”?

Answer:

There are different servers for different functions, e.g. authentication, chat, presence, groups,

- b) How many permanent TCP sessions (over the lifetime of the user’s login) are maintained when using asymmetric servers?

Answer:

1 – usually to a main server like BOS (AIM) or Notification (MSN)

- c) How many permanent TCP sessions are maintained when using symmetric servers?

Answer:

1

Question 3 [2 marks]

If your company is implementing its own IM service, explain an advantage of using Jabber for the architecture.

Answer:

Jabber is an open protocol such that anyone can implement Jabber compliant clients and servers that can interoperate with each other. Therefore if your company has a Jabber server and clients, then potentially the clients can send IMs to clients from other organisations that also use Jabber (including Google Talk).

Question 4 [2 marks]

Explain the difference between IPTV, File-based TV distribution and Internet (or Net) TV. You should also mention the network (or type of network) that each are delivered over.

Answer:

Net TV is the real-time delivery of low to medium quality TV over the Internet (usually via web sites). File based TV is non-real-time delivery of entire content over Internet (usually P2P file sharing). IPTV is delivery of high quality TV (equivalent to digital TV) over IP based network (usually over private IP network).