



# WEB BACK END

## (NODE JS & MONGODB & EXPRESS JS)

Get the skills to get ahead, stay relevant and earn more



[Book your seat now](#)



Reviews 2,500+ • Excellent



**12800+**  
STUDENTS  
TRUST US



## About INCAPP

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INCAPP Coding Institute, established in 2011, was founded with the goal of addressing the global tech skills shortage. Our commitment lies in offering high-quality training programs to students, professionals, and organizations. We strive to empower individuals with coding skills, facilitating personal and professional growth, and assisting organizations in enhancing their workforce's productivity and effectiveness. Our company boasts a team of seasoned instructors, experts in their fields. We employ the latest teaching methodologies and technologies to provide engaging and interactive training programs.

## OUR SUCCESS STREAK

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14 years  
of training  
expertise



12800+  
students



Placements  
in leading  
organisations

## Founders

“

We foster innovation and empower aspiring coders. As founders, we are excited to welcome you aboard. Whether you're new to coding or already experienced, our hands-on curriculum and expert instructors will guide you. Coding is more than just writing lines; it involves creativity and problem-solving. Embrace challenges and celebrate your successes, knowing that coding is a journey of continuous growth. Let's get started!

”



**RAHUL CHAUHAN**

**PRAVEEN CHAUHAN**

**Oracle & Microsoft Certified**

**Founders & Instructors**

# How We Help You To Learn



Step  
1

## Expert Instructors

Top-class instructors, experts in their fields, teach through practical training.

Step  
2

## Assignments

Understand all concepts through well-structured assignments.

Step  
3

## Doubt Resolutions

Dedicated assistance provided to clarify doubts, featuring two types of instructors: Class Instructor and Lab Instructor.

Step  
4

## Projects

Gain a comprehensive understanding of the technology through project work, guided by your instructor.



# Why INCAPP Coding Institute

Students deserve the finest learning environment. At INCAPP, we guarantee a superior learning experience and personalized support to ensure your success.



Top-Notch Classroom with Expert Instructor



Comprehensive Study Materials



Continuous Feedback and Monitoring



Guaranteed Course Completion



Project-Based Learning



Course Completion Certification



Dedicated Support for Doubt Resolution



Placement Assistance



Individual Attention to Each Student



In-Class Assignment Sessions



## Trainers at INCAPP



-  **Expert in Advanced Technologies**  
Trainer having in depth knowledge and expertise in advanced technologies.
-  **Excellent explanation**  
Explains the concepts in easy and fun manner.
-  **Punctual and Disciplined**  
Values time with punctuality and disciplined scheduling.
-  **Simplifies Complex Concepts**  
Breaks down complex concepts into easy-to-understand lessons.
-  **Professional & Efficient**  
Efficient and focused without wasting students' valuable time.
-  **Certified in their fields**  
Certified in Python, Java, and other essential technologies skills.
-  **Years of Technical Experience**  
Years of practical experience in technical projects and training.
-  **Committed to student success**  
Guides students with personalized mentorship ensure students achieve their learning goals.



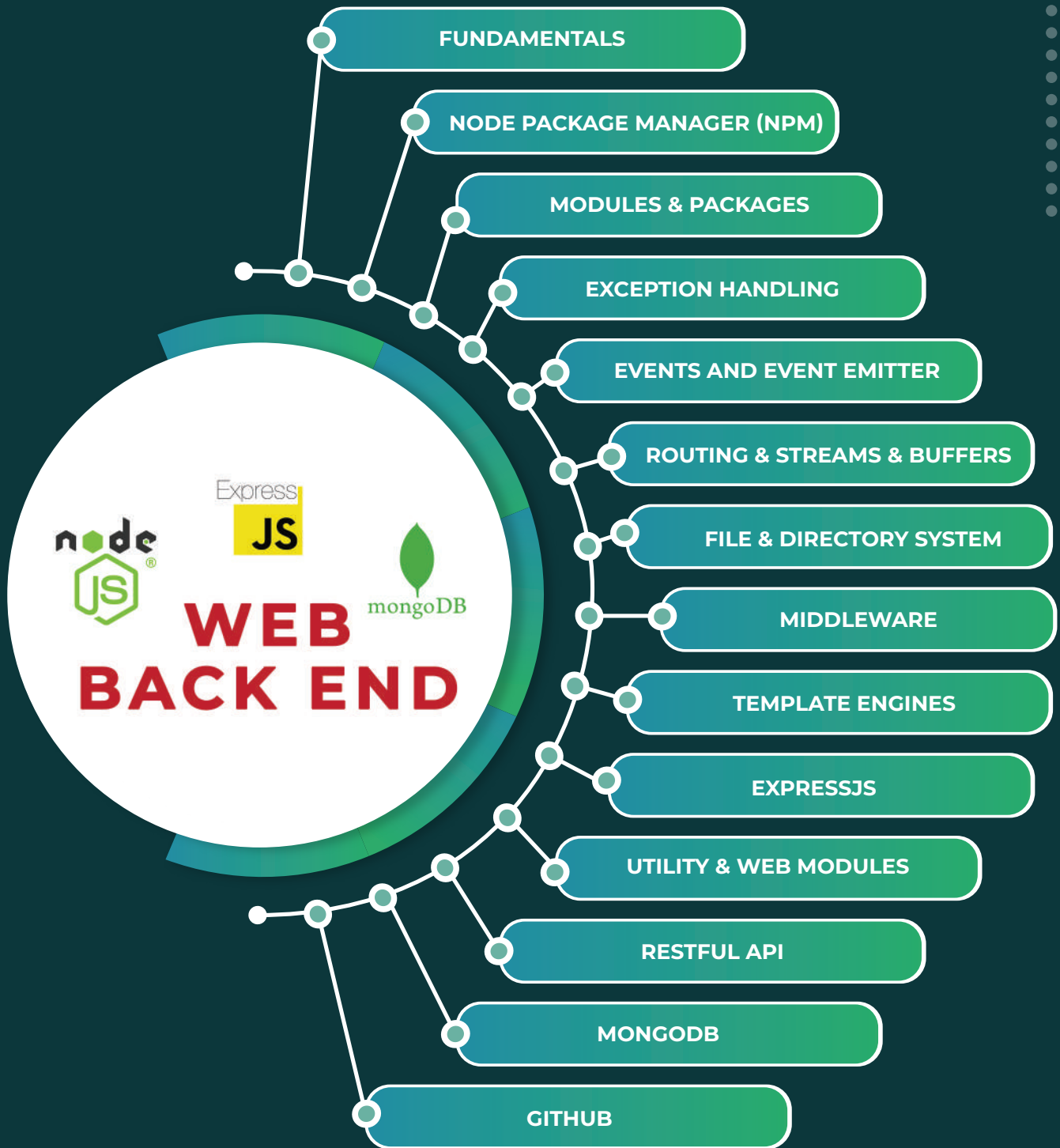
# The world's leading tech companies and startups hire our students



& many more



# What You Will Learn



**PROJECT WORK**





# Course Overview:

This course focuses on building robust backend systems using Node.js, MongoDB, and Express.js. You'll learn how to create scalable server-side applications, handle API development, manage databases with MongoDB, and implement efficient routing and middleware with Express.js. Through hands-on projects and assignments, you'll gain practical experience in backend architecture, preparing you to develop secure, high-performance web applications.

## NODE JS



### Introduction to NodeJS

- NodeJS Introduction
- History of NodeJS
- Features of NodeJS
- Scope of NodeJS
- NodeJS Applications
- Advantages of NodeJS
- NodeJS Versions
- What is V8 JavaScript Engine?
- Why Server-side JavaScript?
- NodeJS Vs Other server-side technologies

### Getting Started with NodeJS

- NodeJS Architecture
- NodeJS Installation
- Creating Web Server in NodeJS
- Creating First NodeJS Application
- Debugging First NodeJS Application
- Event Loop
- Event Driven Architecture
- Node REPL
- Writing Asynchronous Code
- Blocking vs Non-Blocking Code

### Modules and Packages in NodeJS

- Understanding Modules
- Understanding require and exports
- Creating Modules
- Importing Modules
- Exporting Modules
- Built-in Modules
- Process Module
- HTTP Module
- URL Module
- Creating a Node Package
- Publishing the Package
- Using published package

### Node Package Manager (NPM)

- Introduction to NPM Package
- Understanding CLI
- Understanding NPM
- Installing Modules using NPM
- Local and Global Packages
- Installing a Module
- Updating a Module
- Uninstalling a Module
- Working with Node's Package Manager (NPM)
- Understanding package.json
- Using package.json
- Attributes of package.json

### NodeJS Built-in Packages

- NPM Package
- Express NPM Package
- Multer NPM Package
- Node Mail NPM Package
- Boot Strip NPM Package Integration
- JSONWEBTOKEN NPM Integration
- Introduction of Crypto-JS

### Callback

- What is Callback?
- Blocking Code Example
- Non-Blocking Code Example

### Code Debugging

- Built-in Debugger
- IDE Debugger
- Node Inspector

### Exception Handling

- Try-Catch
- Call Back



### Events and Event Emitter

- Understanding Events
- Event-Driven Programming
- How do Node Applications work?
- Event Emitter Class

### Methods

- Class Methods
- Emitting Events
- Listening to Events

### HTTP

- Building a Web Server
- HTTP Request Methods
- HTTP Request Headers
- HTTP Response Codes
- HTTP Response Headers

### ExpressJS

- Introduction to ExpressJS Framework
- Installing ExpressJS Framework
- Building a Web Server
- Creating Hello World Application using ExpressJS
- Debugging and Executing Hello World Application
- Request and Response
- Request Object
- Response Object
- Basic Routing
- Serving Static Files
- GET Method
- POST Method
- FILE Upload
- Cookies Management
- Sending Emails

### Routing

- Understanding Routing
- Router Object
- Route Methods
- Route Paths
- Parameterized Routes
- Route Handlers
- Express Router

### Streams

- Understanding Streams
- Types of Stream
- Creating Streams
- Readable Streams
- Writable Streams
- Piping the Streams
- Chaining the Streams

### Buffers

- Creating Buffers
- Writing to Buffers
- Reading from Buffers
- Convert Buffer to JSON
- Compare Buffers
- Copy Buffer
- Slice Buffer
- Buffer Length
- Method Reference
- Class Methods

### File and Directory System

- Synchronous Vs Asynchronous
- Introduction to fs Module
- File operations
- Creating a File
- Opening a File
- Writing to a File
- Reading from a File
- Closing a File
- Deleting a File
- Creating a Directory
- Reading a Directory
- Removing a Directory

### Middleware

- Middleware Introduction
- Middleware Types
- Express Middleware
- Error Middleware
- Body Parser
- Cors
- Cookie Parser
- Session Management

### Template Engines

- Introduction to Template Engines
- EJS
- Jade
- Vash
- GruntJS
- Handlebars

### ExpressJS Security

- Authentication
- JWT
- Securing Routes
- Debugging in ExpressJS

### Global Objects

- \_\_filename
- \_\_dirname
- setTimeout(cb, ms)
- clearTimeout(t)



- setInterval(cb, ms)
- Global Objects
- Console Object
- Process Object

#### Utility Modules

- OS Module
- Path Module
- Net Module
- DNS Module
- Domain Module

#### Web Modules

- What is a Web Server?
- Web Application Architecture
- Creating a Web Server using Node
- Making a Request to Node Server
- Creating a Web Client using Node

#### RESTful API

- What is REST Architecture?
- Http Methods
- RESTful Web Services
- Creating RESTful for a Library
- List Users
- Add Users
- Show Detail
- Delete a User

#### Introduction to MongoDB

- Understanding NoSQL DB
- NoSQL Vs SQL DB
- Understanding MongoDB
- Document-oriented Vs Other kind of storages
- Installing MongoDB
- MongoDB Data Types
- MongoDB Shell Commands
- Understanding DB, collection and document
- Understanding Embedded documents
- Querying Database Tools and API
- MongoDB Tools

#### CRUD Operations on MongoDB

- Creating Database
- Creating Collections
- Creating Documents
- Inserting Data
- Querying Data
- Updating Data
- Deleting Data
- Limiting Data
- Sorting Data
- Dropping Collection
- Dropping Database

#### MongoDB Indexing and Relationships

- Types of Indexes
- Creating an Index
- Defining Relationships between Documents
- Dropping an Index

#### MongoDB Mongoose

- Introduction to Mongoose
- Mongoose Schemas
- Mongoose Data Types
- Mongoose Models
- Mongoose Relationships
- Mongoose CRUD Operations

#### MongoDB ODM Mongoose

- Introduction to ORM
- Introduction to ODM
- MongoDB ODM Mongoose

#### GitHub

- Real-time Environment setup with GitHub

#### REST API with Mongoose

- REST API with Mongoose, MongoDB and Postman
- Creating REST API using Express and Mongoose

#### Project Work

- Developing the Project
- Deploying the Project



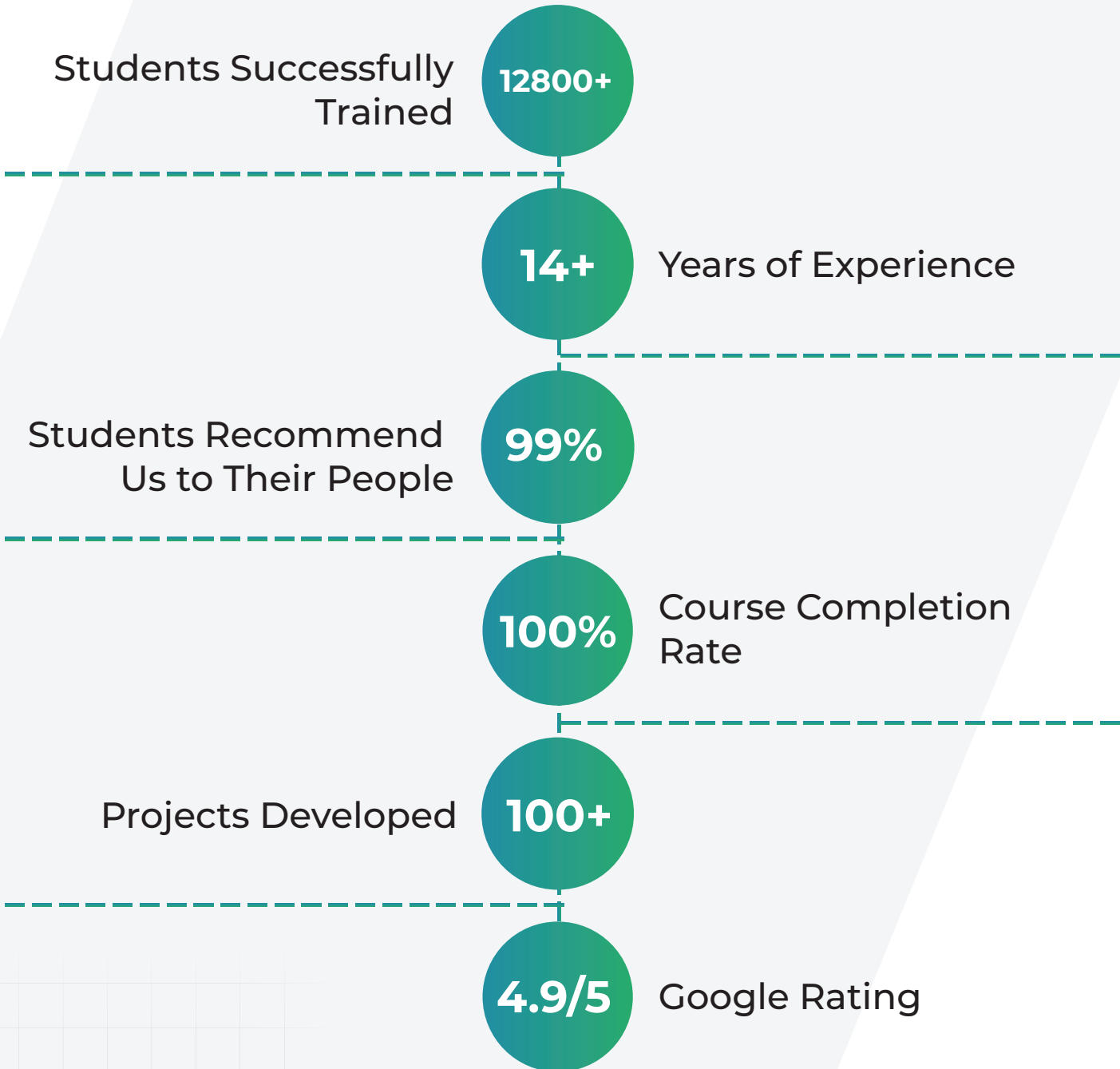
## Certificates



Upon completion of Course/Program, you will receive certificate from Incapp. This certificate validates your skills as an expert in the technology.



## Our Impact



# What our students say about us

**Satyam Kumar**

2 reviews · 1 photo



a week ago

NEW

Your teaching in Java Technology has been truly exceptional. Your deep expertise, clear explanations, and practical examples have significantly enhanced my understanding of the subject. Thank you for your dedication and for making learning Java so engaging and enjoyable.

**Rajan Roy**

Local Guide · 19 reviews · 12 photos



a week ago

NEW

I have completed the Java Core and DSA with Java courses from Incapp. Rahul Sir taught us coding in a very clear and understandable manner. The teaching style was easy to follow. Additionally, Incapp offers numerous backup classes and doubt-clearing sessions. The faculty at Incapp are very helpful and always available to solve any problems you may have. I definitely recommend Incapp if you want to grow, improve your skills, and achieve your dreams. Thank you

**Jyoti Maurya**

1 review



2 weeks ago

NEW

By choosing this platform is blessing for me. It is just amazing and interesting to learn here don't be late. It's totally a worth decision to boost your knowledge.

And this place is very safe and secure especially for girls so don't be concerned about safety and location.

**Yuvesh kasana**

1 review



3 months ago

I just wanted to express my gratitude for the excellent coaching sessions you've been providing for Java. Your teaching style is incredibly clear and effective, making complex concepts easy to understand. I appreciate your patience in addressing all of my questions and your willingness to provide additional resources for further learning. Thanks to your guidance, I feel much more confident in my Java skills and excited to continue improving. Keep up the fantastic work!

## Courses we offer

▶▶▶▶▶

**JAVA**  
FULL STACK  
DEVELOPMENT

PROGRAM



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**PYTHON**  
FULL STACK  
DEVELOPMENT

PROGRAM



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**WEB**  
FULL STACK  
DEVELOPMENT

PROGRAM



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**C & C++**  
LANGUAGE




▶▶▶▶▶

**JAVA**  
LANGUAGE



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**DATA STRUCTURE  
& ALGORITHMS**  
USING JAVA



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**JAVA  
BACKEND**  
(Adv. Java & Spring & Hibernate Framework)



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**OCFA JAVA  
CERTIFICATION**



▶▶▶▶▶

**OCP JAVA  
CERTIFICATION**



▶▶▶▶▶

**PYTHON**  
LANGUAGE



▶▶▶▶▶

**DATA  
ANALYTICS &  
SCIENCE**



▶▶▶▶▶

**DJANGO  
FRAMEWORK**



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**WEB  
DEVELOPMENT**



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**ADVANCED  
WEB FRONT END  
(React JS)**



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**WEB  
BACK END**  
(Node JS & MongoDB & Express JS)






Are you ready to elevate your career?

## Get In Touch

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Alpha I, Greater Noida, UP

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