

FULL STACK JAVA DEVELOPER

OVERVIEW

The Java Full Stack Developer Course offered by JTC provides comprehensive training in Java programming language, along with front-end and back-end web development frameworks like Angular, Spring, and Hibernate. The course covers essential topics like database management, RESTful APIs, and DevOps tools. Students also gain hands-on experience by working on real-world projects and get certified upon completion.



TABLE OF CONTENT

01

ABOUT THE COURSE

02

CAREERS

03

JTC KEY FEATURES

04

ELIGIBILITY CRITERIA

05

LEARNING PATH

06

COURSE SYLLABUS

07

CERTIFICATE



The course includes hands-on training and real-world projects to provide students with practical experience in the field. Upon completion, students will receive certification and be ready to start their careers as Java Full Stack Developers. With the high demand for skilled Java developers, this course is an excellent choice for anyone looking to break into the field or advance their skills.



JTC KEY FEATURES



ONE-YEAR ACCESSIBILITY



STUDENTS WILL HAVE LAB ACCESS



CONDUCTING TEST SERIES



STUDENTS WILL HAVE TUTORIAL ACCESS



CONDUCTING DOUBT SESSION



STUDENTS GET RECORDED VIDEOS



JTC DIGITAL LIBRARY



WORKBOOK ORGANIZED BY TOPICS



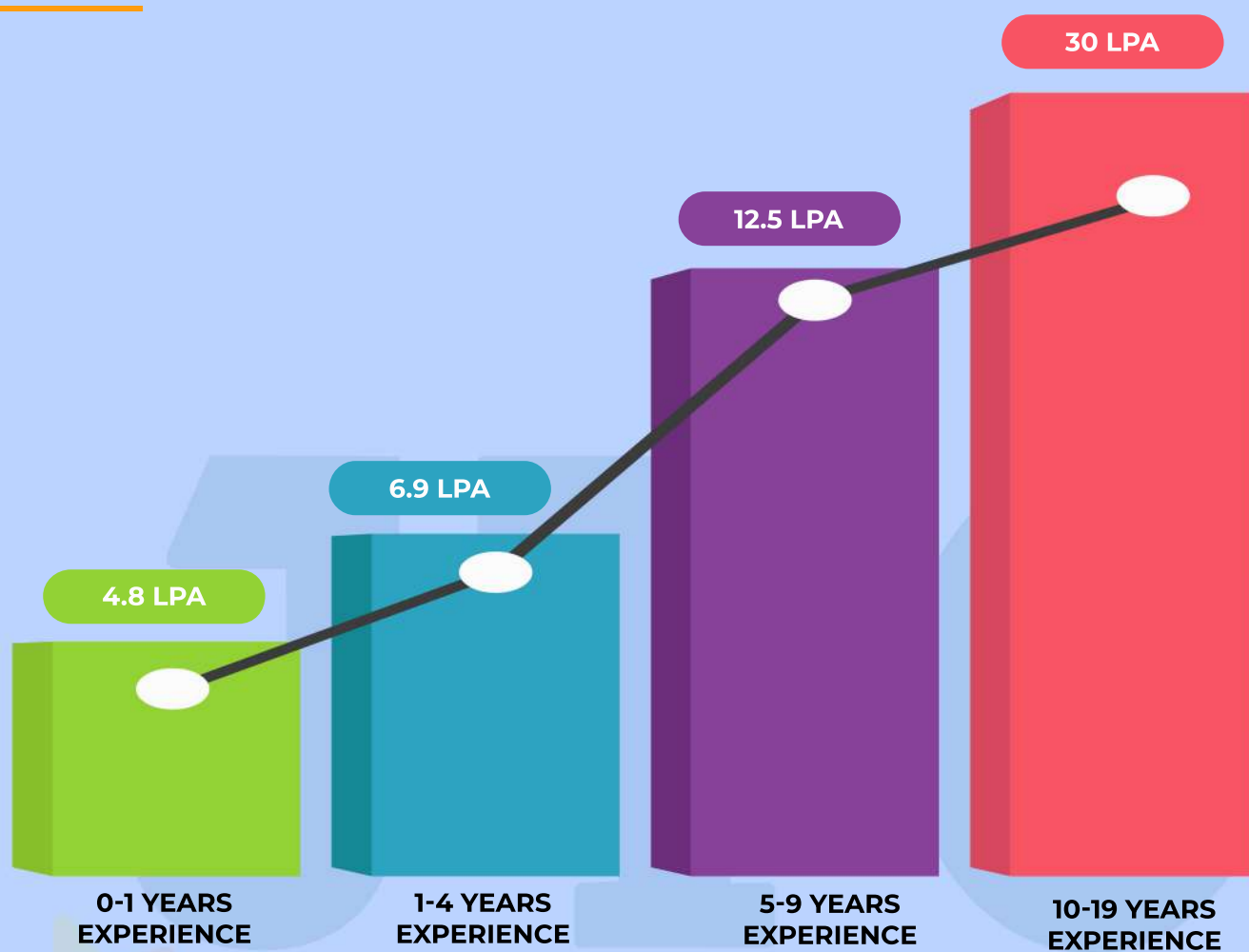
BUILDING A RESUME



CONDUCTING MOCK INTERVIEWS



CAREERS



ELIGIBILITY CRITERIA

WHO CAN APPLY



Anyone with a BE / ME / B.Tech / M.Tech (any stream), MCA or M.Sc (IT) degree in any discipline from an accredited institution (Any Graduate)

HOW TO APPLY ?



SUBMIT APPLICATION

Submit the application with the required information and check for eligibility.



APPLICATION REVIEW

Our admission team will review your application and inform you if you can enroll in the program



ADMISSION ROLLOUT

Secure admission by accepting the offer letter and completing the payment.



LEARNING PATH

01

CORE JAVA

Core Java is a fundamental programming language that provides the basics for developing applications on various platforms.

02

ADVANCE JAVA

Advanced Java is an extension of core Java, focusing on enterprise-level development with features like servlets, JSP, JDBC, and frameworks.

03

FRAMEWORK

Java frameworks are pre-written code libraries that provide a structure and reusable components for developing applications, enhancing productivity and efficiency.

04

RELATIONAL DATABASE

Java Database Connectivity (JDBC) is a Java API that allows programmers to access and manipulate relational databases using Java code.

05

TOOLS

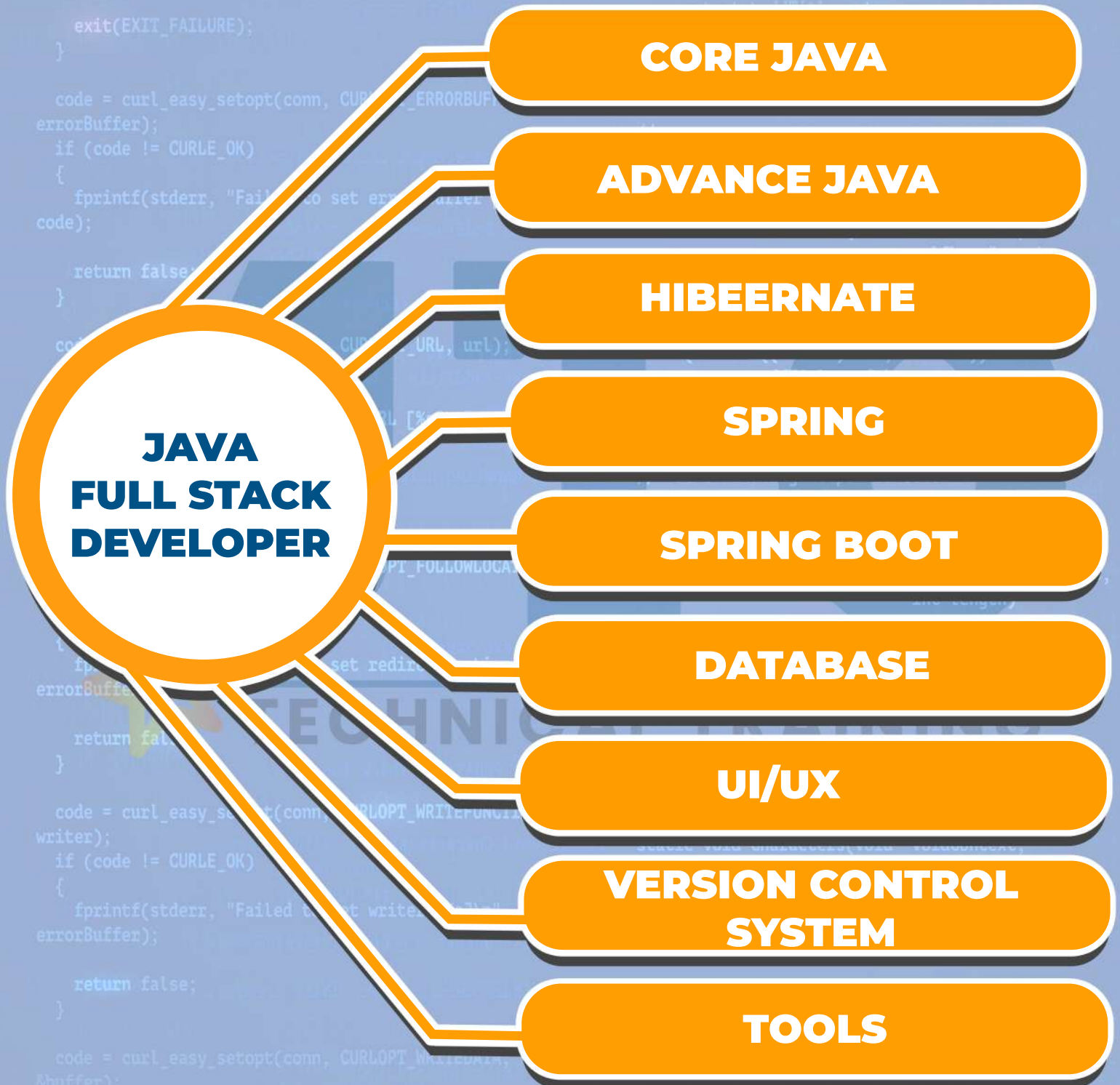
Java tools are software utilities designed to aid in Java development, including IDEs, build tools, debuggers, profilers, and documentation generators.

06

UI/UX

UI/UX refers to the design and user experience aspects of a product, focusing on creating intuitive interfaces that enhance usability and user satisfaction.

COURSE SYLLABUS



CORE JAVA

1. JAVA BASIC

- 1.1. Introduction of Program
- 1.2. Introduction of Programming Language
- 1.3. Introduction of Java
- 1.4. Installation and Classpath setting
- 1.5. Important terminology

2. JAVA LANGUAGE

- 2.1. Character Set | Keyword | Identifiers
- 2.2. Data Types
- 2.3. Variable
- 2.4. Literals
- 2.5. Operator
- 2.6. Control Statement
- 2.7. Array

3. OOPS

- 3.1. Introduction of OOPS
- 3.2. Class | Object | Class Loaders & Class Loading Concept
- 3.3. Instance & Static Variable
- 3.4. Block
- 3.5. Method
- 3.6. Constructor
- 3.7. Abstraction
- 3.8. Encapsulation
- 3.9. Inheritance
- 3.10. Polymorphism
- 3.11. Abstract Class
- 3.12. Interface
- 3.13. Inner Class

4. PACKAGE

- 4.1. Introduction of Package
- 4.2. Package configuration
- 4.3. import
- 4.4. Jar files
- 4.5. Access Modifier

5. JAVA.LANG PACKAGE

- 5.1. Introduction of java.lang package
- 5.2. Java.lang.Object class
- 5.3. Garbage Collection
- 5.4. Cloning
- 5.5. Java.lang.String class
- 5.6. Java.lang.StringBuffer class
- 5.7. Java.lang.StringBuilder class
- 5.8. Java.lang.StringBuilder class
- 5.9. Java.lang.Runtime class
- 5.10. Wrapper Class

6. EXCEPTION HANDLING

- 6.1. Introduction of Exception
- 6.2. Different types of Exceptions
- 6.3. Try-Catch & Finally block
- 6.4. Throw & throws keyword.
- 6.5. Autoclosable Interface

7. MULTI-THREADING

- 7.1. Introduction of Multi-threading
- 7.2. Thread Priority
- 7.3. User-Define Thread
- 7.4. Thread Life-Cycle
- 7.5. Dead lock
- 7.6. Synchronization
- 7.8. Inter-Thread Communication

8. COLLCTION FRAMEWORK

- 8.1. Collction Framework
- 8.2. List
- 8.3. Set
- 8.4. Map
- 8.5. Queue
- 8.6. Iterator, List-Iterator & Enumeration

CORE JAVA

9. GENERICS

- 9.1. Introduction of Generics
- 9.2. Generics Classes
- 9.3. Bounded Types
- 9.4. Generics Methods & Wild-Card characters

10. IO PACKAGE

- 10.1. Introduction
- 10.2. Stream
- 10.3. Filtering
- 10.4. Storing Data records
- 10.5. Readers
- 10.6. Writers

11. FILES

- 11.1. Introductions
- 11.2. File Classes
- 11.3. Utility Methods and Constructor
- 11.4. Action Methods

12. OBJECT SERIALIZATION

- 12.1. Introduction of Serialization
- 12.2. Reading an object from a files
- 12.3. Custom Serialization
- 12.4. Externalizable
- 12.5. Serial Version UID

13. SERIAL VERSION UID

- 13.1. Introduction of Scanner Class
- 13.2. Utility Methods & Constructors.

14. ANNOTATION

- 14.1. Introduction of Java Annotation
- 14.2. Types of Annotation
- 14.3. Built-In Annotation



ADVANCE JAVA

1. JDBC

- 1.1. Introduction of JDBC
- 1.2. JDBC Drivers
- 1.3. JDBC Statements
- 1.4. Batch Updates
- 1.5. Result Set
- 1.6. Row Set

2. SERVLET

- 2.1. Introduction of Servlet
- 2.2. Types of Application
- 2.3. Web Server | Web Client | Web Container | Http & Https | TCP & IP | DNS
- 2.4. Web Server setup
- 2.5. Servlet API
- 2.6. Servlet Example using Web.xml
- 2.7. Servlet Example using Annotations
- 2.8. Servlet Life Cycle
- 2.9. Servlet Parameters
- 2.10. Request Dispatcher
- 2.11. Servlet Thread Models
- 2.12. HttpServletRequest & HttpServletResponse.
- 2.13. Session Management
- 2.14. Exploring HttpSession
- 2.15. Servlet Scopes
- 2.16. Servlet Filter & Filter Chaining
- 2.17. Listeners

3. JSP

- 3.1. Introduction of JSP
- 3.2. JSP Life-Cycle & JSP Life-Cycle Methods
- 3.3. JSP Implicit Objects
- 3.4. JSP Scripting formats
- 3.5. JSP Directives
- 3.6. JSP Standard Actions
- 3.7. JSP Scopes
- 3.8. JSP EL Expression
- 3.9. JSTL Tags
- 3.10. Custom Tags

HIBERNATE

1. HIBERNATE

- 1.1. Introduction of Hibernate
- 1.2. Difference between JDBC and Hibernate
- 1.3. Hibernate Features
- 1.4. First Example of Hibernate using hbm.xml file
- 1.5. First Example of Hibernate using annotations
- 1.6. Hibernate Inheritance Mapping
- 1.7. Table Per Class Mapping
- 1.8. Table Per Concrete Class mapping
- 1.9. Association Mapping
- 1.10. One-to-One Uni-directional Mapping
- 1.11. One-to-One Bi-directional Mapping
- 1.12. Many-to-Many Mapping
- 1.13. Version Mapping
- 1.15. Timestamp Mapping
- 1.16. Hibernate Example on DAO Pattern
- 1.17. Hibernate Query Language SQL | HQL | QBC | Native Query | Named Query
- 1.18. Polymorphic Query
- 1.19. Positional Parameters & Named Parameters
- 1.20. Simple Primary Key
- 1.21. Custom Primary Key
- 1.22. Composite Primary Key
- 1.23. Introduction of Transaction Management
- 1.24. ACID Property
- 1.25. Transaction Concurrency Problem & Solutions
- 1.26. Types of Transactions.
- 1.27. Hibernate Connection Management
- 1.28. JDBC Transaction
- 1.29. JTA Transaction
- 1.30. CMT Transaction
- 1.31. Hibernate Architecture
- 1.32. Exploring SessionFactory
- 1.33. Object States
- 1.34. Introduction of Hibernate Cache
- 1.35. Different types of Hibernate Cache
- 1.36. Hibernate Cache Architecture

SPRING

1. SPRING

- 1.1. About Spring 5.x Training
- 1.2. Spring 5.x Course Prerequisite
- 1.3. Spring 5.x Training Course Objective
- 1.4. Spring 5.x Training Course Duration
- 1.5. Spring 5.x Training Overview
- 1.6. Spring Introduction
- 1.7. Spring Core Module
- 1.8. Spring Core Module with Annotations
- 1.9. Spring Core Module with 100% Code/Java Config Approach.
- 1.10. Spring Boot Core
- 1.11. Spring JDBC/DAO
- 1.12. Spring AOP Module
- 1.13. Spring Transaction Management
- 1.14. Spring MVC
- 1.15. Spring Security
- 1.16. Spring ORM
- 1.17. Spring Data and Spring Data JPA
- 1.18. Spring Batch
- 1.19. Spring Mail
- 1.20. Introduction to Spring MicroServices
- 1.21. How to Explain Project Architectures



SPRING BOOT

1. SPRING BOOT

- 1.1. introduction
- 1.2. Bootstrapping
- 1.3. Tomcat Development
- 1.4. Code Structure
- 1.5. Spring beans and dependency injection
- 1.6. Runners
- 1.7. Application Properties
- 1.8. Logging
- 1.9. Building Restful Web Service
- 1.10. Exception Handling
- 1.11. Interceptor
- 1.12. Servlet Filter
- 1.13. Rest Template
- 1.15. File Handling
- 1.16. Service Components
- 1.17. Consuming Restful Web Services
- 1.18. Cors Support
- 1.19. Internationalization
- 1.20. Scheduling
- 1.21. Enabling Https
- 1.22. Eureka Server
- 1.23. Service Registration With Eureka
- 1.24. Cloud Configuration Server
- 1.25. Cloud Configuration Client
- 1.26. Actuator
- 1.27. Admin Server
- 1.28. Admin Client
- 1.29. Enable Swagger2
- 1.30. Creating Docker Image
- 1.31. Tracing Micro Service Logs
- 1.32. Flying Database
- 1.33. Web Socket
- 1.34. Batch Service
- 1.35. Spring for Apache Kafka
- 1.36. Database handling
- 1.37. Securing Web Application
- 1.38. OAuth2 with JWT

DATABASE

1. DATABASE CONCEPTS

- 1.1. Introduction to Database
- 1.2. Limitation of File system
- 1.3. Introduction to RDBMS
- 1.4. Steps to install MySql and oracle 10g in windows Os
- 1.5. SQL(Structured Query Language)
- 1.6. Exploring CURD Operations
- 1.7. Table Maintenance
- 1.8. Exploring operators
- 1.9. Exploring Aggregate Functions
- 1.10. Exploring group BY and having clauses
- 1.11. Exploring Constraints
- 1.12. Exploring Sequence
- 1.13. Exploring Sub queries
- 1.14. Exploring views
- 1.15. Exploring Joins
- 1.16. User Maintenance
- 1.17. Altering Tables
- 1.18. Exploring Index
- 1.19. Introduction to PL/SQL
- 1.20. Exploring PL Statement
- 1.21. Exploring Control Statements
- 1.22. Exploring Procedures
- 1.23. Exploring Triggers
- 1.24. Special queries



UI/UX

1. HTML5

- 1.1. Introduction
- 1.2. Layouts
- 1.3. Elements
- 1.4. Tags
- 1.5. Text Formatting
- 1.6. Attributes
- 1.7. Fonts
- 1.8. Comments
- 1.9. Lists
- 1.10. Images/Background
- 1.11. Tables
- 1.12. Color
- 1.13. Web Forms
- 1.14. Iframe

2. CSS 3.0

- 2.1. Introduction
- 2.2. Styling Backgrounds
- 2.3. Box Model
- 2.4. Transforms
- 2.5. Transitions

3. JAVASCRIPT

- 3.1. Introduction
- 3.2. Operators
- 3.3. Conditional Statement & Looping Statement
- 3.4. Function & Object
- 3.5. Method
- 3.6. Event Type

4. JQUERY

- 3.1. Introduction
- 3.2. Retrieving Page Content
- 3.3. jQuery Animations and Effects
- 3.4. Using the jQuery UI Plug In
- 3.5. Manipulating Page Content
- 3.6. Working with Events
- 3.7. Putting It All Together

VERSION CONTROL SYSTEM

1. VERSION CONTROL SYSTEM

- 1.1. GIT
- 1.2. GIT-SCM
- 1.3. GIT HUB

TOOLS

1. TOOLS

- 1.1. Maven
- 1.2. IDE
- 1.3. Agile
- 1.4. Scrum
- 1.5. Mysql Work
- 1.6. Eclipse
- 1.7. GIT Base
- 1.8. Postman



CERTIFICATE



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