## Practice Questions – July 08, 2024

## 

### Question 1

Look at the following output:

A picture containing graphical user interface

Description automatically generated

**Figure 1**

When use enters name and age. A function “**makeObj()**” is called which makes an object by using a “constructor” function “**User()**” after getting the values from both Name and age fields.

You need to apply necessary style to the form to give it a look as near as possible to the figure above. **[Don’t worry about the styling of buttons, as these are coming from Skeleton CSS that is there in the head section]**

* You need to write two functions, makeObj() and displayObj() and call them respectively on each button’s click event.
* You need to write a constructor function User() that may accept two parameters “n” and “a”. The constructor function uses this n and a to construct a user object and sets up the values inside its own variables. [remember this.name = n; that we did with constructor function]
* **BONUS PART: Can you add multiple user objects every time makeObj() is called and use displayObj() to print all of them together.**

### Question 2

For this part see the json file “users.json” and use this to solve it.

Look at the following:

Graphical user interface, text

Description automatically generated

You need to write a function “showJSON()” and attach it with the click of but “Show Json” and it reads the json file from the data folder and displays the record like above picture.

Use XMLHttpRequest to achieve this asynchronously.

### Question 3

Determine MIME type from filename extension.

Web browsers and servers exchange streams of bytes, which must be interpreted by the receiver based on their type. For example, an HTML web page is plain text, while a JPG image is a binary sequence.

The Content-Type header contains information about a resource's MIME type.

The MIME type is made-up of a `type` and a `subtype` separated by a `/` character.

The type is general, for example, 'text' or 'video'. The subtype is more specific, indicating the specific type of text, image, video, etc.

A number of common types are used in web development:

- mimeFromFilename('/User/Documents/readme.txt') ===> returns 'text/plain'

Your mimeFromFilename() function should support all of the following extensions with and without the leading '.':

- .html, .htm ===> text/html

- .css ===> text/css

- .js ===> text/javascript

- .jpg, .jpeg ===> image/jpeg

- .gif ===> image/gif

- .bmp ===> image/bmp

- .ico, .cur ===> image/x-icon

- .png ===> image/png

- .svg ===> image/svg+xml

- .webp ===> image/webp

- .mp3 ===> audio/mp3

- .wav ===> audio/wav

- .mp4 ===> video/mp4

- .webm ===> video/webm

- .json ===> application/json

- .mpeg ===> video/mpeg

- .csv ===> text/csv

- .ttf ===> font/ttf

- .woff ===> font/woff

- .zip ===> application/zip

- .avi ===> video/x-msvideo

NOTE: any other extension should use the `application/octet-stream` MIME type, to indicate that it is an unknown stream of bytes (e.g., binary file). You should also use `application/octet-stream` if the file has no extension.

Consider the following screenshot:

Graphical user interface

Description automatically generated

When user has entered “style.css” the “text/css” is displayed as per requirements above.

Here are the general requirements:

* Just check if user has left the textbox empty, display a message in place of “text/css”, that please enter a valid file name.