**Block One: Introduction to The Web**

*In this first block, we're going to introduce basic programming concepts using HTML + CSS. This week is very hands-on and quite basic, acting as an introduction to website development and programming in general. Please complete all of the 'How to Make A Website' module by the end of this block (Sunday 28th January)*

Session One: Welcome to the course, overview of the course structure, overview of expectations from the course. Overview of the web, DNS and how a browser works Thu 11th Jan Tim

Session Two: Introduction to basic HTML + CSS. HTML semantics and best practices. What resources to use. How to use an editor properly - intro to Sublime Text / Atom. Tue 16th Jan Matt

Session Three: Interactive. First hour will be live coding up of a design. Second hour students will attempt to code it themselves. due Thu 18th Jan Bill

Session Four: Code Review - working with students to review their code. due Tue 23 Jan Matt

Session Five: Block One wrap-up session - HTML and CSS Q&A due Thu 25th Jan

1. How to Make A Website: Beginning HTML & CSS due Sun28th Jan
2. How to Make A Website: HTML First due Sun28th Jan
3. How to Make A Website: Sharing a Website due Sun28th Jan
4. How to Make A Website: How to debug HTML & CSS Issues due Sun28th Jan
5. How to Make A Website: Styling Web Pages and Navigation due Sun28th Jan
6. How to Make A Website: Customising Colours and Fonts due Sun28th Jan re-read
7. How to Make A Website: Responsive Web Design and Testing due Sun28th Jan
8. How to Make A Website: Adding Pages to a Website due Sun28th Jan
9. How to Make A Website: Creating HTML Content due Sun28th Jan

all done by 18th January

Creating HTML Content 9

CSS: Cascading Style Sheets not

Customizing Colors and Fonts 6

Styling Web Pages and Navigation 5

Adding Pages to a Website 8

Responsive Web Design and Testing 7

Sharing a Website 3

Debugging HTML and CSS Problems 4

**Block Two: Basic Programming Concepts**

*In this block, we're going to introduce more technical programming concepts using Ruby and introduce some of the fundamental concepts of the language in preparation for our first project. Please complete all of the 'Ruby Foundations' modules by the end of this block (Sunday 11th February)*

Session Six: Installation of a Ruby / Rails development environment on students laptops due Tue 30 Jan

Session Seven: First look at programming in Ruby - understanding the basics due 1st Feb

I’ve started watching the Ruby videos forBlock Two

Ruby Basics 2 on Tree house has: Ruby syntax, Objects, Strings, Numbers, If statements

Where can I find the other content - Methods, Arrays, Hashes etc. ?

Ruby Foundations: Strings due Sun 4th Feb

Ruby Foundations: Numbers due Sun 4th Feb

<https://teamtreehouse.com/library/ruby-collections>

Ruby Foundations: Methods due Sun 4th Feb

Ruby Foundations: Arrays due Sun 4th Feb

Ruby Foundations: Hashes due Sun 4th Feb

Ruby Foundations: Loops due Sun 4th Feb

<https://teamtreehouse.com/library/ruby-loops>

Session Eight: Diving deeper into Ruby, creating functions and understanding libraries Tue 6th Feb

Session Nine: Introduction to object oriented programming due Thu 8 Feb

Ruby Foundations: Understanding the Ruby Standard Library due Sun 11 Feb

Ruby Foundations: Blocks due Sun 11 Feb

<https://teamtreehouse.com/library/ruby-blocks>

Ruby Foundations: Modules due Sun 11 Feb confused!!?!!

<https://teamtreehouse.com/library/ruby-modules>

Ruby Foundations: Ruby Core due Sun 11 Feb

<https://teamtreehouse.com/library/ruby-core-and-standard-library>

Ruby Foundations: Objects, Classes and Variables due Sun 11 Feb

<https://teamtreehouse.com/library/ruby-objects-and-classes>

this needs to be done before blocks!!!

**Block Three: Git, Open Source and The Console**

*In this block, we're going to learn about why Git is important and how we use it. We also explain what Open Source really means and start working with and understanding the console. Please complete all of the 'Git Basics' and 'Console Foundations' modules by the end of this block (Wednesday 28th February)*

Session Ten: Introduction to the console / terminal, overview of what it does, why you'd use it and some basic commands due Tue 13th Feb

Console Foundations: Getting Started with the Console due Wed 14th Feb

Console Foundations: Users and Permissions due Wed 14th Feb

Console Foundations: Processes due Wed 14th Feb

Console Foundations: Installing Software due Wed 14th Feb

Console Foundations: Environment and Redirection due Wed 14th Feb

Session Eleven: Introduction to (and installation of) Git. Overview of Github. Explanation of how we use git in projects. due Thu 15 Feb

Git Basics: Why Version Control Matters due Mon 19 Feb

Git Basics: Getting Started with Git due Mon 19 Feb

Git Basics: Branches due Mon 19 Feb

Git Basics: Merging due Mon 19 Feb

Git Basics: Working with Remote Repositories due Mon 19 Feb

Git Basics: Workflows due Mon 19 Feb

Session Twelve: Introduction to databases. Overview of CRUD, schema design and basic best practices. Tue 20 Feb

Session Thirteen: SQL 102. Practical workshop session Thu 22 Feb

Session Fourteen: Applied Database Design - Modelling the problem domain Tue 27 Feb

Database Foundations: Introduction to Data, Databases and SQL Wed 28 Feb

Database Foundations: Installing MySQL Server and MySQL Workbench Wed 28 Feb  
(We recommend SequelPro for Mac)

Database Foundations: Reading Data from Databases with SQL Wed 28 Feb

Database Foundations: SQL Calculating, Aggregating and Other Functions Wed 28 Feb

**Block Four: Front-End - Designing Product Hunt**

*In this block, we're going to tackle the first half of our first group project - planning, designing and coding the front-end of a coding programme themed reddit clone whilst diving deeper into HTML and CSS and learning some front-end best practices. Please complete the HTML and CSS Foundations modules by the end of this block (Sunday 11th March)*

Session Fifteen: Overview of Product hunt, why we're building it. Thu 1 Mar  
Students to work on coding up HTML and CSS

Session Sixteen: Continue work coding up design Tue 6 Mar

Session Seventeen: Introduction to Model-View-Controller frameworks and how they work Thu 8 Mar

HTML: Introduction Sun 11 Mach

HTML: Text Sun 11 Mach

HTML: Lists Sun 11 Mach

HTML: Links Sun 11 Mach

HTML: Objects Sun 11 Mach

HTML: Tables Sun 11 Mach

HTML: Forms Sun 11 Mach

CSS: Basics (up to and including basic layout) Sun 11 March

CSS: Selectors (all sections) Sun 11 Mach

CSS: Flexbox Layout (all sections) Sun 11 Mach

CSS: Responsive Layouts (all sections) Sun 11 Mach

**Block Five: Basic Back-End - Making Product ~~Hunt~~ Work**

*In this block, we'll tackle the second half of our first group project - taking the design we've coded up and building the core functionality of the product using Ruby on Rails. Please complete the ActiveRecord Basics modules by the end of this block. (Sunday 25th March)*

Session Eighteen: Practical session using Rails discussing routing and gemsets Tue 13 March

Session Nineteen: Creating a basic application with Rails and porting the HTML and CSS to it Thu 15 March

Session Twenty: Planning our back-end, designing the database creating it in Rails Tue 20 Mar

ActiveRecord Basics: Introduction to ActiveRecord Sun 11 Mach

ActiveRecord Basics: Migrations and Relationships Sun 11 Mach

ActiveRecord Basics: Validation Sun 11 Mach

ActiveRecord Basics: Query Interface Sun 11 Mach

ActiveRecord Basics: Callbacks Sun 11 Mach

ActiveRecord Basics: AR Extensions Sun 11 Mach

**Block Six: Rails Development Deep-Dive - Improving Product ~~Hunt~~**

*In this block, we take the work we've put into our version of Product Hunt so far and continue to build on it, adding common features and functionality as we continue to introduce new Rails concepts.*

Session Twenty One: Authentication Thu 22 Mar

Session Twenty Two: Commenting on posts Tue 27 Mar

Session Twenty Three: Upvoting Thu 29 Mar

Session Twenty Four: Permissions due 3rd April

**Blocks Seven -> Twelve: Industry project with sporadic technical sessions**

*In this block, we split the students into three separate groups and introduce them to real world projects. Over the next six blocks, we'll work in groups directly with clients to design, build and host a project to their specification.*

Session Twenty Five: Introduction to SCSS and organising your project files so that they are maintainable. due 5th April

Session Twenty Six: Introduction to the projects, split the students into groups, review the project specs and begin basic project management / planning due Tue 10th April

**Block Thirteen: Course Completion**

*In the final block, we finish the projects, test them, prep them for presentation and host a graduation evening where we show off the students and their work over the past 6 months, with a focus on their project work.*

Projects Complete due Thu 28th Jun

Project Presentation Prep Evening due Tue 3rd July

Graduation Evening due Thu 5th July