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
- Day 4
 - Array Collection methods²⁵
 - Function Usage Patterns²⁶
 - Assignment 5²⁷

Week 3 (01/19-01/23)

- Day 1
 - Lab 2: Writing Tests²⁸
- Day 2
 - Methods in objects and the need for this²⁹
 - Function call forms and the value of this 30

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

²⁶notes/function_usage_patterns.html

²⁷assignments/5.html

²⁸labs/2.html

²⁹notes/object_methods.html

³⁰notes/function calls and this.html

- Day 3
 - Object creation and prototypes³¹
 - Different stack implementations³²
 - Assignment 6³³
- Day 4
 - Object properties³⁴

Week 4 (01/26-01/30)

- Day 1
 - Survey of HTML³⁵
 - EVERYTHING BELOW IS WORK IN PROGRESS
 - Introduction to the DOM (Document Object Model)³⁶
 - Manipulating the DOM tree³⁷
- Day 2
 - Introduction to DOM Events³⁸
 - Bubbling of Events³⁹
- Day 3
 - Introduction to jQuery⁴⁰
- Day 4
 - Assignment 7⁴¹
 - Assignment 8⁴²
 - Lab 3: Union/Find, Sets⁴³
 - Assignment 9⁴⁴
 - Timers⁴⁵
 - Function idiom: Throttling⁴⁶

³¹notes/object creation prototypes.html

³²notes/stack_various.html

³³assignments/6.html

³⁴notes/object_properties.html

³⁵notes/html_survey.html

³⁶notes/dom_intro.html

³⁷notes/dom_tree.html

³⁸notes/event_intro.html

³⁹notes/event_bubbling.html

⁴⁰ notes/jquery_intro.html

⁴¹assignments/7.html

⁴²assignments/8.html

⁴³ labs/3.html

⁴⁴assignments/9.html

⁴⁵notes/event_timers.html

⁴⁶notes/function_throttling.html

- Assignment 10⁴⁷
- A custom Event module⁴⁸
- Lab 4: Starting on a TODOapp⁴⁹

Week 5 (02/02-02/06)

- Day 1
 - Introduction to the concept of Design Patterns⁵⁰
 - Creation Patterns: Constructor⁵¹
 - Creation Patterns: Singleton⁵²
 - Creation Patterns: Mixins⁵³
 - Data Structures in Javascript⁵⁴
 - Behavioral Patterns: Observer⁵⁵
 - Behavioral Patterns: Publish/Subscribe⁵⁶
- Day 2
 - Implementation of Publish/Subscribe⁵⁷
 - Behavioral Patterns: Mediator⁵⁸
 - Assignment 11⁵⁹
- Day 3
- Day 4
 - Lab 5: Continued work on TODOapp⁶⁰

Week 6 (02/09-02/13)

- Day 1
 - Architectural Patterns: Model-View-Controller⁶¹
- Day 2
 - Implementing a basic MVC⁶²

⁴⁷assignments/10.html

⁴⁸notes/event custom.html

⁴⁹labs/4.html

⁵⁰notes/design_patterns.html

⁵¹notes/pattern_constructor.html

⁵²notes/pattern_singleton.html

⁵³notes/pattern_mixin.html

⁵⁴notes/data_structures.html

⁵⁵notes/pattern_observer.html

⁵⁶notes/pattern_pubsub.html

⁵⁷notes/pubsub_implementation.html

⁵⁸notes/pattern_mediator.html

⁵⁹assignments/11.html

⁶⁰labs/5.html

⁶¹notes/pattern_mvc.html

⁶²notes/mvc_implement.html

- Day 3
 - Introduction to Backbone⁶³
 - Assignment 12⁶⁴
- Day 4
 - Lab 6: Incorporating MVC in TODOapp⁶⁵

Week 7 (02/16-02/20)

- Day 1
 - Introduction to XMLHttpRequest⁶⁶
- Day 2
 - Ajax via jQuery⁶⁷
- Day 3
- Day 4
 - Lab 7: Introducing data persistence in TODOapp⁶⁸

Week 8 (02/23-02/27)

BREAK

Week 9 (03/02-03/06)

- Day 1
 - Testing with Stubs, Mocks and Spies⁶⁹
- Day 2
 - Module Patterns: Node modules⁷⁰
- Day 3
 - Module Patterns: AMD modules⁷¹
- Day 4
 - Project proposals

⁶³notes/backbone.html

⁶⁴assignments/12.html

⁶⁵ labs/6.html

⁶⁶ notes/xhr_intro.html

⁶⁷notes/xhr_jquery.html

⁶⁸labs/7.html

⁶⁹notes/test_stubs.html

⁷⁰notes/pattern_module.html

⁷¹ notes/pattern_amd.html

Week 10 (03/09-03/13)

- Day 1
 - Project structure⁷²

Day 2

- 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

⁷²notes/project.html ⁷³notes/css_survey.html

⁷⁴labs/8.html

⁷⁵notes/templates.html

⁷⁶notes/object_deeper.html

⁷⁷ notes/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