Schedule

A week-by-week breakdown of the material.

Week 1 (01/05-01/09)

- Day 1
 - History of Javascript¹
 - Components of a Web Page²
 - How to run Javascript³
 - Numbers in Javascript⁴
 - Assignment 1⁵
- Day 2
 - Local and Global Variables⁶
 - Basics of Arrays⁷
 - Assignment 2⁸
- Day 3
 - Basics of Objects⁹
 - Strings and Regular Expressions¹⁰
- Day 4
 - Function basics¹¹
 - Assignment 3¹²
 - Basics of Version Control¹³
 - Git basics¹⁴
 - Review of Git commands¹⁵

¹notes/history.html

²notes/page_components.html

³notes/how_to_run.html

⁴notes/numbers.html

⁵assignments/1.html

⁶notes/local_vs_global.html

⁷notes/array_basics.html

⁸assignments/2.html

⁹notes/object_basics.html

¹⁰notes/strings_and_re.html

¹¹notes/functions_basic.html

¹²assignments/3.html

¹³notes/git_version_control.html

¹⁴notes/git_basics.html

¹⁵notes/git_commands_review.html

Week 2 (01/12-01/16)

- Day 1
 - GitHub basics¹⁶
 - Remotes and Branches¹⁷
 - GitHub Workflow¹⁸
 - Overall Project Workflow¹⁹
 - Lab 1: Getting used to the basics²⁰
- Day 2
 - Functions as values²¹
 - Functions as closures²²
 - Assignment 4²³
- Day 3
 - Functions as a means for creating a scope/context²⁴
 - Array Collection methods²⁵
 - Assignment 5²⁶
- Day 4
 - Function Usage Patterns²⁷
 - Methods in objects and the need for this 28
 - Function call forms and the value of this ²⁹

Week 3 (01/19-01/23)

- Day 1
 - Object creation forms. Prototypes³⁰
 - Assignment 6³¹

¹⁶notes/github_basics.html

¹⁷notes/git_remotes_branches.html

¹⁸notes/github_workflow.html

¹⁹notes/project_workflow.html

²⁰labs/1.html

²¹notes/function_values.html

²²notes/function_closures.html

²³assignments/4.html

²⁴notes/functions_for_scope.html

²⁵notes/array_collection_methods.html

²⁶assignments/5.html

²⁷notes/function_usage_patterns.html

²⁸notes/object_methods.html

²⁹notes/function calls and this.html

³⁰notes/object_creation_prototypes.html

³¹assignments/6.html

- Writing tests³²
- Lab 2: Node, Testing³³
- Different stack implementations³⁴
- Introduction to the concept of Design Patterns³⁵
- Day 2
 - Creation Patterns: Constructor³⁶
 - Creation Patterns: Singleton³⁷
 - Creation Patterns: Mixins³⁸
 - Assignment 7³⁹
- Day 3
 - Introduction to the DOM (Document Object Model)⁴⁰
 - Manipulating the DOM tree⁴¹
 - Assignment 8⁴²
- Day 4
 - Data Structures in Javascript⁴³
 - Lab 3: Union/Find, Sets⁴⁴

Week 4 (01/26-01/30)

- Day 1
 - Introduction to DOM Events⁴⁵
 - Bubbling of Events⁴⁶
 - Assignment 9⁴⁷
- Day 2
 - Timers⁴⁸

³²notes/test_writing.html

³³labs/2.html

³⁴notes/stack_various.html

³⁵notes/design_patterns.html

³⁶notes/pattern_constructor.html

³⁷notes/pattern_singleton.html

³⁸notes/pattern_mixin.html

³⁹assignments/7.html

⁴⁰notes/dom_intro.html

⁴¹notes/dom_tree.html

⁴²assignments/8.html

⁴³notes/data_structures.html

⁴⁴labs/3.html

⁴⁵notes/event_intro.html

⁴⁶notes/event_bubbling.html

⁴⁷assignments/9.html

⁴⁸notes/event_timers.html

- Function idiom: Throttling⁴⁹
- Assignment 10⁵⁰
- Day 3
 - A custom Event module⁵¹
- Day 4
 - Lab 4: Starting on a TODOapp⁵²

Week 5 (02/02-02/06)

- Day 1
 - Behavioral Patterns: Observer⁵³
 - Behavioral Patterns: Publish/Subscribe⁵⁴
- Day 2
 - Implementation of Publish/Subscribe⁵⁵
 - Behavioral Patterns: Mediator⁵⁶
 - Assignment 11⁵⁷
- Day 3
 - Introduction to jQuery⁵⁸
- Day 4
 - Lab 5: Continued work on TODOapp⁵⁹

Week 6 (02/09-02/13)

- Day 1
 - Architectural Patterns: Model-View-Controller⁶⁰
- Day 2

⁴⁹notes/function throttling.html

⁵⁰assignments/10.html

⁵¹notes/event_custom.html

⁵²labs/4.html

⁵³notes/pattern_observer.html

⁵⁴notes/pattern_pubsub.html

⁵⁵notes/pubsub_implementation.html

⁵⁶notes/pattern_mediator.html

⁵⁷assignments/11.html

⁵⁸notes/jquery_intro.html

⁵⁹labs/5.html

⁶⁰notes/pattern_mvc.html

- Implementing a basic MVC⁶¹
- Day 3
 - Introduction to Backbone⁶²
 - Assignment 12⁶³
- Day 4
 - Lab 6: Incorporating MVC in TODOapp⁶⁴

Week 7 (02/16-02/20)

- Day 1
 - Introduction to XMLHttpRequest⁶⁵
- Day 2
 - Ajax via jQuery⁶⁶
- Day 3
- Day 4
 - Lab 7: Introducing data persistence in TODOapp⁶⁷

Week 8 (02/23-02/27)

BREAK

Week 9 (03/02-03/06)

- Day 1
 - Testing with Stubs, Mocks and Spies⁶⁸
- Day 2
 - Module Patterns: Node modules⁶⁹
- Day 3

⁶¹notes/mvc_implement.html

⁶² notes/backbone.html

⁶³assignments/12.html

⁶⁴labs/6.html

⁶⁵notes/xhr_intro.html

⁶⁶notes/xhr_jquery.html

⁶⁷labs/7.html

⁶⁸notes/test_stubs.html

⁶⁹notes/pattern_module.html

- Module Patterns: AMD modules⁷⁰
- Day 4
 - Project proposals

Week 10 (03/09-03/13)

- Day 1
 - Project structure⁷¹
- Day 2
 - Survey of HTML elements⁷²
- Day 3
 - Survey of CSS features⁷³
- Day 4
 - Lab 8:⁷⁴

Week 11 (03/16-03/20)

- Day 1
 - Using Templates: Handlebars⁷⁵
- Day 2
 - Deeper look into Javascript objects⁷⁶
- Day 3
 - Structural Patterns: Facade⁷⁷
 - Structural Patterns: Proxy⁷⁸
- Day 4
 - Work on project

⁷⁰notes/pattern_amd.html

⁷¹ notes/project.html

⁷²notes/html_survey.html

⁷³notes/css_survey.html

⁷⁴labs/8.html

⁷⁵notes/templates.html

⁷⁶notes/object_deeper.html

⁷⁷notes/pattern_facade.html

⁷⁸notes/pattern_proxy.html

Week 12 (03/23-03/27)

- Day 1
 - Introduction to Promises⁷⁹
- Day 2
 - More advanced testing
- Day 3
 - More advanced testing
- Day 4
 - First project submission

Week 13 (03/30-04/03)

- Day 1
- Day 2
- Day 3
- Day 4

Week 14 (04/06-04/10)

- Day 1
- Day 2
- Day 3
- Day 4

⁷⁹notes/promises.html