

ITMD 465/565 Assignment 3

Spring 2015 – 16% course grade

Objectives

- Utilize Web Sockets for continuous communication and describe the differences between socket and http protocols
- Utilize JavaScript as both a client and a server language through the Node.js framework for application development Explain the functionality and develop applications that use the HTML5 Local Storage API for making internet applications available when not connected to the internet

Instructions

- You are to build an express application that utilizes Jade templates and Express to create reusable web pages that enable clients to perform web socket communication to one another – by sharing text messages with one another.

Teen Connect has a social network for teenagers in high school. The organization has just completed its first expo – connecting teens with local businesses for internships. They found that during the event, most attendees had mobile phones but were having trouble exchanging phone numbers to connect with businesses. The social network is looking to augment its application (which is currently implemented on a node.js technology stack) with a real-time chat on its website, which can operate during events – they would like to implement their own technology, so that safety can be assured to its users. You will create a pilot of that technology for the company – demoing how easy it is to create such an application on a JavaScript stack.

Steps

- Create an express application using express generator
- Check your package.json is correct
- Add in the peer or socket.io modules and add the required code to start a socket server
- Modify the index route to produce a home page describing your service with a username form
- When the user submits the username form, they should be connected to your socket service
- Write client code that send and receives chat messages – all connected peers must receive the messages

Graduate Extension

- Must add a button that allows users to post a “thumbs up” to the chatroom.
- Create/modify a separate route (/users) that displays a list of all users logged in to the chat server

Graded

To obtain maximum grades:

- Build all functionality entirely in JavaScript
- Have no JavaScript errors in console during operation in both client and server

- Create a readme file explaining your submission

Submission

Put all of your code, and any additional files you create into a zip file named:

FIRSTNAME_LASTNAME_ANO_A3.zip and submit that on blackboard by the due date – May 3rd 11:59PM Chicago Time - March 28th 2014.

Late Policy

You will receive a 10% grade reduction per 24 hours your submission is late, starting from 1 minute after the deadline. Submissions after Wednesday 6th May will not be graded. **Last minute submissions lead to last minute problems – start and submit early! Since this is the final programming assignment for this class – no extensions are given.**