7.A | ✳️ Assignment 7: Show and Tell Collection

No unread replies.No replies.

Estimated time: up to 4 hours

INSTRUCTIONS

Create a list displaying a collection of items with conditional formatting.

Select an item that you collect or would like to collect (baseball cards, European high-performance cars, Power Ranger figures; it can literally be anything). Create an POJO (plain old javascript object) that represents one unit of that collection. For example, if I was selecting retro video game consoles, my first POJO would look like this:

{

name: "Nintendo Entertainment System",

nickname: "NES",

manufacturer: "Nintendo"

activeYears: [1983, 1990],

description: "Released July 15, 1983, the Nintendo Entertainment System (NES) is an 8-bit video game console released by Nintendo in North America, South America, Europe, Asia, Oceania and Africa and was Nintendo's first home video game console released outside Japan. In Japan, it is known as the "Family Computer" (or "Famicom", as it is commonly abbreviated)."

}

For this assignment, your collection object should have 3 to 5 properties. Create an array of exactly 5 of these objects and include this array as one of the properties in your Vue data object.

// Note: this is the new Vue 3 way

const { createApp } = Vue;

createApp({

data(){

return {  
 consoles: [

{...}, // this would be the NES object

{...}, // and this might be the N64

// and so on

]  
 }

}

}).mount("#app");

Use the array you just made to create a list of your collection using **v-for** to render each item as one row of you list. You are not constrained to using a table for you html; you may use div or some combination of un-ordered lists and divs. Each row should display at least 4 properties from you collection objects. The values of each property will make up the columns in your list.

You should make an appropriate row with column headings as well as an appropriate page heading for the collection in general.

**Additional requirements:**

Use conditional class bindings to alter one set of rows from the rest. This could be as simple as make every other row darker or displaying a special styling some subset in your collection. (For example, Nintendo consoles may have a Nintendo logo applied via CSS, or the most valuable console may use a CSS class to impose two dollar signs to its row). If you do something other than odd and even rows, please indicate with an explanation (perhaps in the form of a legend) somewhere on your page.

**Future consideration:**

This project will serve as the base for next week’s assignment where we learn to add new items to and delete items from your collection. Keep that in mind as you choose your content. I would recommend something you really are interested in.

**Rubric:**

* Following instruction: up to 5 points
* (Non-Vue) Javascript code and syntax: up to 5 points
* Appropriate creation and placement of your collection array on the Vue data object: up to 5 points
* Displaying each item of your collection using v-for directive: up to 10 points
* Conditionally applying CSS styles or classes on specific rows (the subset of your collection as mentioned above): Up to 10 points
* Overall design of page: up to 5 points

TURN IT IN

When you have finished, commit your html and js to github (or a similar repository of version controlled code), upload your code to your web server, test it, and then reply to this post. Include a link to both the (public) github repository and your uploaded webpage.

Functionality demo

I expect more design and polish that what I put in this demonstration

<https://youtu.be/mLhjNydTvH4>

8.A | ✳️ Assignment 8: Adding and Deleting Items from Your Collection Site

No unread replies.No replies.

INSTRUCTIONS

If you successfully completed your previous assignment, you should have a collection of items displayed as a list. If you were unable to complete your previous assignment, you can use the attached zip file as a starting point.

In this installment of the multipart assignment, you will introduce a form that will allow users to create new instances of your collected items. You will also introduce a delete button.

See requirements below:

* A multiple element form
* At least one input is a text input that has a simple validation that there is text in the input.
* A submit button that will trigger a method that will collect form data to create a new object and push that object into the collection array.
* Each collection item should have a button that trigger a method that removes the associated item from the collection array.

Your assignment will be graded upon:

* Required elements function as described
* Javascript is well formed and follows correct syntax
* Demonstration of understanding of data-binding to form elements
* Demonstration of understanding of event handling

Each grading criteria is worth 10 points

Note: Please don't forget to use good design. My demos are meant to show how to make things functional—I'm leaving the design up to you.

<https://youtu.be/CMCjdxl8D9U>

TURN IT IN

When you've finished, upload your html and javascript to your MCAD server, push your code to github, and reply to this post. Include links to your github repo and to your MCAD url.

9.A | ✳️ Assignment: Componentizing Your Collection

No unread replies.No replies.

Estimated time: ~ 1-3 hours (rough estimate)

INSTRUCTIONS

Recreate your collection using the Vue CLI/Build tools.

Convert "row" element into a component.

In your last assignment, you modified your collection app to allow you to add and delete items. This week, we will optimize it by converting the repeated element into a component. Use a single object property or multiple properties to pass the data from your objects in the array into the new component.

**Be sure to use 'reactive' and $emit to ensure your delete button will still work.**

TURN IT IN

When you have completed the conversion, run `npm run build`. In the dist folder, remove the leading slashes from the index.html's urls and upload the contents of the dist folder to your studio server. Post a link to your working collection page as well as your git repository in your reply to this discussion.

<https://youtu.be/FFuRICr00zk>

10.A | ✳️ Assignment 10: SPA Collection

No unread replies.No replies.

Description

You may build off the existing collection project you have been working on or use a different list of *things*. Convert this list into a json file. On your existing collection page or the new list of items you've created, create a router link to a detail page for that single item. Feel free to go into as much or as little detail as you would like with this.

This could also be a portfolio app so don't feel restrained by the existing collection project.

Requirements

* Use createWebHashHistory for your history type
* Your list of *things* should be considered your *home* page. Create a Home.vue view for it.
* User the */route/:param* approach for your detail pages.
* Each detail page should have a link to return home.

Turn it in

Run `npm run build` and upload the contents of your dist folder to your web server. When you have completed the project, post a link to your working URL as well as your git repository in your reply to this discussion.

# 11.A | ✳️ Themes of Computational Aesthetics

No unread replies.No replies.

## INSTRUCTIONS

This assignment will allow to apply some of the themes from Form and Code to real programs.

* Choose a theme proposed in Form and Code (Repeat Transform Parameterize Visualize or Simulate).
* Make 3 distinct p5.js sketches that attempt to showcase that theme.
* When you're making the sketches, add in your index.html page an <h1> tag that displays which theme you are working on.

In your post be sure to discuss your creation:

* Which theme did you pick? Why? What drew you to that theme in particular?
* What p5.js tools did you use to make that theme happen?
* If you had more time, what else would you make?

Here are some pretty [amazing examplesLinks to an external site.](https://tylerxhobbs.com/fidenza) by [TYLER HOBBSLinks to an external site.](https://tylerxhobbs.com/). It is pretty clear these could easily be representative of **Repeat** or even **Transform**. These are pretty amazing, but I'd like you to push yourselves and see what you can do.

## TURN IT IN

* Build the sketch on your local computer.
* Commit your sketch to Github
* Upload it to your mcad server.
* Post links to your MCAD url and Github repo here.

12.A | ✳️ Digital Instrument

No unread replies.No replies.

The purpose of this assignment is to explore creative approaches to making digital "music".

INSTRUCTIONS

* Make a p5.js sketch that behaves like a musical instrument.
* Your sketch must incorporate the p5.js audio library extension.
* Your sketch must also react to some form of user input, i.e. it can't just play audio automatically.

Think back to this week's readings about what's possible with digital audio –– what makes a digital instrument different from an analog one?

You may also wish to link the sound portion of your sketch to a visual representation of some kind.

TURN IT IN

Post a link to your completed sketch and your Github repo and reply to this post.

13.A | ✳️ Natural Emulation

No unread replies.No replies.

The purpose of this assignment is to explore methods for emulating natural phenomena in code

INSTRUCTIONS

Build a p5.js sketch that emulates a natural process. This natural process can be any changing process you're interested by –– Wind Motions, Falling Water, Hot Lava, Macaroni Boiling etc. It may be helpful to pick something that you can feasibly execute. Some very smart coders work on modeling natural stuff so don't be discouraged if you're not able to make hyper-realistic water flow.

TURN IT IN

Post a link to your completed sketch in your reply to this post.

15 | ✳️ Final Assignment

No unread replies.No replies.

Description

Select a project (exercise or assignment) that has really interested you or made you wish you had more time to complete. This may also be a combination of an assignment and some external idea or another assignment.  Or it may have the barest thread of relation to an assignment we’ve done this semester and mostly is an original idea. The idea is to experiment with variation, and synthesis of something your familiar with and something else. Here are some examples of possible ideas (disclaimer: I am just thinking of these now; no one has actually proven these ideas work):

* Using the ideas from our RESTful API assignment and p5.js, you create an interface that visualizes this week’s weather. It provides more specific details about each day as we click or hover over them.
* You take the radial art assignment and convert it to use the data from an mp3 to provide variable changes. (Once again, I’m not 100% sure how that would work.)
* You make a collection manager using Vue and components to display your portfolio.
* You create a matching game to teach kids how to treat those with disabilities.

Of course, the best idea is the one you’ll think of.

Some *very* important things to keep in mind:

* **All project are due 11:59pm (CST), May 10th**
* You will only have one dedicated week of work time to complete this. You must make good use of your time and not over commit. (A good rule of thumb is to estimate what time you think it will take and double it to compensate for the unknowns).
* I can not accept any late Final Projects — your project will receive 0 points
* I want to know what you’re planning before Week 14. **Please either email me or arrange a meeting to discuss your assignment sometime during week 13**.

**Grading Rubric**

* **Concept and scope (33%)**: What is your idea? How can this project help you and/or other people? How appropriate is the amount of work you’re planning on doing for the amount of time you have? Did you communicate your plans to me and get my feedback?
* **JavaScript Functionality, Maintainability and Syntax  (33%)**: Does your code work? Are you using JavaScript correctly? Is it (your code) easy to read? Could another developer maintain your code?
* **Design and user experience (33%)**: Is your project a delight to use? Is the design appropriate for the content and behaviors your programming it to have? Does your interface compel me to use it?

Turn it in!

Commit your project to Github and upload it to the MCAD servers. Please reply in this discussion with URLs for both.