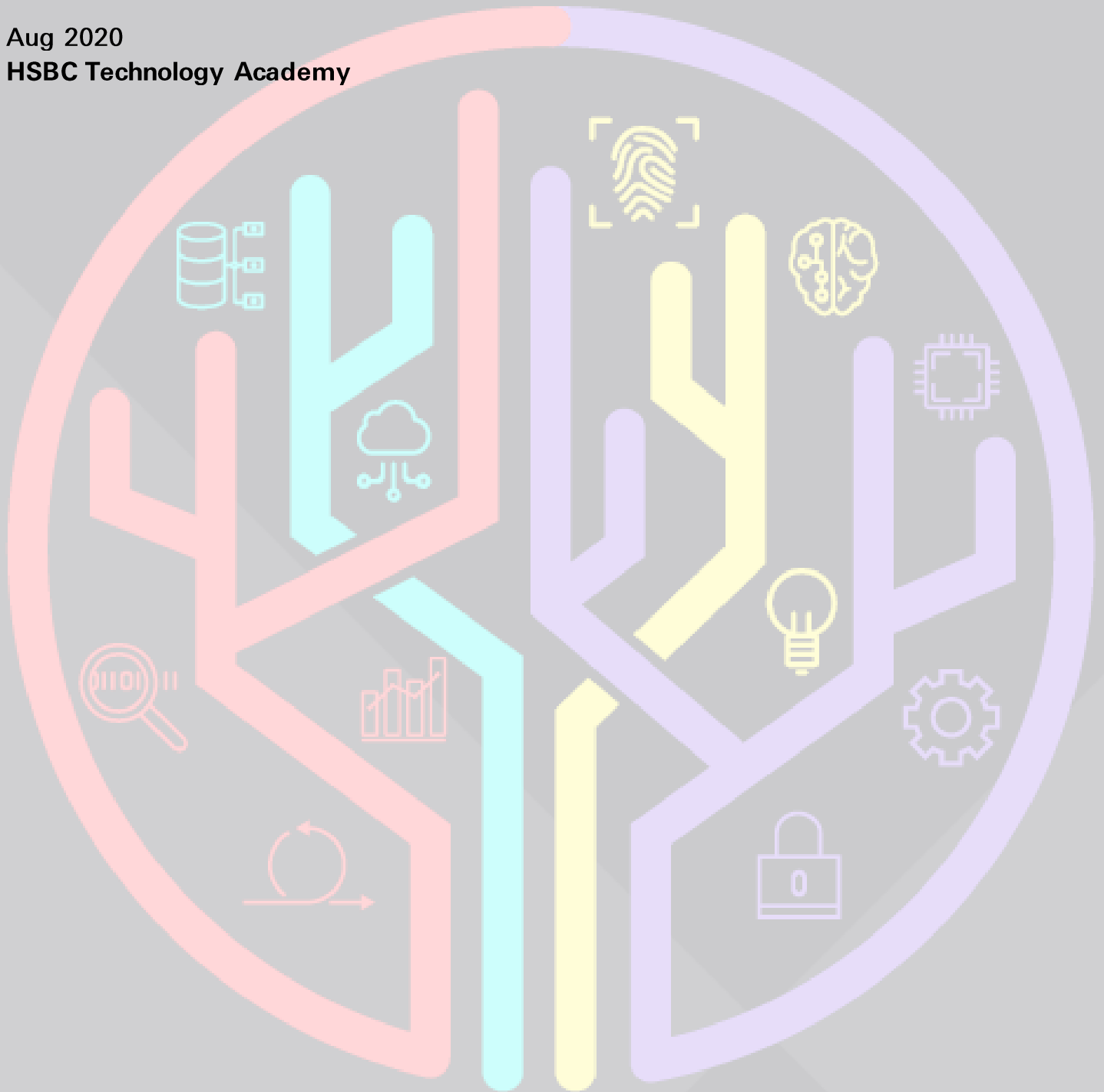


Web Technologies Full Stack Curriculum

Aug 2020

HSBC Technology Academy



Programming Bootcamp

Day	Topic	Sub-topics
1	Concepts of OOPs, Language Basics	OOP, javac, java command, JDK JRE and API introduction, Operators, loops, class, objects, String, overloading, is-a, has-a relation, Introduce eclipse
2	Arrays, Constructors, Inheritance	Arrays, Object Arrays, how objects and primitive values are passed to methods Constructors, Inheritance, Polymorphism, Overriding, packages
3	Inheritance, Packages, Polymorphism	Run time polymorphism using overriding, Abstract class, Interfaces, Layered Architecture, access specifiers
4	Exception Handling, Introduction to IO	try, catch, throw, throws, finally, user defined exceptions, Byte and Char Streams
5	IO, File Handling	FileInputStream, DataInputStream, ObjectInputStream, File, Serialization, etc, Developing complex applications using files and arrays, etc
6	Multi Threading, Introduce Collections, sql	Threading basics, Runnable, synchronization, DeadLock, Fork Join
7	Collection with Generics	Interfaces, Implementations, List, set, tree, Generics, algorithms, Comparator, Comparable, equals, hashCode, Working with Dates
8	JDBC, Factory pattern	JDBC Architecture, Prepared Statement, ResultSetMetaData, RowSet objects, Transaction, Factory pattern
9	HTML, CSS, Java Script	HTML forms, Java script, Functions, Validations, basics of css, JSON
10	Servlets	Simple Servlet, Life cycle, Request & Response, Form Handling,
11	Servlets, JSP	concept of MVC, Forward, include, Session management, Simple JSP, implicit object, Custom Tags,
12	end to end application	end to end application development. Using MVC, ajax, REST
13	Case study	Case Study

Web Full Stack

Day	Topic	Sub-topics
1	Java 7 & 8 features	Diamond operator, Strings in switch, Improved exceptional handling, lambda, default methods, new Date Time api, Resource handling, Automatic Resource Management and over view of xml, Functional Interfaces, Lambdas, Streams
2	Java 7 & 8 features continued, Introduction to spring	Streams, filters, Introduction to Spring, Spring different APIs
3	spring Core	Dependency Injections, Application Context, Bean Factory, Annotations
4	Spring Mvc, Boot	Boot, Dispatcher Servlet, Extracting request parameters, View resolvers, spring boot, spring micro services RestController
5	Spring Micro services	Eureka server, calling one service with another service, REST template
6	NodeJs, Type Script, Angular	Introduction to Node, npm, type script, Angular, single page applications
7	Angular components	Creating components, communicationg using @Input, @output
8	Angular Services	Services, Injecting services,
9	Consuming REST services	Angular application consuming microservice, end to end flow
10	Code FURY	CodeFury and Final Assessment