


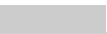
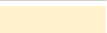
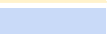


Visual Course

Key:

-  = Morning / Evening Exercise
-  = Technical Content
-  = Career, Soft skill Content
-  = UX/Design
-  = Workshops
-  = Projects

Complexity Ranking System

1. Requires little effort to understand

- easy to grasp
- does not build on any other topic
- paired with exercises or a workshop
- requires very little mental processing time

2. Requires medium understanding

- requires understanding of one level 1 topic
- builds on level 1 topic
- paired with a workshop
- requires more mental processing time
- probably most common

3. Requires full comprehension of several topics

- requires understanding several level 1 or 2 topics
- combines several level 1 or 2 topics
- can be paired with a project
- requires a lot of mental processing time
- requires some higher level thinking (critical thinking)

Foundations

Remote Week 1

- Content:
 - How the web works
 - UI/UX (production roles and flow chart). Tech Glossary. An explanation of progress checking and why this is.
 - CSS
 - HTML
 - Learning Style
- Deliverables:
 - Project #0 (Profile, requires basic html, css, applying UI terminology), quizzes (Zipfile via canvas)
- Quizzes (UI/UX terminology, How the web works, Learning Style)
- Exercises (CSS, HTML)

Remote Week 2

- Content:
 - Terminal
 - Programming (with JS)
 - Growth mindset
- Deliverables
 - Create / submit a programs using javascript (Zipfile via canvas)
 - Submit a reflection write up on growth mindset and experience of week (scaffold with questions)
- Quizzes (Terminal, Growth Mindset)
- Exercises (Javascript)

Project Chart

#	Title	Description	Format	Description
1.	Munder Diffiin Paper	Overview: 1 page front end website for paper company. Key Tech: CSS, HTML, Javascript	Individual	Technical
2.	Personal Pokedex	Overview: Milestone front end website for using pokemon API Key Tech: HTML, CSS, Object Oriented Javascript, APIs, AJAX, grid systems, SASS, UI/UX and deployment via Github Pages.	Individual	Technical
3.	Pokemon Group Gym	Overview: Collaborative Front end website for integrating legacy code. Key Tech: HTML, CSS, Object Oriented Javascript, APIs, AJAX, grid systems, SASS, Github, UI/UX and deployment via Github Pages.	Group	Technical
4.	Friendly Bakery	Overview: Full stack website for a bakery website. Key Tech: API, Sinatra, using Sendgrid	Individual	Technical
5.	R-umblr (Ruby Tumblr)	Overview: Full stack blog website for designed to match a particular user profile. Key Tech: Sinatra + ActiveRecord, Cookies (via login), Heroku Deployment	Individual	Technical
6.	Pamela's Panel	Overview: Milestone Full stack administrative panel for a school Key Tech: Ruby on Rails, UI Branding, Data Integrity, AJAX in Rails, APIs and deploying a Rails application to Heroku	Individual	Technical
7.	Startup Crunch	Overview: Collaborative MVP full stack web product for a potential investor. Key Tech: HTML, CSS, JS, Ruby on Rails, Team Dynamics and Workplace Simulation.	Group	Technical
8.	Personal Passion Project (PPP - P^3)	Overview: Fullstack MVP web product that integrates all course learning and a self-directed learning component. Key Tech: HTML, CSS, JS, Ruby on Rails and Self Directed Learning.	Individual	Technical
9.	Resume	Overview: 1 page targeted resume	Individual	Career
10.	LinkedIn	Overview: Complete and Branded Profile page	Individual	Career
11.	GitHub	Overview: Complete with Profile and Projects	Individual	Career
12.	Online Portfolio	Overview: Complete and Branded Profile page	Individual	Career
13.	Jobtracker	Overview: Organized system to track job applications	Individual	Career
14.	Screen Recording	Overview: Video to showcase project and skills	Individual	Career
15.	LinkedIn Summary	Overview: Concise of summary of professional skills/brand	Individual	Career

In class: Week 1

1	2	3	4	5
		Morning Exercise	Morning Exercise	Morning Exercise
Orientation Expectations Installing software	Agile 1 Definition Agile in WDI Exercises & Activities	CSS Review 2 Flexbox/Grid? CSS Animations Animation Use Cases Mobile Responsive Design Resource - <i>Material Design</i>	UX/UI Foundations Review 1 Design of Everyday things Example Sites MVP - Must haves/Nice to haves Tools - <i>Google fonts</i> - <i>Icons-Fontawesome</i> - <i>Color choosers</i>	Version Control (VC) 1-2 VC using Git
Professional Etiquette Workshop 1-2				
Learning Style Workshop 1-2 Review Exercises & Activities	Web Development Basics 1 Review HTML Review Semantic HTML Accessibility Exercise	Workshop* Reinforce: CSS Basics Transitions	Workshop* Reinforce: UX/UI Website Project or Need to haves, Must haves (Steph's idea)	Workshop* Reinforce: Atomic Commits Why use Git Git Revert/Changes
Growth Mindset Review Exercises & Activities	Workshop* Reinforce: HTML Agile	Keyframing Use Case	Computational Thinking 1 Overview Focus on Decomposition Exercises & Activities	Networking Skills 1 Networking (what is it and why) Social Map Networking Communication
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 2

6	7	8	9	10
Morning Exercise	Morning Exercise	Morning Exercise	Morning Exercise	Coding Challenge
Collaboration Exercises & Activities 1	Intro to programming Pseudo Code 1	Functions Scope 2	Stress Management Exercises & Activities 1	How to Debug Error Handling in JS 2
Collaborative Development Github 2 <ul style="list-style-type: none"> - Merging - Pull Requests - Issues - Open Source Contributions Github Profile 1 Fill in Avatar, complete profile	Your First Programming Language Javascript Review Syntax Variables & Loops 1		Intro to Problem Solving Problem Solving in JS 2	Clean Code User oriented code design 2
Self-Awareness <ul style="list-style-type: none"> - Definition - Methods to improve it - Activities 	Workshop* Reinforce: Variables & Loops Ex: long list of exercises, game show, etc	Workshop* Reinforce: Functions	Introduction to Algorithms Common Use Algorithms 2	Workshop* Reinforce: Debugging Clean Code Format Find the thing that's wrong and fix it.
Documentation 1 <ul style="list-style-type: none"> - Writing good docs - Markdown - Reading documentation 			Workshop* Reinforce: Algorithms Ex: Word problems, use code to solve	

Workshop*				
“Causes” = current workshop Reinforce: Pairwork Documentation/read.me				
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 3

11	12	13	14	15
Quiz	Coding Challenge	Quiz	Coding Challenge	Coding Challenge
Behavioral Javascript 2 - Intro to DOM - DOM Manipulation - Event Handling	Software Development Life Cycle Exercises & Activities	Presentation Skills 1 Exercises & Activities	Introduction to Object Oriented Programming 3 Object Oriented Javascript Syntax	Intro to Data Structures 3 Data Structures in JS <i>Intro to Abstractions</i>
	Product thinking 1 - Product thinking questions - Wireframing Tools	Project #1 - Munder Difflin Paper Reinforce: CSS HTML Behavioral Javascript		
Workshop* Reinforce: JS Behavior Ex: 2-3 hours, Fun, eye catching, integrate CSS animations	Time Management 1 <i>Pivoting</i> Exercises & Activities	*Project Due, *Presentation Due at end of day	Workshop* Reinforce: OO Javascript	Workshop Reinforce: Data Structures Problem Solving

	Project #1 - Munder Difflin Paper Reinforce: CSS HTML Behavioral Javascript			
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 4

16	17	18	19	20
Quiz	Coding Challenge	Coding Challenge	Quiz	Coding Challenge
Project #2: Personal Pokedex	HTTP Request Response Cycle 1	Introduction to APIs 3 Public APIs Vs Private APIs	Project #2: Personal Pokedex *Project Due *Presentation Due at End of Day	Intro to Frameworks 1 Front End Frameworks
	Forms 1 Logins			
UX Web Design Principles 1	AJAX (Asynchronous Javascript) 1 Jquery / Axiom Json	Workshop* Reinforce: API General Ex: Weather api display		Grid Systems 2 Bootstrap/ Materialize/ Lemon/ Skeleton

	Workshop* Reinforce: AJAX Build on Existing Code	Project #2: Personal Pokedex APIs		Workshop* Reinforce: Frameworks Grid systems (Does not need to be code related, maybe a game?)
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In Class: Week 5

21	22	23	24	25
Quiz	Coding Challenge	Coding Challenge	Quiz	Coding Challenge
<div> <div>Sass</div> <div>Needs Ruby Simplifies, necessary for framework</div> <div>2</div> </div>	<div> <div>Deployment</div> <div>Github Pages</div> <div>2</div> </div>	<div> <div>Project #2: Personal Pokedex</div> <div>Presentation at End of Day</div> </div>	<div> <div>Teamwork Review The importance of communication</div> <div><i>Working with other people's code</i></div> <div>1</div> </div>	<div> <div>Project #3: Pokemon Group Gym</div> <div>Deployment and Presentation</div> </div>
<div> <div>Workshop*</div> <div>Reinforce: Sass Ex: 1 page website that uses Sass</div> </div>			<div> <div>Github Collaboration</div> <div>Review & Workflow</div> <div>2</div> </div>	

UX Check-in Reinforce choices Reflect	1-2	Project #2: Personal Pokedex Presentation at End of Day Deployment API		Project #3: Pokemon Group Gym	
Closing Standup		Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 6

26	27	28	29	30
Quiz	Coding Challenge	Quiz	Coding Challenge	Quiz
Review Frontend vs Backend Big Picture Backend Language Overview	Object Oriented Programming using Ruby	Libraries using Ruby Gems	Data Structures in Ruby	Problem Solving with Ruby

¹ Introduction to your Second Language using Ruby <i>Understanding Ruby Specific Constructs (Blocks)</i>				² Algorithms Context & Why Sorting Searching $O(n)$
Workshop*/? Or Multiple Exercises	Workshop Object Oriented Programming using Ruby	Workshop* Reinforce: Pic gems Put in code Ex: Pirate Gem	Workshop Data Structures in Ruby	Workshop* Word Problem
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 7

31	32	33	34	35
Coding Challenge	Quiz	Coding Challenge	Quiz	Coding Challenge
² Debugging in Ruby Error Handling in Ruby <i>Exceptions</i>	² Analogies to describe technical concepts	¹ <i>Intro to Design Patterns</i> MVC (Model View Control) Idea: Implement in Sinatra	³ Ruby Sinatra Views Layouts	Configuration Web Security Environmental Variables Storing Password

Clean Code for Ruby User Centered Coding	1	Microframeworks Sinatra What is routing? What is templating?	1	Ruby Routing Dynamic Routing Sinatra Controller	3	Review Forms	1	API in Ruby <i>API Wrappers</i> Using Sendgrid	3
Workshop* Reinforce: Debugging Clean Code ex:Find Whats Wrong		Webframeworks	1	Workshop* Reinforce: Create website website w/ URL Pages will do something		Workshop*		Workshop* Reinforce: Email via sendgrid Configuration using Environment Variables	
		HTTP: Request Review New Context	1						
Closing Standup		Closing Standup		Closing Standup		Closing Standup		Closing Standup	

In class: Week 8

36	37	38	39	40
Quiz	Coding Challenge	Quiz	Coding Challenge	Coding Challenge
Project #4: Friendly Bakery	Project #4: Friendly Bakery	Databases Theory	Active Record (Databases)	Active Record + Sinatra
		Database Types	Models	Login Passwords

		SQL / Sqlite or Postgres ¹	Workshop* Reinforce: Database Diagram Active Record	Cookies via Sessions ²
		Workshop* Reinforce: Database Diagram Ex: Provide database, have student do something. Ex: Carmen San Diego	Ex: Do something interesting using data, similar to database ws	Workshop* Build login + Login, Signup
				Project #5: R-umblr (Ruby Tumblr) Introduce Project +Project Idea (Build upon other projects like case study but could be tricky)
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 9

41	42	43	44	45
Quiz	Coding Challenge	Quiz	Coding Challenge	Coding Challenge

Project #5: R-umblr (Ruby Tumblr)	2 Deployment Heroku PG? (Sinatra)	Project #5: R-umblr (Ruby Tumblr) Deployment Presentation	2 Review Reflect <i>Post Mortem</i> Introduce Final Projects	1 Scaffolded Approach to RoR
			2 UX Design Planning Problem/ User Branding	3 Rails Routing Controllers Exercies: Filling in missing part of pre-built RoR opp
	Project #5: R-umblr (Ruby Tumblr)		1 Career Research Overview of Required Deliverables	Project #6: Pamela's Panel Ex: Basic Site with Routes and Controllers
			2 Review High level review of frameworks Sinatra, Rails	Many to Many Relationships
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 10

46	47	48	49	50
Quiz	Coding Challenge	Quiz	Coding Challenge	Coding Challenge

<p>Rails 3</p> <p>Views Model Ex: Fills in missing part of pre-built RoR app</p>	<p>Rails 3</p> <p>Forms Helpers Ex: Fills in missing part of pre-built RoR app</p>	<p>Rails 3</p> <p>Asset Pipeline Forms (Review) Exercise fills in missing part of pre-built RoR app</p>	<p>UX 3</p> <p>Visual Branding (color, font) UX Bring it all together</p>	<p>Troubleshooting Frameworks using Rails</p> <p>Problem Solving in Rails</p>
<p>Project #6: Pamela's Panel</p> <p>Ex: Build on site from before but w/ models and views</p>	<p>Project #6: Pamela's Panel</p>	<p>Project #6: Pamela's Panel</p> <p>Assets JS/ CSS</p>	<p>Project #6: Pamela's Panel</p> <p>Ex: UX</p>	<p>Project #6: Pamela's Panel</p> <p>Troubleshoot</p>
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 11

51	52	53	54	55
Quiz	Coding Challenge	Quiz	Coding Challenge	Coding Challenge

Web Security Data Integrity in Rails (validations (more +)) Strong Parameters	Rails (Advanced) Authentication using Devise/Clearance Ex: Fills in missing part of prebuilt RoR app	Rails (Advanced) Turbo Links	Rails (Advanced) UJS - maybe stick to ajax? AJAX Same, as prior exercise	Review API's 3 As related to Rails Ex: Same as prior exercise
				Deployment 2 Heroku (Rails)
Project #6: Pamela's Panel	Project #6: Pamela's Panel	Rails (Advanced) Image Upload (Paperclip) Ex: Fills in missing part of prebuilt RoR App	Project #6: Pamela's Panel	Project #6: Pamela's Panel
		Project #6: Pamela's Panel		
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 12

56	57	58	59	60
Quiz	Coding Challenge	Quiz	Coding Challenge	Coding Challenge

Project #6: Pamela's Panel	Teamwork Review Agile Roles Exercises & Activities	Project #7: Startup Crunch	Project #7: Startup Crunch	Project #7: Startup Crunch
	Project #7: Startup Crunch			How to Be Adaptive Change major aspect of project
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 13

61	62	63	64	65
Coding Challenge	Coding Challenge	Quiz	Coding Challenge	Coding Challenge

Project #7: Startup Crunch	Group Presentation Skills Tips for group presentations and long presentations	Project #7: Startup Crunch Presentations	Project #8: Personal Passion Project (PPP - P^3) Reintroduce Requirements: Fullstack MVP web product that integrates all course learning and a self-directed learning component. Key Tech: HTML, CSS, JS, Ruby on Rails and Self Directed Learning.	Project #8: Personal Passion Project (PPP - P^3) Proposal Due
	Project #7: Startup Crunch Deployment		Self Directed Learning What is SDL How to create learning plan	
			Project Planning Setting milestones	
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup

In class: Week 14

66	67	68	69	70
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Coding Challenge	Coding Challenge	Quiz	Coding Challenge	Quiz
Project #8: Personal Passion Project (PPP - P^3)	UX User Testing A/B Testing	Post-Graduation Learning Plan Exercises & Activities	Presentation Skills Elevator Pitch Long Form Presentation Story Telling Exercises & Activities	Project #8: Personal Passion Project (PPP - P^3) Presentations
	Project #8: Personal Passion Project (PPP - P^3)	Project #8: Personal Passion Project (PPP - P^3)	Project #8: Personal Passion Project (PPP - P^3) Deployment	
Closing Standup	Closing Standup	Closing Standup	Closing Standup	Closing Standup