Instructor's Summary for *Murach's Modern JavaScript*

The instructor's materials for *Murach's Modern JavaScript* will help you run an effective course based on the book. This document summarizes the materials available to you and your students. In particular, the section titled *What's included in the instructor's materials* describes not just the instructor resources and how you can use them but also our underlying instructional philosophy.

In addition to the materials described in this document, we provide a downloadable Canvas course file that you can import into the Canvas LMS. This course file includes most of the materials described in this document after they have been imported into Canvas and organized into modules. So, if you use Canvas, this file makes it easy to start a new course based on our book. Like the instructor's materials themselves, you can download the Canvas course file from our instructor's website.

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What's included in the student download

To help your students get the most from our book, our website lets them download (1) the book apps, (2) the starting code for the exercises at the end of each chapter, and (3) the solutions to those exercises. Appendixes A (Windows) and B (macOS) show your students how to download and set up these materials on their own systems. These files are also included with the instructor's materials, so you don't have to download them separately.

Book apps

Once your students have downloaded the files for this book, they can run them to see how they work. They can review the complete code for every app, even when the book presents only highlights. And they can copy and paste code from the book apps into their own HTML, CSS, and JavaScript files.

Exercise starts

Each chapter in the book ends with exercises to help your students master the skills covered in the chapter. For each exercise, the students start from folders and files that contain some of the routine code that the exercise requires, including the HTML and CSS files. That way, your students get the most JavaScript practice in the least time. These exercise starts are stored starting in a top-level folder named *exercises.*

If you review the exercises, you'll see that they guide the students through the process of building a variety of web apps. These exercises also force the students to use all of the critical skills that are needed for website development. In fact, if your students can successfully do all of the exercises, they will be well on their way to a professional level of competence.

Exercise solutions

To help your students get over any learning obstacles when they're working on their own, the download also provides the solutions to the exercises. That way, students can check the solutions to see how something is done whenever they're wasting time on what is likely to be a trivial coding mistake.

We think that providing the solutions is the right approach didactically because it helps students learn faster and better. However, we realize that this makes it difficult for an instructor to use the book exercises to test their students. That's why the instructor's materials include over 30 additional projects and two case studies that can be used for testing purposes.

You can assign these additional projects and case studies to challenge and test your students. We only provide solutions to these assignments in the instructor's materials. As a result, these solutions are not available to your students unless you decide to make them available.

What's included in the instructor's materials

The instructor's materials for this book are designed to save you time in preparing and running an effective course based on the text so that your students gain the JavaScript skills they'll need on the job. Besides the materials in the student download, we also provide instructional objectives, test banks, PowerPoint slides, a second set of chapter exercises, short exercises for quizzes or tests, and case studies. A summary of these materials follows.

The student download

These are the same materials that your students can download from our website. We've included them in the instructor's materials so that you can easily demonstrate and review the book examples and exercise solutions in class, without having to download them separately.

Objectives

We believe that instructional objectives should be the start of any educational methodology, so we provide objectives for each chapter in the book. We developed these based on the principles presented in Robert F. Mager's classic book, *Preparing Instructional Objectives*. As a result, our objectives describe the skills that your students should have when they complete a chapter, and you should be able to test whether they have those skills.

Beyond that, we've tried to make sure that each objective describes a skill that a professional programmer should have. This gives our objectives a real-world context. So, if your students can do what the objectives state when the course is over, you can be sure that they have learned the skills that they will actually need on the job.

If you review the objectives for one of the chapters, you'll see that they begin with *applied objectives* that ask the students to apply what they've learned. These are the critical objectives of a programming course, and they are best tested by having the students do exercises like the ones that we provide.

After the applied objectives, you'll find *knowledge objectives* that define skills like identifying, describing, and explaining concepts, terms, and procedures. These objectives determine whether your students are able to talk intelligently about the topics that are presented, and they are best tested by the questions in our test banks.

Test banks

To provide a way for you to test comprehension, we have created one test bank for each chapter. We provide these test banks in multiple formats, and they can be imported into most learning management systems including Canvas, Blackboard, and D2L.

Each test bank provides questions that are designed to test the skills described by the objectives for that chapter, and each test question is designed to test the skill described by one objective. This keeps the promise to the students that they will only be expected to have the skills that are described by the objectives.

In our test banks, we use only multiple-choice test questions because they are the easiest to score and have the highest validity. To us, that means that the students who get the best scores are also the ones with the best knowledge and skills. By contrast, matching and true/false questions have low validity, so we don't use them.

Projects

To give your students practice and to test whether they can develop their own apps, the instructor's materials include over 30 projects. For each chapter, the projects range from simple to complex so you can assign the ones that are appropriate for your students. If your students can do the more difficult projects for each chapter, that's proof that they're developing the skills that are needed on the job.

The instructor's materials also include any starting files that are needed for the projects as well as the project solutions. That way, you can demonstrate the projects in class. You can also show the code for the solutions, which is likely to be written in a way that is more professional than the solutions that the students develop.

Case studies

To provide a more extensive way to test the programming skills of your students, the instructor's materials also include two case studies. Each case study asks your students to develop an app and then improve it as they progress through your course.

The instructor's materials include a Word document that describes each case study. In addition, they provide a starting point for each case study as well as solutions for each assignment.

If you want to make a case study easier or more difficult for your students, you can modify the Word document that you give them. For example, you can provide more information or starting code to make a case study easier, or you can add requirements to make it more difficult. You can also add or remove specific requirements for an assignment depending on which chapters your students have read.

PowerPoint slides

The PowerPoint slides present all of the critical information from the figures in the book. That includes all of the screen shots, diagrams, tables, and code that you may want to review in class. As a result, these slides make it easy for you to review any of the skills that your students may have difficulty with. In addition, the slides for each chapter start with the instructional objectives so you can review them in class.

How to get started

Once you have an instructor account at www.murachforinstructors.com, you can request the instructor's materials for this book and download its zip file from your account page. Then, you can unzip the materials and store them on your computer as described below.

Once you've unzipped the instructor's materials, you can review them. In particular, we recommend running some of the book scripts as well as some of the solutions for the exercises to see the level of competence that our book develops. We also recommend clicking through some of the PowerPoint slides to see how they can help you review and reinforce the information that's presented in the book. To help you find what you're looking for, the entire file structure for the instructor's materials is shown on the next page.

How to use the zip file

1. Download the zip file for the instructor's materials from your Murach instructor's account page.
2. Double-click on the zip file to unzip it. This creates the javascript folder.
3. Create a folder named murach in your Documents folder.
4. Move the javascript folder into the murach folder so all the files are in a folder that starts with:

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Documents/murach/javascript
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The student files

javascript/student_download	Contents
book_apps	The apps presented in this book.
exercises	The starting points for the exercises that are at the end of each chapter.
Solutions	The solutions to the exercises.

The instructor files

javascript/instructors	Contents
Objectives.docx Objectives.pdf	Word and PDF files for the instructional objectives for all chapters.
case_studies	Word files for the specifications for the case studies.
case_studies/starts	The starting points for the case studies that you can distribute to your students.
case_studies/solutions	The solutions to the case studies.
projects	Word files for the specifications for the projects.
projects/starts	The starting points for the projects that you can distribute to your students.
projects/solutions	The solutions to the projects.
slides	PowerPoint slides for each chapter.
test_banks	One test bank of multiple-choice questions for each chapter, in various formats.

Any comments?

If you have any comments about our book or its instructional materials, we would love to hear from you. Your feedback helps us improve each new book we write, so that we can provide you with better materials for your classes.

If you discover any errors in our apps or exercise solutions, we would appreciate hearing about them so that we can post a correction as soon as possible. And if you want to let us know that you're going to adopt our book for your course, that would make our day.

To get in touch, just email us at either of the addresses below. But whether or not we hear from you, we want to thank you in advance for your interest in our book.

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