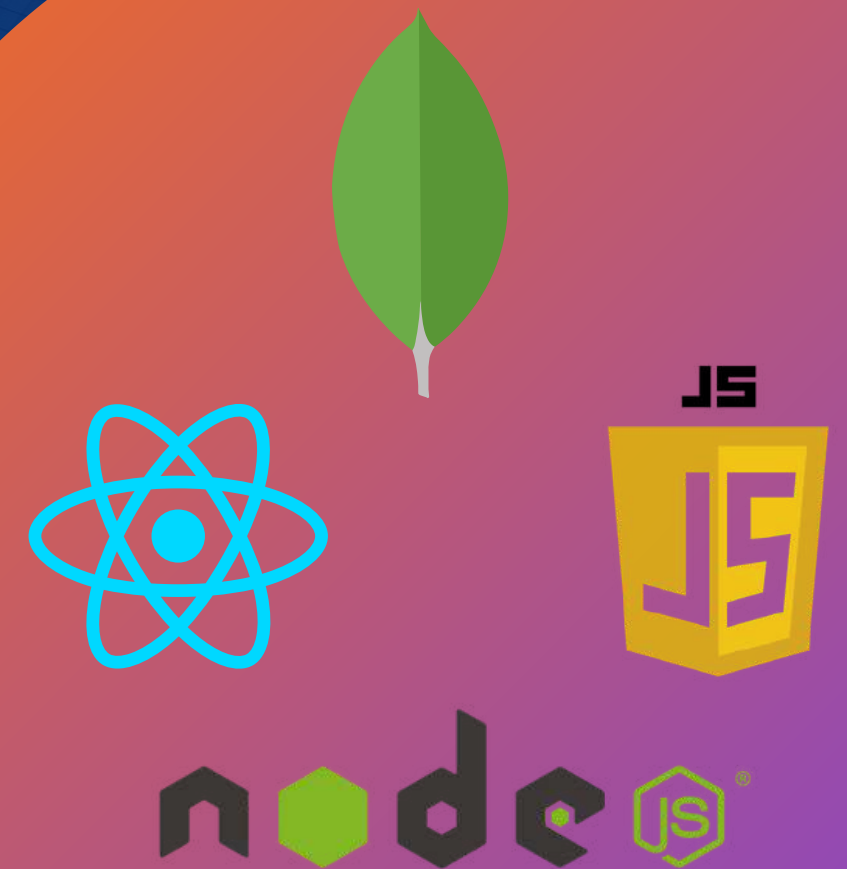




TESTING SHASTRA

EXCELLENCE WITH EASE

# Master Class on **MERN STACK** Development





TESTING SHASTRA



# Welcome To Testing Shastra

Testing Shastra is a premier IT training and placement institute, offering a comprehensive array of courses designed to equip students with the latest skills demanded by the industry. Our curriculum covers a range of trending technologies including Java Fullstack Development, Automation Testing, ReactJS, Manual Testing, UI/UX Development, and REST API Testing. With a track record of successfully training over 3000 students, Testing Shastra has established itself as a trusted destination for quality education and career advancement. Our dedication to excellence is reflected in our impressive placement record, with approximately 2000 students placed in leading companies across various sectors. At Testing Shastra, we are committed to nurturing talent and empowering individuals to thrive in the dynamic world of IT.



# KEY FEATURES

01

## 100% PLACEMENT ASSURANCE

Our industry aligned course and exhaustive curriculum ensures to help you achieve your dream job. You will get unlimited call supports till your placement

02

## IT PROFESSIONAL TRAINERS

All our trainers are IT professionals. Their expertise, guidance, and industry insights empower you to acquire the necessary skills, stay relevant in a rapidly changing field, and succeed in your IT careers.

03

## LIVE PROJECT BASED TRAINING

We use all the industry standard tools to give you the complete walkthrough of Live projects. Each candidate will get 2 Live projects to work upon.

04

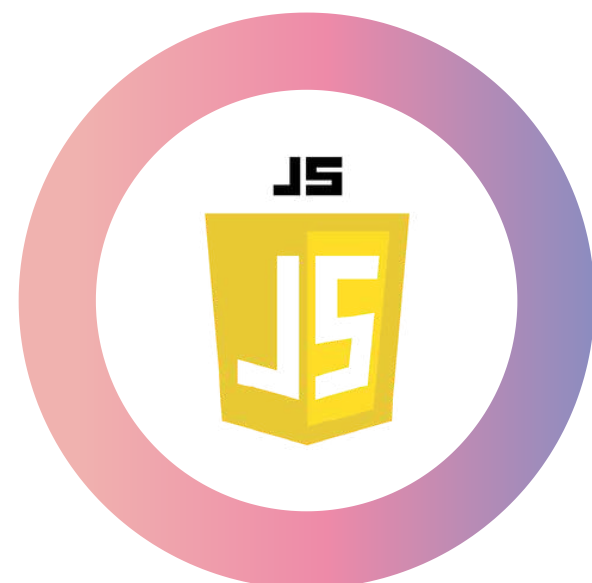
## MOCK INTERVIEW PREPARATION

Continuous mock interviews helps you to understand your preparation in better way. You can attend unlimited mock interviews to understand yourself better.

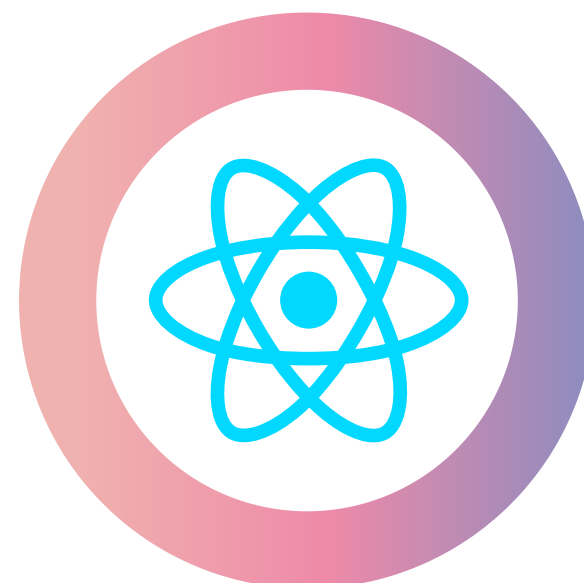
# COURSE MODULES



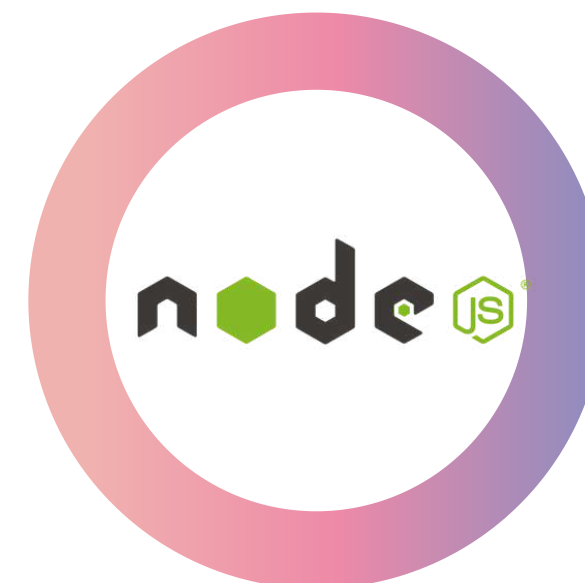
MongoDB



Express Js



React Js



Node Js



Live Projects



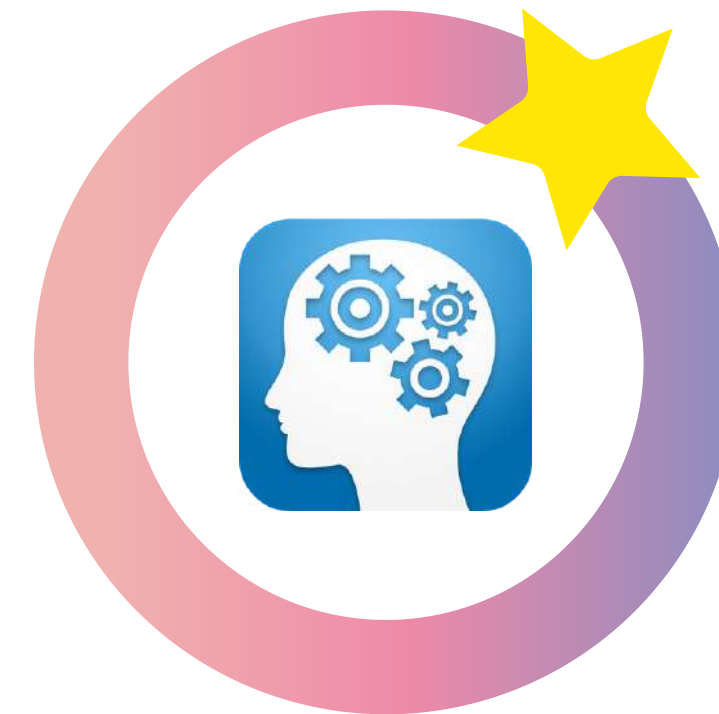
# OPTIONAL MODULES



**Soft Skills and Written  
Communication**



**Mentorship Sessions**



**Aptitude and Reasoning  
Paid**

## Module-1

# HTML and CSS

### HTML 4 and HTML 5

- Introduction of HTML
- Tag, Elements and Attributes
- Basics syntax
- Table
- List
- Forms
- Structure of HTML4 and HTML5
- Semantic and non-semantic tags
- HTML 5 Features
- New Input type Forms Attribute
- SVG
- Canvas
- Audio, Video Tag

### CSS

- Attributes (ID, Class, Style, Title )
- CSS Types (Inline, Internal, External)
- Box-model
- Display Property (Block, Inline, None)
- Visibility-Hidden
- Position Property(Static, Relative, Absolute, Fixed )
- Z-index Property
- Combinators ( Child Selector,Adjacent Sibling Selector
- Descendant Selector, General Sibling Selector)

- CSS Pseudo-classes ( Visited, Hover,Link,,Active)
- CSS Pseudo-elements ( Selection,First Letter,First Line, Before After)
- K. Static Web Page
- Viewport Meta tag

### CSS 3

- Background, Multiple Backgrounds
- Font Related Features (online fonts)
- Text-Effect and Box-Effect
- Gradients-Line a and Radial
- Transition
- Transformation
- Animation
- Media Queries

## Module-2 JavaScript

- Understanding JavaScript
- Linking JavaScript
- word vs keyword
- console.log()
- document.write
- var, const, let
- Hoisting
- Types of JavaScript
  - (Primitive & References {},[],())
- Conditionals
  - (if-else, else-if)
- Loops
  - for
  - for each(array)
  - while
  - do-while

- Arrays
    - push (add)
    - pop (remove)
    - unshift (add Start)
    - shift (remove start)
    - splice(index,count)(remove)
  - functions
  - Objects
    - (key:value)
- async JavaScript  
    async vs sync JavaScript  
Api Call (async, await)

### \*\*\*\*\* ADVANCE JS \*\*\*\*\*

- var vs let,const (es5 & es6)
- Scope of var, let, const
- Browser context Api
  - window Objects
    - (window features)
      - window features
        - alert
        - console
        - document.
          - setTimeout
          - setInterval
- -stack (FI-FO)
- -heap memory (temporary memory)
- Execution context
- Lexical Environment
- Spread operator (copying reference value)
- Truthy & Falsy

## Module-4

# Mongo DB

- Overview
- Advantages
- Environment
- Data Modeling
- Create Database
- Drop Database
- Create Collection
- Drop Collection
  
- Data Types
- Insert Document
- Query Document
- Update Document
- Delete Document

MongoDB is an agile and scalable NOSQL Database. The name Mongo DB comes from "humongous". It is based on the NoSQL document store model, meaning that data is stored in the database as a form of JSON objects rather than the traditional columns and rows of a relational database. Following are some reasons that MongoDB really fits in the Node.js stack well:

I. High performance: MongoDB is one of the highest performing databases available. Especially today when more and more people interact with websites, it is important to have a backend that can support heavy traffic.

II. High Availability: MongoDB's replication model makes it easy to maintain scalability while keeping high performance.

III. High Scalability: MongoDB's structure makes it easy to scale horizontally by sharing the data across multiple servers.



## Module-5

# Express JS

- Overview
- Environment
- Hello World
- Routing
- HTTP Methods
- URL Building
- Middleware
- Templating
- Static Files
- Form Data
- Database

The Express Module acts as the webserver in the Node.js-to-Angular stack. The fact that it is running in Node.js makes it easy to configure, implement, and control. The Express module is an extension of Node.js for handling several web requests. This allows you to implement a running web server in Node.js with only a few lines of code. Features of Express are:

- I. Route management: Express makes it easy to define routes that tie directly to Node.js script functionality on the server.
- II. Error Handling: Express provides built-in error handling for documents not found and other errors.
- III. Easy integration: An Express server can easily be implemented behind an existing reverse proxy system such as Nginx or Varnish. This allows it to be easily integrated into your existing secured system.
- IV. Cookies: Express provides easy cookie management.

## Module-3

# React Js

- Introduction to React
- Lesson 1. What is React?
- Lesson 2. Why React?
- Lesson 3. React version history
- Lesson 4. React 16 vs React 15
- Lesson 5. Just React - Hello World
- Lesson 6. Using create-react-app
- Lesson 7. Anatomy of react project
- Lesson 8. Running the app
- Lesson 9. Debugging first react app

### Components

- Lesson 1. Significance of component architecture
- Lesson 2. Types of components - Functional, Class based, Pure
- Lesson 3. Component Composition

### State and props

- Lesson 1. What is state and its significance
- Lesson 2. Read state and set state
- Lesson 3. Passing data to component using props
- Lesson 4. Validating props using propTypes
- Lesson 5. Supplying default values to props using defaultProps

### ReactJS-Component Life Cycle I

- Lifecycle Methods.
- Explanation on life cycle

### ReactJS Events

- Simple Example
- Child Events.

### ReactJS - Redux

- Concept of Redux
- Redux API
- React-Redux provides
- Middleware- (Trunk)

### ReactJS Router

- Install a React Router
- Create Components
- Add a Router

## Module-6

# Node JS

- Introduction
- Environment Setup
- First Application
- REPL Terminal
- Package Manager (NPM)
- Call backs Concept
- Event Loop
- Event Emitter
- Buffers
- Streams
- File System
- Global Objects
- Utility Modules
- Web Module

Node.js is a development framework based on Google's V8 JavaScript engine. Node.js code is written in JavaScript and then compiled into machine code by V8 to be executed. Nice thing about Node.js is that it is all just JavaScript, so you can easily take functionality from a client-side script and place it in a server-side script. Following are the reasons why Node.js is a great framework to start from:

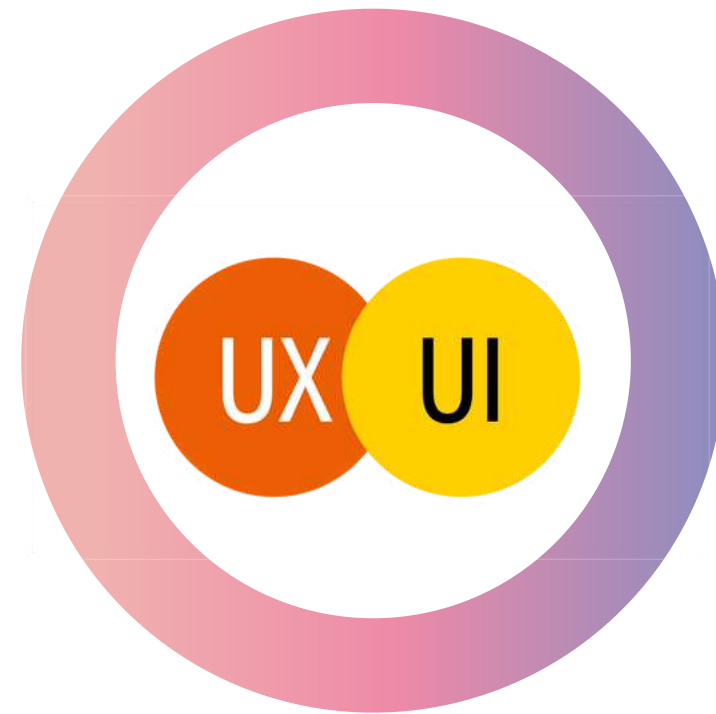
- I. JavaScript end-to-end: One of the biggest advantages to Node.js is that it allows to write both server-side and client-side scripts in JavaScript.
- II. Event-driven scalability: Node.js applies a different logic to handling web requests. Rather than having multiple threads waiting to process web requests, they are processed on the same thread using a basic event model.
- III. Extensibility: Node.js has a great following and an active development community.



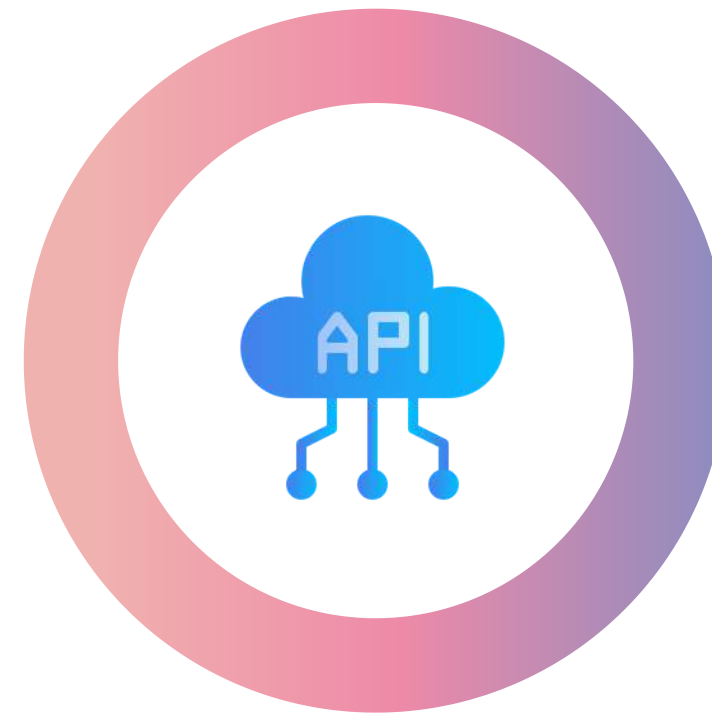
# OUR OTHER COURSES



Diploma in Java Fullstack  
Development



Diploma in  
UI/UX Development



REST API Testing



Manual Testing



TESTING SHASTRA

# Read Our Reviews on Google

★★★★★ 4.9/5





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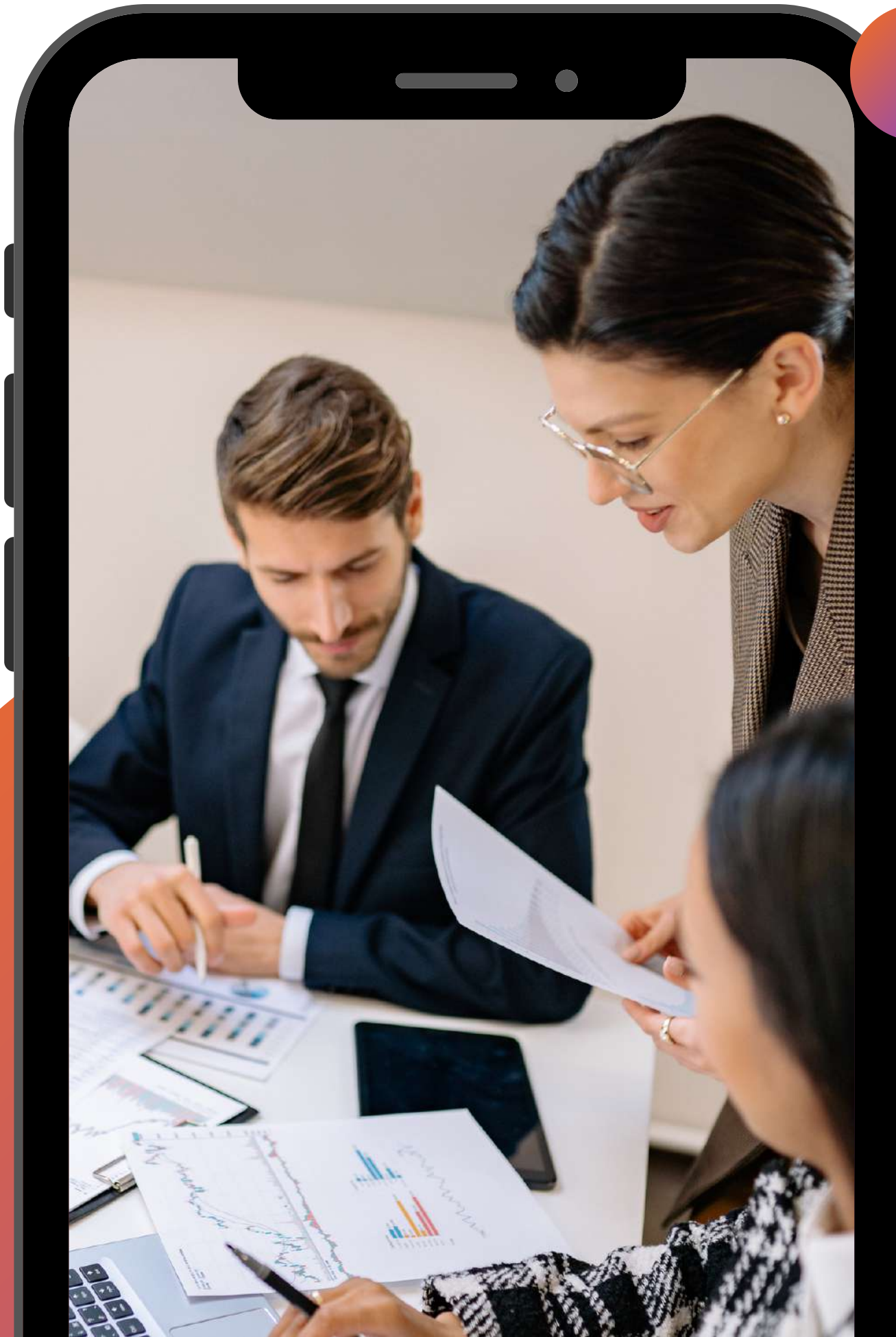
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# Thank You

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