

Internship Do It Yourself - 2022

The purpose of this document is to specify the DIY program for Internship program 2022. This will outline topics, timeline, suggested tutorials and outcome.

Expectations

The students are expected to complete the assessments/assignments allocated to them and shall be evaluated on the basis of these assignments for the Pre placement offer.

Prerequisite

- Students passing the selection criteria by 3pillar
- Complete Knowledge of DIY skill sets proposed by 3pillar

Process

Assuming candidate needs to follow below steps

1. **Self learning** - Books, video, online blogs and tutorials
2. **Assignment** - Work on assignments

Timeline & Topic

Entire program is for almost 18 weeks.

Following topics are going to be part of the program

1. Git - 3 weeks
2. JavaScript - 12 weeks
3. RDBMS & SQL - 3 weeks

4-5 hours per week commitment should be good enough to finish the topics

Content

# Week	Topics & Resources	Exercise
01 - Git - Intro	<ul style="list-style-type: none">• Version Control<ul style="list-style-type: none">◦ https://www.atlassian.com/git/tutorials/what-is-version-control• Source Code Management<ul style="list-style-type: none">◦ https://www.atlassian.com/git/tutorials/source-code-management	

	<ul style="list-style-type: none"> • What is Git <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/what-is-git ◦ • Install Git <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/install-git • Git SSH <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/git-ssh 	
02 - Git - Getting Started	<ul style="list-style-type: none"> • Setting up repository <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/setting-up-a-repository • Saving Changes <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/saving-changes • Inspecting a repository <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/inspecting-a-repository • Undoing Commits & Changes <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/undoing-changes 	
03 - Git - Collaborating	<ul style="list-style-type: none"> • Syncing <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/syncing • Making a pull request <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/making-a-pull-request • Git Branch <ul style="list-style-type: none"> ◦ https://www.atlassian.com/git/tutorials/using-branches 	
04 - JavaScript	<ul style="list-style-type: none"> • What is Javascript? https://developer.mozilla.org/en-US/docs/Learn/JavaScript/First_steps/What_is_JavaScript • Use JavaScript within a webpage https://developer.mozilla.org/en-US/docs/Learn/HTML/Howto/Use_JavaScript_within_a_webpage • JavaScript DataTypes/Variables https://www.tutorialspoint.com/javascript/javascript_variables.htm 	https://github.com/Asabeneh/30-Day-Of-JavaScript/blob/master/02_Day_Data_types/02_day_data_types.md#day-2-exercises

05 - JavaScript	<ul style="list-style-type: none"> • JavaScript Operators <ul style="list-style-type: none"> ◦ Arithmetic Operators ◦ Comparison Operators ◦ Logical Operators ◦ Assignment Operators ◦ Conditional Operators ◦ Ternary Operator https://www.tutorialsteacher.com/javascript/javascript-operators • JavaScript Date Objects https://www.tutorialspoint.com/javascript/javascript_date_object.htm 	https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/03_Day_Booleans_operators_date/03_booleans_operators_date.md#-day-3-exercises
06 - JavaScript	<ul style="list-style-type: none"> • JavaScript Objects https://www.javascripttutorial.net/javascript-objects/ • JavaScript Arrays and Array Methods https://www.freecodecamp.org/news/the-javascript-array-handbook/ 	https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/05_Day_Arrays/05_day_arrays.md#-exercise https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/08_Day_Objects/08_day_objects.md#-exercises
07 - JavaScript	<ul style="list-style-type: none"> • JavaScript Conditional Statements https://www.guru99.com/how-to-use-conditional-statements-in-javascript.html • JavaScript Switch Statement https://www.javascripttutorial.net/javascript-switch-case/ • Javascript Loops/Iteration <ul style="list-style-type: none"> ◦ for statement ◦ do...while statement ◦ while statement ◦ labeled statement ◦ break statement ◦ continue statement ◦ for...in statement ◦ for...of statement https://developer.mozilla.org/en- 	https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/04_Day_Conditionals/04_day_conditionals.md#-exercises https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/06_Day_Loops/06_day_loops.md#-exercises-day-6

	US/docs/Web/JavaScript/Guide/Loops and iteration	
08 - JavaScript	<ul style="list-style-type: none"> JavaScript Functions https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Functions JavaScript Comments https://www.javatpoint.com/javascript-comment 	https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/07_Day_Functions/07_day_functions.md#exercises
09 - JavaScript	<ul style="list-style-type: none"> Javascript ES6 (New Features) https://www.w3schools.com/js/js_es6.asp 	
10 - JavaScript	<ul style="list-style-type: none"> Error Handling https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Control_flow_and_error_handling 	
11 - JavaScript	<ul style="list-style-type: none"> Promises https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Promise 	https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/18_Day_Promises/18_day_promises.md#exercises
12 - JavaScript	<ul style="list-style-type: none"> Writing Clean Code https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/20_Day_Writing_clean_codes/20_day_writing_clean_codes.md 	
13 - JavaScript	<ul style="list-style-type: none"> Manipulating DOM Object https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/22_Day_Manipulating_DOM_object/22_day_manipulating_DOM_object.md 	https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/22_Day_Manipulating_DOM_object/22_day_manipulating_DOM_object.md#exercises

14 - JavaScript	<ul style="list-style-type: none"> • Mini Project: Create a Portfolio https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/27_Day_Mini_project_portfolio/27_day_mini_project_portfolio.md 	
15 - JavaScript	<ul style="list-style-type: none"> • Mini Project: Leaderboard https://github.com/Asabeneh/30-Days-Of-JavaScript/blob/master/28_Day_Mini_project_leaderboard/28_day_mini_project_leaderboard.md 	
16 - SQL - Intro	<ul style="list-style-type: none"> • Introduction • What is a Database? • Tables & Keys • SQL Basics • MySQL Windows Installation • Creating Tables • Inserting Data • Constraints • https://www.youtube.com/watch?v=HXV3zeQKqGY&t=2s 	
17 - SQL - More	<ul style="list-style-type: none"> • Update & Delete • Basic Queries • Company Database Intro • Creating Company Database • More Basic Queries • Wildcards (• Union • Joins • Nested Queries • https://www.youtube.com/watch?v=HXV3zeQKqGY&t=6491s 	
18 - SQL - Practice	<ul style="list-style-type: none"> • SELECT queries 101 https://sqlbolt.com/lesson/select_queries_introduction • Queries with constraints https://sqlbolt.com/lesson/select_queries_with_constraints https://sqlbolt.com/lesson/select_queries_with_constraints_pt_2 • Filtering and sorting Query results https://sqlbolt.com/lesson/filtering_sorting_query_results 	

	<ul style="list-style-type: none">• Multi-table queries with JOINS https://sqlbolt.com/lesson/select_queries_with_joins• OUTER JOINS https://sqlbolt.com/lesson/select_queries_with_outer_joins	
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