

TECHNOVALLEY CERTIFIEDTM

A D V A N C E D

JAVA DEVELOPER



120
HRS
DURATION

PRE-REQUISITE :

- Any Graduate.
- Diploma Holder.

TARGET AUDIENCE :

- Beginners.
- IT Professionals.
- Students.

JOB ROLES :

- Junior Java Developer.
- Senior Java Developer.
- Java Web Developer.
- Android Developer.
- Java EE Developer.
- Project Manager.
- Design Lead.
- Software Engineer.
- Senior Core Java Developer.
- Java Backend Developer.



glassdoor



According to Glassdoor, The national average salary for a Java Developer is **\$98,555** in United States.

According to Payscale, The national average salary for a Java Developer is **\$81989** in United States.

ABOUT SALARY



TOOLS COVERED



CURRICULUM

1. JAVA Basics

6 HRS

- History of Java.
- Difference between Java and other programming languages.
- Features of Java.
- Working of Java.
- JDK tools- javac, java, applet viewer.
- Set path and how to run Java Program in Command Prompt.
- JVM.
- Byte code.
- Java Program Structure.
- Packages in java.
- Java naming rules and conventions.
- comments.
- Wrapper Classes.
- Conditional Statements.
- Looping constructs.
- Create objects of class.
- Functions
- Variable types – local, instance and static variables
- Parameterized functions
- Function overloading
- Variable argument function

2. IDE

1 HR

ECLIPSE:

- Overview.
- Menus.
- Views.
- Perspective.
- Workspaces.
- Create project.
- Create package.
- Create java class.
- Run Configuration.
- Running Program.
- Build Project.

CURRICULUM

3. OOPS

6 HRS

- OOPs concepts in JAVA.
- Object Oriented Features.
- Constructors.
- Constructor overloading.
- Types of inheritance – single, hierarchical and multilevel.
- Base class and child class concepts.
- Access specifies and scope of variables – public, private, protected.
- Method overriding.
- Super-3 uses.
- Final- 3 uses.
- Static functions and properties.
- Dynamic method dispatch (Runtime Polymorphism).
- Order of constructor calling in inheritance.
- Abstract class.
- Interface.

4. Inner Class and Nested Class

2 HRS

- Regular inner class.
- Method local inner class.
- Anonymous inner class.
- Static nested class.

CURRICULUM

8. Arrays

3 HRS

- One-dimensional array.
- Enhanced for loop.
- Two-dimensional array (dynamic column size).
- Multidimensional array.

9. Collection Framework

8 HRS

- Introduction to Collection framework.
- List Interface.
- Array List.
- Vector.
- Linked List.
- Set Interface.
- Hash Set.
- Linked HashSet.
- Tree Set.
- Map Interface.
- Hash Map.
- HashTable.
- Linked HashMap.
- Tree Map.
- Queue and Priority Queue.

CURRICULUM

10. Generics

2 HRS

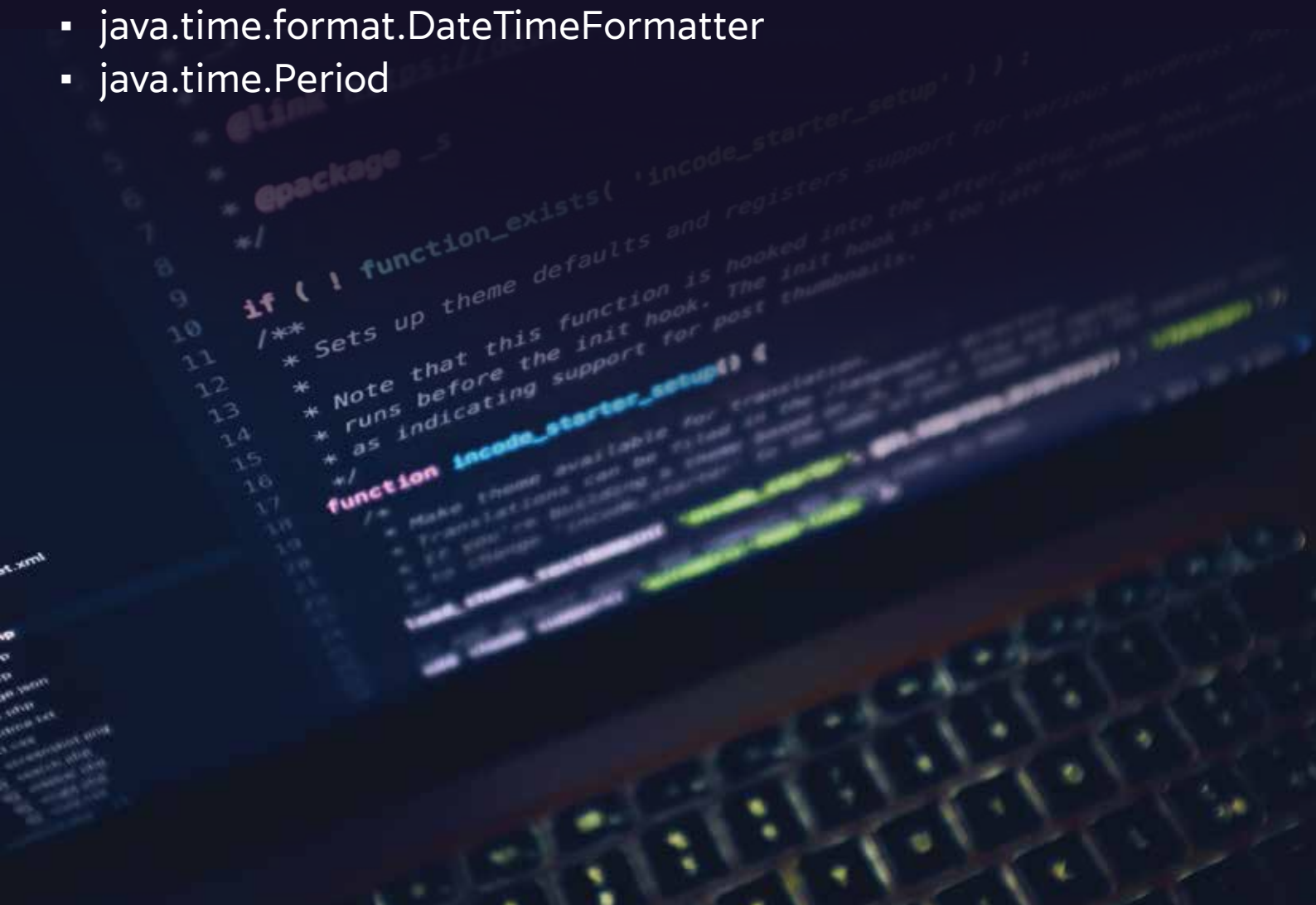
- Introduction to Generics code.
- Mixing Generics and Non Generic code.
- Polymorphism in Generics.
- Generics methods.

11. Date

2 HRS

Create and manipulate calendar data using classes from

- `java.time.LocalDateTime`
- `java.time.LocalDate`
- `java.time.LocalTime`
- `java.time.format.DateTimeFormatter`
- `java.time.Period`



CURRICULUM

12. Annotations

3 HRS

- What is Annotation and its usage.
- Built in Annotations.
- User Defined Annotations.

13. File Navigation and IO

6 HRS

- Introduction to java.io package.
- Character and Byte Streams.
- File Class.
- Character Classes – File Reader, File Writer, Buffered Reader, Buffered Writer, Print Writer.
- Byte Streams – FileInputStream, FileOutputStream, Buffer Input Stream, Buffered Output Stream.
- Object Serialization.
- Object Input Stream and Object Output Stream.
- readObject() and writeObject().
- Serialization in inheritance.
- Externalization.

CURRICULUM

14. Multithreading

2 HRS

- What is Multithreading.
- Lifecycle of Thread.
- Creating Thread.
- Thread Scheduler.
- Sleeping a thread.

15. MySQL & JDBC

- Introduction to MySql.
- Queries.
- Create – database, table.
- Alter – add, modify, change, rename, drop column.
- Drop – table, database.
- Insert, delete, update, select, show, desc.
- Where clause, order by, group by.
- Operators – and, or, between and, in, not in, like, distinct.
- Sub queries.
- Join – inner join, left join, right join.
- JDBC Introduction.
- JDBC Driver.
- DB Connectivity steps.
- Connectivity Java with MySQL and Oracle/MongoDB.
- Driver Manager.
- Connection.
- Statement.
- ResultSet.

CURRICULUM

16. Web Application Introduction

1 HR

- Introduction.
- Web server and web client.
- Web application directory structure.
- Web application components.
- Web container.
- Deployment descriptor.
- Apache Maven build tool.
- Starting a web application in Eclipse.
- Internet, client server architecture, Http, https, ftp, file.
- uploading etc. – introduction.

17. HTML 5 & CSS

4 HRS

- HTML introduction.
- HTML tags.
- Images.
- HTML tables.
- HTML forms.
- CSS syntax.
- CSS Id and Class selectors.
- How to insert CSS.

CURRICULUM

18. JavaScript

4 HRS

- Introduction.
- External and internal JavaScript.
- Functions.
- Accessing HTML form controls.
- JavaScript pop up boxes.
- Validation.
- Debugging JavaScript.

19. jQuery

2 HRS

- Introduction and installation.
- Syntax.
- Selectors.
- Events.
- jQuery effects – hide, show, fade, slide, animate.
- Callback function.
- Chaining effects.

20. AJAX using jQuery

2 HRS

- Introduction to AJAX.
- Send GET and POST data.
- Read response and display it in HTML controls.

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21. Servlet

6 HRS

- Features of Servlet.
- Working of Servlet.
- Introduction to Servlet API and Servlet class hierarchy.
- Servlet life cycle.
- Life cycle methods.
- The Servlet API and its interfaces.
- How to set Servlet initialization parameter.
- How to set context initialization parameter.
- Servlet Event handling.
- Servlet events and interfaces.
- Servlet session handling techniques.
- Inter Servlet communication.
- Servlet filters.

22. JSP

10 HRS

- Introduction to JSP.
- Advantages.
- JSP Life cycle.
- Structure of JSP page.
- Components of JSP page.
- JSP implicit objects.
- Create error pages in JSP.
- JSP and JavaBean.
- JSTL.
- Custom tags.

CURRICULUM

23. Spring

26 HRS

- Benefits of using Spring framework.
- Dependency injection.
- Aspect Oriented Programming.
- Spring framework architecture.
- Spring environmental setup.
- One example.
- Spring IoC containers.
- Spring BeanFactory Container.
- Spring ApplicationContext Container.
- Spring Bean definition.
- XML based configuration file.
- Annotation-based configuration.
- Spring Bean scopes.
- Spring Dependency Injection.
- Constructor based DI.
- Setter based DI.
- Spring Injecting Inner Beans.
- Spring injecting Collections.
- Spring Beans AutoWiring.
- By name.
- By type.
- Spring Annotation Based Configuration.
- @Required.
- @AutoWired.
- Spring JDBC framework.
- Spring with Hibernate.
- Spring MVC framework.
- CRED Application with MVC

CURRICULUM

24. Web services

6 HRS

- Introduction.
- Features of Web Services.
- Roles – service provider, service requestor, service registry.
- Web services protocol stack.
- Life cycle.
- Standards.
- RESTful web service.
- Create a RESTful web service.
- REST – Representational State Transfer.
- JAX-RS with Jersey.
- Installation of Jersey.
- Web container.
- Prerequisites.
- Create your first RESTful Webservice.
- Create a REST client.
- RESTful web services and JAXB.
- CRUD RESTful webservice.
- JSON.

GLOBAL HEADQUARTERS



***THE ULTIMATE LEGEND IN
UPSKILLING AND RESKILLING***

ACHIEVEMENTS OF OUR INTERNS



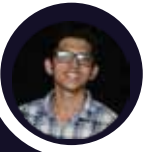
AMAL KRISHNA C
Cyber Security Intern



Amal is our cyber security intern, he discovered the flaws in a **Government website**.



MUHAMMED SANEEM
Cyber Security Intern



Recognition by **The Govt. of Scotland** - Vulnerability Disclosure.

Featured in **Apple** Hall of Fame for Vulnerability Disclosure.



ALEENA ANTONY
Data Science Intern



She created a mask and no mask detection system using Computer vision and Deep learning,

Platform : **TensorFlow** Program : **Python**



ADNAN MUHAMMAD
Python Fullstack Intern



He developed M C Hospital **Doctor Booking web application** in Python program.



KARTHIK SHIBU
Cyber Security Intern



Karthik is our cyber security intern, he discovered the flaws in an **Indian Government website**.



VIDYA P KISHORE
Python Fullstack Intern



She developed an E-commerce website for a Fashion Store Brand.

Frontend : **Bootstrap** Backend : **Python**



CWAP INTERNS
Cyber Security



Reconnaissance tool created by our CWAP Students.

congratulations

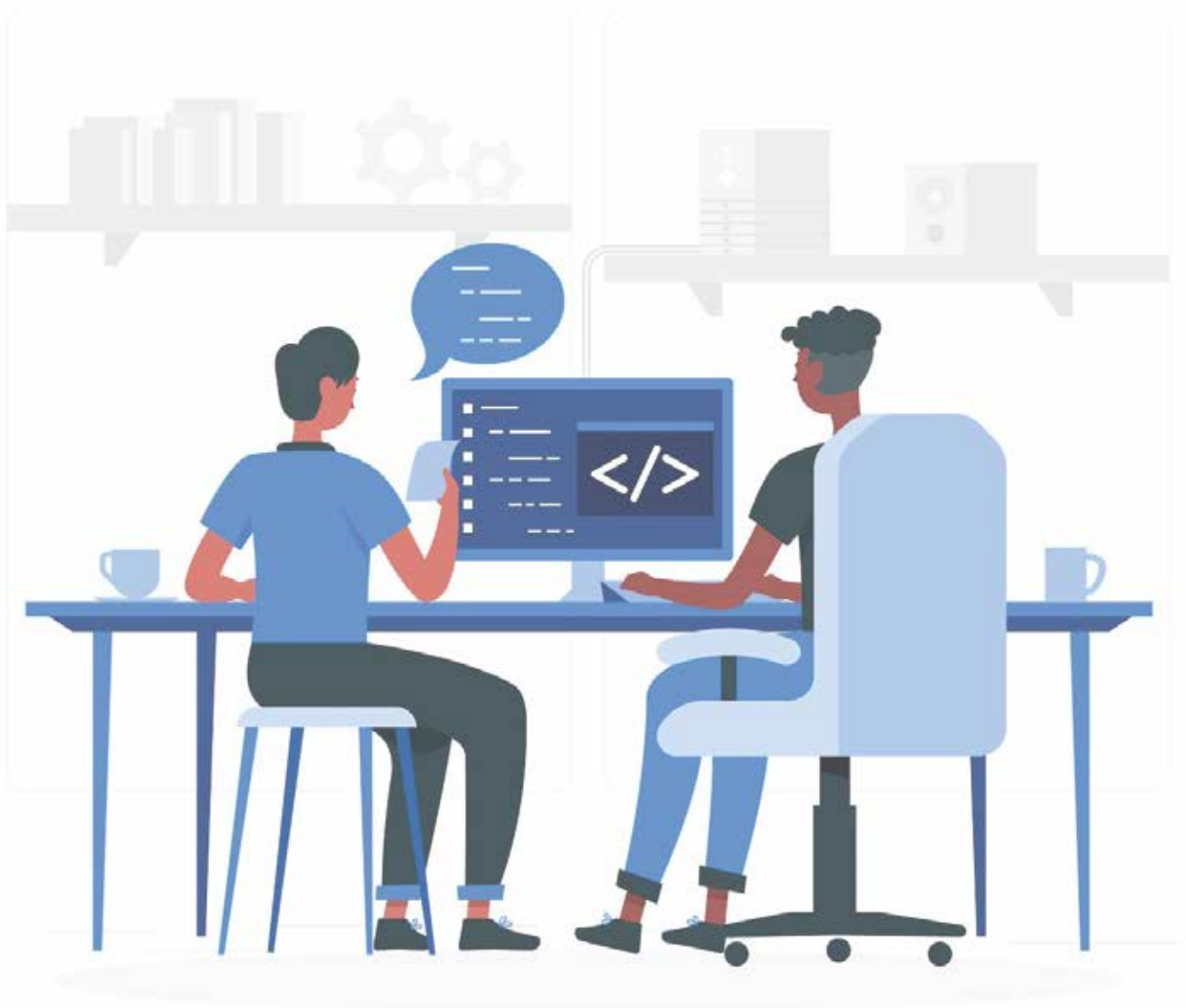
OUR STUDENTS ARE EVERYWHERE

Technovalley has a long-standing tradition of providing top-notch internship opportunities for students and young professionals. Over the years, we have certified thousands of interns, and we are proud to say that many of our graduates have gone on to secure employment in some of the most renowned global companies. The following are some of the organisation that our students are placed in



Technovalley's partnerships and experience with global companies have cemented its position as a foremost provider of upskilling and reskilling. By leveraging successful techniques and continually improving its services, Technovalley has established itself as a leader in the field. The following are our Global partners for **Technovalley Global HQ**.





HEADQUARTERS

BOTSWANA

📍 TechnoValley Africa Proprietary Limited,
Plot No. 53609/4, First Floor, Gaborone West,
Gaborone, Botswana.

🌐 www.technovalleyafrica.com

✉ enquiry@technovalleyafrica.com

GLOBAL HEADQUARTERS

INDIA

📍 TechnoValley Software India Pvt Ltd,
Level 4, ATS Grand, Bypass, Kochi, India, 682024

🌐 www.technovalley.co.in | www.technovalley-aks.com

✉ info@technovalley.co.in