CSP Short Term Project 2 (Design a communications protocol)

Description

Students will work in small groups to design a communications protocol like the TCP/IP protocols.

Standards

IT-PGA-2 Describe the software application life cycle and use a prototype development model to develop applications.
IT-PGA-4 Design, develop, and implement accessible and usable interfaces, and analyze applications for engaging the user.

Business Ethics
Students will model work readiness traits required for success in the workplace including teamwork, multitasking, integrity, honesty, accountability, punctuality, time management, and respect for diversity.

Expectations

Students are expected to use the skills and concepts learned in the course to design a protocol.

Objectives

Students will design a functional communications protocol for half-duplex transmission.

Data must be in binary

Protocol must include how each set of data will be sent, recognized, and interpreted.

Protocol must be tested with results reported.

Project Time

The project will take approximately 3 hours to complete.

Rubric

50 points   Protocol is complete.

25 points   Protocol is tested

25 points   Results are reported

Numbers are sent in sets of four. The first four numbers represent "x". The following four numbers represent the "y". The recipient of the first set of four numbers graphs the point. When the next points are sent, the recipient graphs the point and draws a line from the previous point to the new point. This continues until a point connects to the starting point.

			X	X	X				X	X	X				
			X	X						X	X				
						X									
					X										
					X	X									
			X								X				
				X	X				X	X					
				X	X	X	X	X							
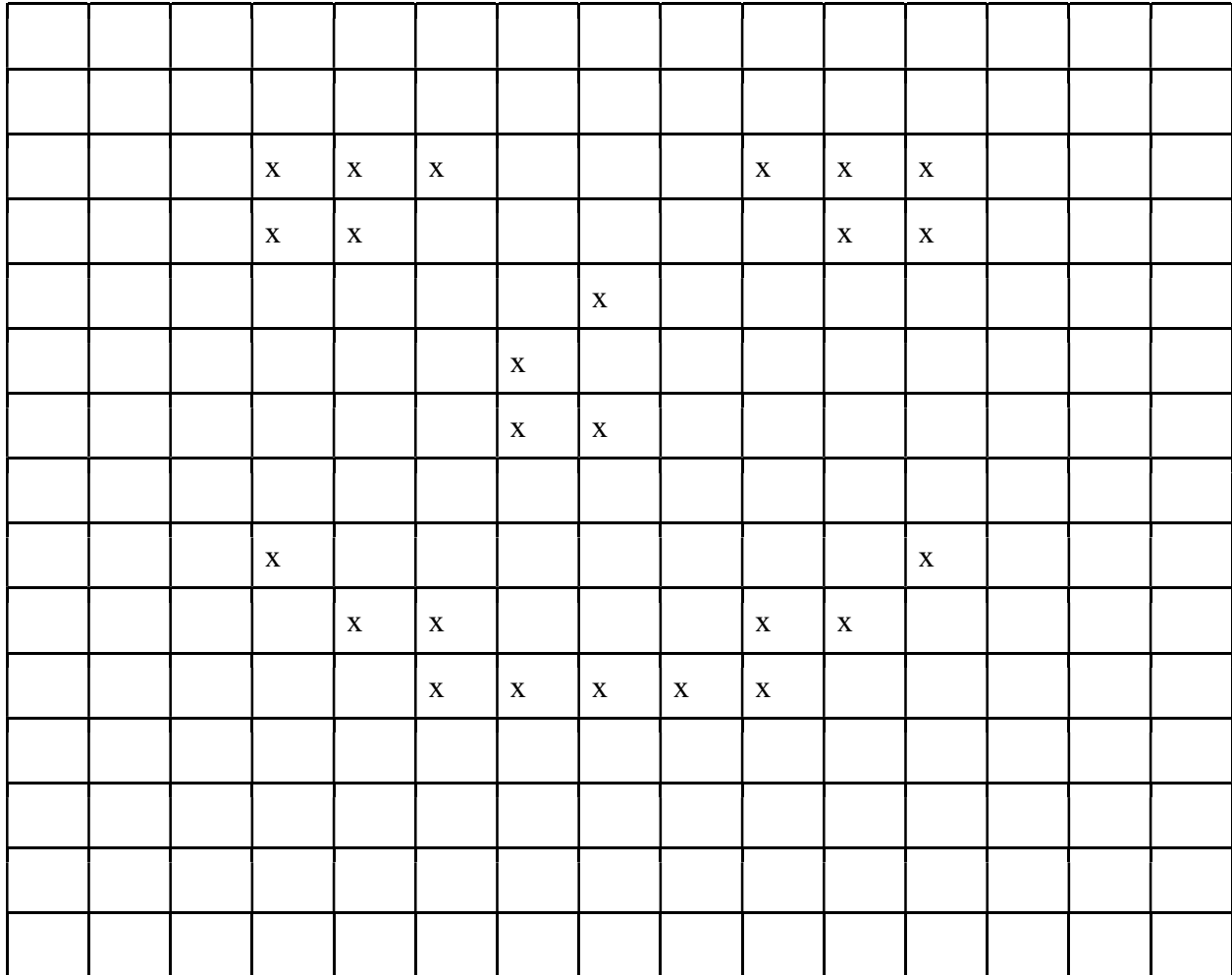
Very good work. 100 points

50 points   FAVICON is 16x16 - 50
25 points   FAVICON is encoded in RGB using at least 12-bits-per-pixel - 25
25 points   FAVICON is a discernable image and not merely a pattern - 25