

**Refresher – Self learnings**

**MySQL Refresher Learning**

|  |  |  |
| --- | --- | --- |
| **Topics** | **Subtopics** | **Learning Reference Links** |
| Database Basics | * Understanding databases and relational database management systems (RDBMS). * Basic SQL syntax. | <https://www.techtarget.com/searchdatamanagement/definition/RDBMS-relational-database-management-system>  <https://www.w3schools.com/sql/sql_syntax.asp> |
| Data Definition Language (DDL) | * Creating, altering, and dropping tables. * Defining primary keys, foreign keys, and indexes. | <https://www.w3schools.com/sql/sql_ref_table.asp>  <https://www.geeksforgeeks.org/difference-between-primary-key-and-foreign-key/>  <https://www.w3schools.com/mysql/mysql_create_index.asp> |
| Data Manipulation Language (DML) | * Inserting, updating, and deleting data. * Using SELECT queries to retrieve data. | <https://satnamsingh99.medium.com/data-manipulation-with-sql-insert-update-and-delete-4ae9c80e89b3>  <https://www.freecodecamp.org/news/sql-select-statement-how-to-select-data-from-a-database/> |
| Joins and Subqueries | * Understanding different types of joins (INNER JOIN, LEFT JOIN, RIGHT JOIN) * Writing subqueries to perform complex queries. | <https://www.geeksforgeeks.org/sql-join-set-1-inner-left-right-and-full-joins/>  <https://mode.com/sql-tutorial/sql-sub-queries> |

**HTML, CSS, JavaScript Refresher**

|  |  |  |
| --- | --- | --- |
| Skills | Key Concepts | Video Links |
| **HTML5** | Introduction, Getting Started, Elements & Attributes, Navigation, Events, Web Forms 2.0, Web Storage, Web SQL Database, Geo Location | <https://www.youtube.com/watch?v=mJgBOIoGihA> |
| **CSS3** | Introduction, Selectors, Styling, Box Model, Advanced Concepts - Media Queries, RWD | <https://www.youtube.com/watch?v=OXGznpKZ_sA> |
| **JavaScript** | Getting Started, Fundamentals, Operators, Control Flow, Objects, Arrays, Functions, DOM | <https://www.youtube.com/watch?v=PkZNo7MFNFg> |

|  |  |
| --- | --- |
| **Key Concepts** | **Learning Reference Links** |
| Introduction to HTML5 | <https://www.geeksforgeeks.org/html5-introduction/> |
| Elements & Attributes | <https://www.almabetter.com/bytes/tutorials/html/html5-attributes> |
| Navigations | <https://www.geeksforgeeks.org/html-nav-tag/> |
| Events | <https://www.geeksforgeeks.org/html-event-attributes/> |
| Web Forms 2.0 | <https://www.geeksforgeeks.org/what-is-web-forms-2-0/> |
| Web Storage | <https://www.c-sharpcorner.com/UploadFile/cb1429/web-storage-in-html5/> |
| Web SQL Database | <https://www.c-sharpcorner.com/UploadFile/75a48f/html-5-web-sql-database/> |
| Geolocation | <https://www.geeksforgeeks.org/html-geolocation/> |
| Introduction to CSS3 | <https://www.geeksforgeeks.org/css-introduction/> |
| Selectors | <https://www.geeksforgeeks.org/css-selectors/> |
| Styling | <https://www.geeksforgeeks.org/types-of-css-cascading-style-sheet/> |
| Box Model | <https://www.geeksforgeeks.org/css-box-model/> |
| Media Queries | <https://www.geeksforgeeks.org/css-media-queries/> |
| RWD | <https://www.geeksforgeeks.org/what-is-rwdresponsive-web-design/> |
| Introduction to JavaScript | <https://www.geeksforgeeks.org/introduction-to-javascript/> |
| Operators | <https://www.geeksforgeeks.org/javascript-operators/> |
| Control Flow | <https://www.geeksforgeeks.org/control-statements-in-javascript/> |
| Objects | <https://www.geeksforgeeks.org/objects-in-javascript/> |
| Arrays | <https://www.geeksforgeeks.org/javascript-arrays/> |
| Functions | <https://www.geeksforgeeks.org/functions-in-javascript/> |
| DOM | <https://www.geeksforgeeks.org/dom-document-object-model/> |

**Core Java Refresher Learning**

|  |  |  |
| --- | --- | --- |
| **Topics** | **Sub Topics** | **Learning Reference Links** |
| Basic Syntax and Structure | * Understanding the basic structure of a Java program. * Variables, data types, and operators. | <https://www.javatpoint.com/structure-of-java-program>  <https://www.guru99.com/java-variables.html> |
| Object-Oriented Programming (OOP) | * Classes and objects. * Inheritance, polymorphism, encapsulation, and abstraction. | <https://www.geeksforgeeks.org/classes-objects-java/>  https://www.geeksforgeeks.org/understanding-encapsulation-inheritance-polymorphism-abstraction-in-oops/ |
| Exception Handling | * Try-catch blocks. * Throwing and handling exceptions. | <https://www.javatpoint.com/try-catch-block>  <https://www.geeksforgeeks.org/throw-throws-java/> |
| Collections Framework | * Lists, sets, maps, and their implementations (ArrayList, HashSet, HashMap). * Iterators and enhanced for loop. | <https://www.javatpoint.com/collections-in-java>  https://www.geeksforgeeks.org/iterator-vs-foreach-in-java/ |
| Java I/O | * File handling using java.io package. * Reading and writing files. | <https://www.geeksforgeeks.org/file-handling-in-java/>  <http://www.btechsmartclass.com/java/java-File-reading-and-writing.html> |
| Java 8 Features | * Lambda expressions and functional interfaces. * Stream API for processing collections   . | <https://favtutor.com/blogs/lambda-expressions-java>  <https://www.geeksforgeeks.org/functional-interfaces-java/>  <https://www.geeksforgeeks.org/stream-in-java/> |