

# Lab: JAVASCRIPT

## Lab Overview

*This Lab consists of 2 JavaScript projects. You will find a folder for each with design mockups for mobile, desktop and active states, optimized images, a style guide and a starter index.html file with accompanying style.css file. Open these folders using VS Code to get started.*

While performing this lab, incorporate the principles and practices that you've learned from prior lessons in this course; for this Lab, be sure to consider:

- Proper [JavaScript Coding Conventions](#)
- Make good code comments, while also commenting only if needed
- Check the console often to make sure there are no js errors in the browser
- Leverage Google, Stack Overflow & other trusted resources to troubleshoot problems and aid in your learning

## Submission Instructions

Create a new feature branch in your TEKbootcamp repository. Commit and push frequently. When your work is done and ready for review, please merge the feature branch into the develop branch.

Following instructions for CodeGrade submission:

1. Click on the "Launch exercise" button on the exercise page at TEKsystems Academy.
2. In the new CodeGrade window, click on the "Connect Git" button.
3. Select GitHub as your Git host. Connect your TEKbootcamp repository to the exercise\*.

After selecting a repository, this repository will be cloned to CodeGrade as a first submission. After this, you can start to use Git like you usually would. Every time you push to the develop branch, it will automatically result in a new submission in CodeGrade. Pushes made after the submission deadline will not be taken into consideration.

\* You will only have to log in and authorize CodeGrade once; after that, it will be available for all your other assignments inside CodeGrade too.

**WARNING:** Be sure to connect the proper repository to the exercise. You will not be able to connect to another one immediately using the CodeGrade connection. You can undo your Git connection with CodeGrade by revoking access to the External Tool "CodeGrade" in your GitHub account only.

## Grading Expectations

A solution that meets all the requirements in this lab constitutes a grade of Proficient (3/5). To earn a higher grade, your solution must also apply the code quality concepts you've learned up to this point. Additional functionality that does not improve the quality of the code and only serves to make your assignment look more impressive will not help to raise your grade.

## Plagiarism Warning

This assignment is a demonstration of your understanding of the topics covered to-date in the boot camp. You may need to reference tutorials or Q&A sites such as StackOverflow to complete parts of the assignment. It is acceptable to use tutorials/Q&As to learn how to add specific functionality to your project, but you cannot simply copy a tutorial repository, follow a single tutorial from start to finish, or copy the code from a Q&A site to develop your application. See guidelines below for using tutorials:

- Do not fork a tutorial repository. This would be considered plagiarism and result in an automatic grade of zero and potential removal from the boot camp.
- Do not simply follow the tutorial from start to finish.
- Do not copy code from a Q&A site and then change it for your application (a few lines of code are permissible)
- You must be able to explain how all functionality included in your project works.
- List ALL tutorials or aids used, either in your README file, and/or as code comments. Include:
  - The name of the tutorial,
  - Which section(s) you used, and
  - The functionality you learned from the tutorial.
- Failure to identify tutorials/Q&A responses will result in significant reduction of your grade.
- If you work with other boot camp members – or instructional team members – to find solutions, that is acceptable, but must also be clearly identified

## Estimated Duration

Estimated duration for both exercises is 6-8 hours

## Resources

1. **JAVASCRIPT-Lab Resources** Zip File with the following folders inside:
  - a. Form Validation folder
  - b. Accordion folder

## Project 1: *Form Validation*

### Project Overview

- Your task is to build out the project to the designs inside the design folder.
- **Your users should be able to:**
  - Receive an error message when the `form` is submitted if:
    - Any `input` field is empty. The message for this error should say:
      - "[Field Name] cannot be empty."
    - The email address is not formatted correctly (i.e. a correct email address should have this structure: `name@host.tld`). The message for this error should say:
      - "Please enter a valid email address."
- **\*\*Pay attention to 'active-states' design to see how error messages should display.**

- *ALL scripts must be in an external js file you need to create and attached to index.html in the correct location.*

### Estimated Duration

Estimated duration for Form Validation Exercise is 3-4 hours

### Project Setup Instructions

Open the Form Validation Exercise folder In VSCode:

- As you complete a section of the *project*, push your code to your student repo frequently.
- Use the same setup guidelines for working html/css and javascript as Traversy provides in the Udemey courses.

### Exercise Notes:

- NO frameworks – example – can't use JQuery, Bootstrap nor Foundation etc
- **No console warnings in the browser**

## Project 2: *Accordion*

### Project Overview

- Your challenge is to build out this FAQ accordion card and get it looking as close to the design as possible.
- **Your users should be able to:**
  - Hide/Show the answer to a question when the question is clicked.
    - Have the hide/show 'slide' on toggle.
    - **NOTE** - The mockup design shows the one answer, but you will find all questions and answers provided to you as unformatted content in the starter index.html file found in the Accordion directory/folder.
- *ALL scripts must be in an external js file you need to create and attached to index.html in the correct location.*

### Estimated Duration

Estimated duration for the Accordion Exercise is 3-4 hours

### Project Setup Instructions

*Open the Accordion Exercise folder In VSCode:*

- As you complete a section of the project, push your code to your student repo frequently
- Use the same setup guidelines for working html/css and javascript as Traversy provides in the Udemy courses

### Exercise Notes:

- NO frameworks – example – can't use JQuery, Bootstrap nor Foundation etc.
- **No console warnings in the browser**