

PRACTICE

The following are the instruction for your practice to prepare for the final exam. There is NO WAY DOES THIS PRACTICE COMPREHENSIVELY REPRESENT THE TOPICS/FEATURE THAT WILL APPEAR IN YOUR FINAL EXAM.

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You will receive ZERO mark if:

1. You were found cheating, collaborating, or getting advice from other people
2. You did not submit the file in zip format
3. Ask the instructor how to solve a certain problem in the code
4. You did not return the exam paper to the instructor
5. You did not submit your exam, or the submission do not contain any file, or the submission file cannot be opened by the instructor (make sure to try to open the zip file before submitting your exam)
6. The code does not run when tested using Chrome web browser by the instructor
7. Your JavaScript code produce an error message at the console (make sure to comment the code that do not work)
8. You were found to have shared the practice material (instruction and code) to others by email, internet or social media

Submission Instruction

1. Create a separate folder for each part of the practice, i.e., part1 and part2
2. The CSS and JavaScript files created need to be saved in their respective folder
3. Zip both part1 and part2 folder and name it as practice_LastName_XXXXX.zip (XXXXX is the last five digit of your student ID)

You will receive mark reduction if:

1. You did not follow the submission instruction
2. You did not conform to the coding standard, i.e., indentation, comments, etc, as shown and used in class and lab

The following are some of the **common methods** that you may find useful to create the solution: *addEventListener(event, function)*, *checkValidity(element)*, *getElementById(id)*, *createElement(element)*, *setAttribute(attribute, value)*, *createTextNode(string)*, and *append(node)*

PART 1A (15 marks)

Create the following dynamic page such that the table content and image will respond to the event handler (listener) when a radio button is clicked (or the page is loaded). The table is created in HTML. In creating the solution, you can choose any of the options available for each task as listed below. Your mark for each task depends on the option you choose.

Task	Feature Options	Mark
1.	An HTML page displaying the table and the original image.	5
2.	a. The radio buttons were coded in HTML.	2
	b. The radio buttons were added using JavaScript event handler (body onload).	4
	c. The radio buttons were added using JavaScript's addEventListener method.	5
3.	a. The JavaScript code to change the image was implemented using event handler from each radio button.	3
	b. The JavaScript code to change the image was implemented using addEventListener method.	5

The page displayed when it is loaded by the browser

FIFA 2018 WORLD CUP Quarter-Finals Countries

Click on the radio button to view the flag

☐ Belgium

☐ Brazil

☐ Croatia

☐ England

☐ France

☐ Russia

☐ Sweden

☐ Uruguay



Sources:
<https://www.fifa.com/worldcup/>
<https://www.countryflags.com>

The page after the Croatia radio button was clicked

FIFA 2018 WORLDCUP Quarter-Finals Countries

Click on the radio button to view the flag

- ☐ Belgium
- ☐ Brazil
- ☒ Croatia
- ☐ England
- ☐ France
- ☐ Russia
- ☐ Sweden
- ☐ Uruguay

When a user selects a country, the flag should change accordingly.



Sources:

<https://www.fifa.com/worldcup/>

<https://www.countryflags.com>

PART 1B (15 marks)

Please the provided template files and write the JavaScript code in their corresponding file such that a user can choose the smiley to be drawn in the provided container (see Figure 1 until 3).

Requirement

1. DO NOT MODIFY THE HTML FILE
2. DO NOT MODIFY THE CONTENT OF CSS FILE. You should rename your css file into style_ABcXXXXX.css (with ABcXXXXX follow the lab naming convention)
3. Rename the initialize.js into initialize_ABcXXXXX.js and rename draw_smile.js into draw_smile_ABcXXXXX.js.
4. Write JavaScript statements and function in the initialize_ABcXXXXX.js file such that when the page is being loaded, your page will look like Figure 1. YOU MUST USE event listener.
5. Write JavaScript even listener statements and function in the draw_smile_ABcXXXXX.js such that when the user select the Smiley 1, your page will look like Figure 2; and when the user select the Smiley 2, your page will look like Figure 3. YOU MUST USE event listener for “change” event on the select input

Figure 1: The initial page when it was loaded by the browser

Select the pixelated image you want to see

Select one option ▼

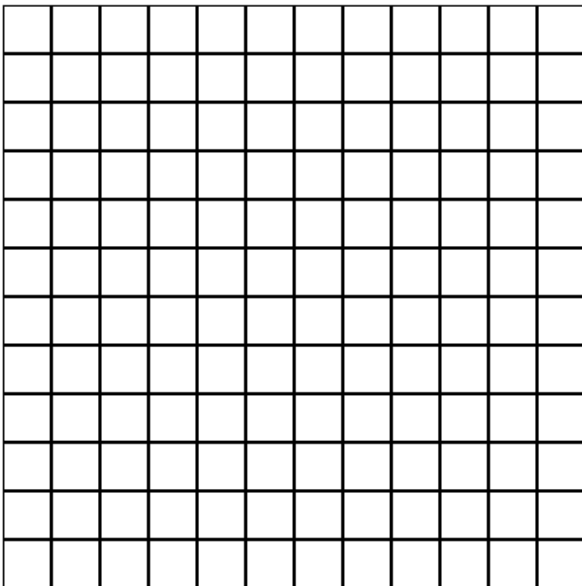


Figure 2: When Smiley 1 is selected

Select the pixelated image you want to see

Smiley 1 ▾

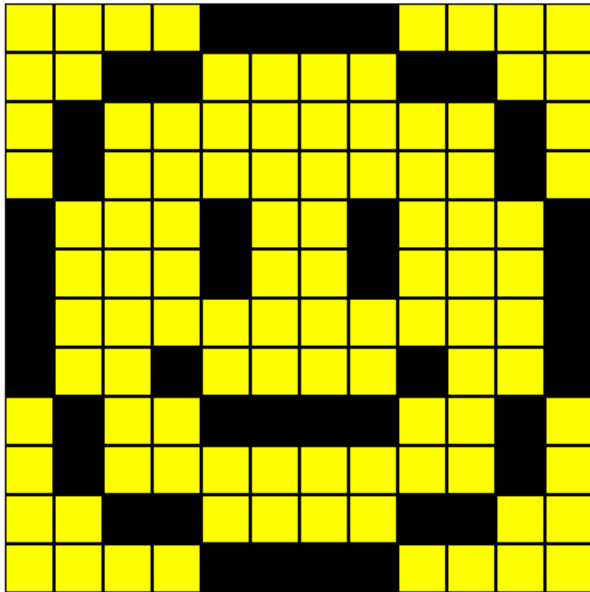
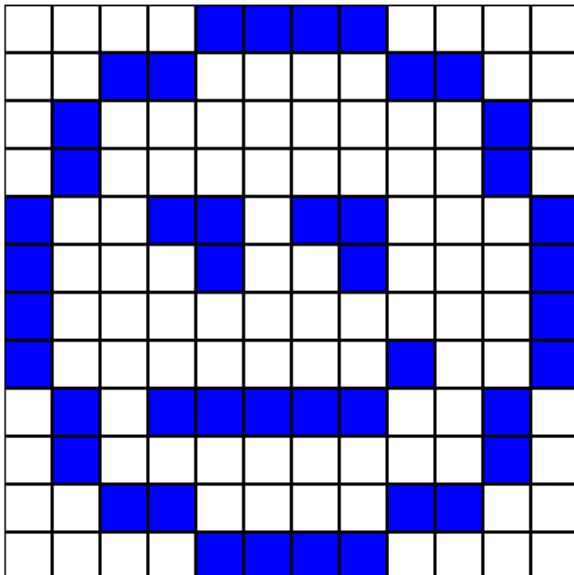


Figure 3: When Smiley 2 is selected

Select the pixelated image you want to see

Smiley 2 ▾



PART 2 (33 marks)

Create a feedback collection system using HTML, CSS and JavaScript. Your application must present a form to the user such that when the user clicks the Submit Feedback button, the feedback data that were validated beforehand will be collected and displayed in the second fieldset.

Note:

1. The Feedback select options are: *Awesome*, *Cool*, *Fun*, and *Not bad*.
2. The collected feedback is displayed within a div element inside the second fieldset

Your JavaScript code should be stored in separate files according to the concern related with the name of the file, e.g., initializePage.js, feedbackCollection.js (for class file), and formFunctions.js (for form related functions)

Task	Feature Options	Mark
1.	An HTML page displaying the form and the two fieldsets side by side.	5
2.	a. The Feedback select options were coded in HTML.	2
	b. The Feedback select options were added using JavaScript (event handler or listener).	5
3.	The form data was validated using a simple JavaScript constraint validation API that produces an alert window if any of the input were not entered.	3
4.	a. A class was defined to store the submitted feedback data. An array of objects of the feedback data was used to store and process all the feedback.	10
	b. The data was processed without using any user defined class.	5
5.	a. The div to display the collected feedback data was created using DOM's node creation methods. A function is declared and used to display the collected feedback data.	10
	b. The div to display the collected feedback were coded in HTML and no specific function was created to display the data.	5

The page displayed when it is loaded by the browser

Feedback input

Full Name

Course

☐ CSIS 1280

☐ CSIS 1175

☐ CSIS 2200

Feedback

Awesome

Submit Feedback

Feedback summary

When the button was clicked

Feedback input

Full Name

Simon

Course

☒ CSIS 1280

☐ CSIS 1175

☐ CSIS 2200

Feedback

Awesome

Submit Feedback

Feedback summary

Feedback List

1. **Simon** says that CSIS 1280 is Awesome

H2 and DIV elements

When a user enters all the required data and clicks the button

When the button was clicked but any of the input was empty

Feedback input

Full Name

Course

☐ CSIS 1280

☒ CSIS 1175

☐ CSIS 2200

Feedback

Awesome

Submit Feedback

This page says

Please enter all input correctly

OK

1. **Simon** says that CSIS 1280 is Awesome

The invalid data was not collected nor displayed

When a user does not enter all the required data but clicks the button

After three valid data were submitted

Feedback input

Full Name

Singh

Course

☐ CSIS 1280

☐ CSIS 1175

☒ CSIS 2200

Feedback

Not bad

Submit Feedback

Feedback summary

Feedback List

1. **Simon** says that CSIS 1280 is Awesome

2. **Paul** says that CSIS 1175 is Fun

3. **Singh** says that CSIS 2200 is Not bad