ORACLE

Build And Deploy Applications Faster Using The APEX Service On Oracle Cloud Infrastructure

Build apps 20x faster with 100x less code

Manish Kapur

Director, Product Management

@kapmani

/in/mkapur

Poll

What topics interest you the most?

      Answer 1: General OCI roadmap

      Answer 2: Deep-dive sessions on new OCI services

      Answer 3: Configurations and best practices for deploying on OCI

      Answer 4: OCI supported third-party solutions and integrations

      Answer 5: Real-world insights from practitioners

Poll

We're starting a limited availability access program for new OCI services. Are you a customer or partner and interested in an early preview?

Answer 1: Yes

Answer 2: No

Safe harbor statement

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.

# Poll

1. Are you currently using APEX?

 Answer 1: Yes

 Answer 2: No

Traditional Application Development has challenges

1   Requires specialized skills, **dependency** on professional talent

2   **Long development cycles**, unacceptable time to market

3   Increased business demands results in **huge application backlog**

4   **Expensive** to build and maintain entire application stack

5   Development model **lacks agility**, not suitable for rapid development of new ideas
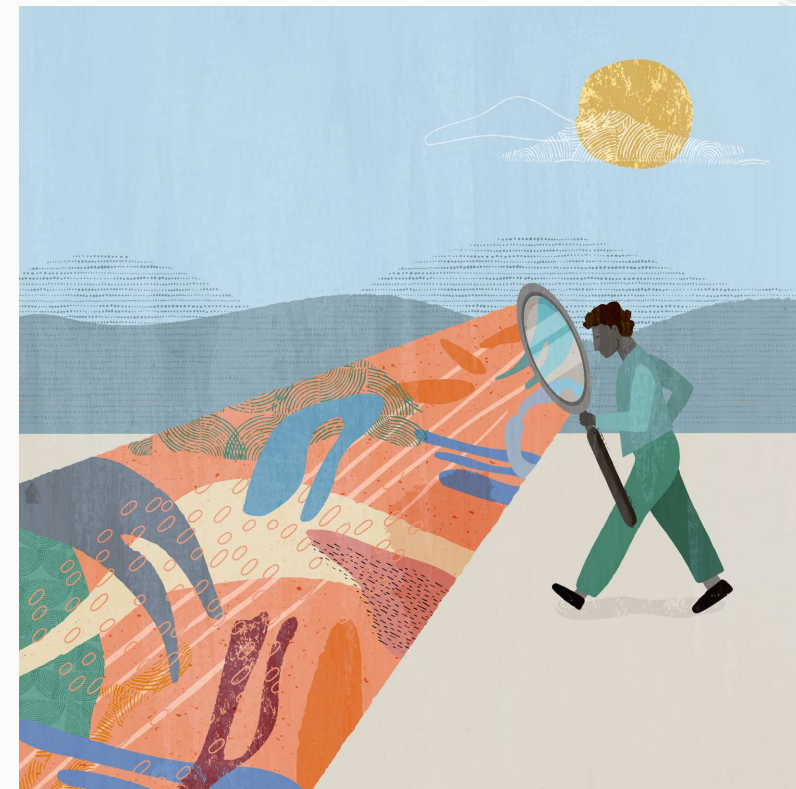
Low Code

Low-code development platforms reduce the amount of traditional hand coding, enabling accelerated delivery of business applications. A common benefit is that a wider range of people can contribute to the application's development—not only those with formal programming skills. LCDPs can also lower the initial cost of setup, training, deployment and maintenance

https://en.wikipedia.org/wiki/Low-code_development_platform

Why you should choose Low Code?

- No specialization needed, very easy to learn

- Less code to write, helps innovate faster

- Rapid delivery, Acceleration of speed to market

- Address business requirements with minimal cost

- Attract and retain top talent with innovative culture

Who should use low code development?

- ✓ Line of business / business analysts

- ✓ IT professionals

- ✓ Application developers

- ✓ Database developers / DBAs / DevOps

- ✓ You!

What is Oracle APEX?

A high-productivity, low code development platform for business analysts and low code developers to easily build scalable and secure data centric web applications

ā'pĕks
(#orclapex)

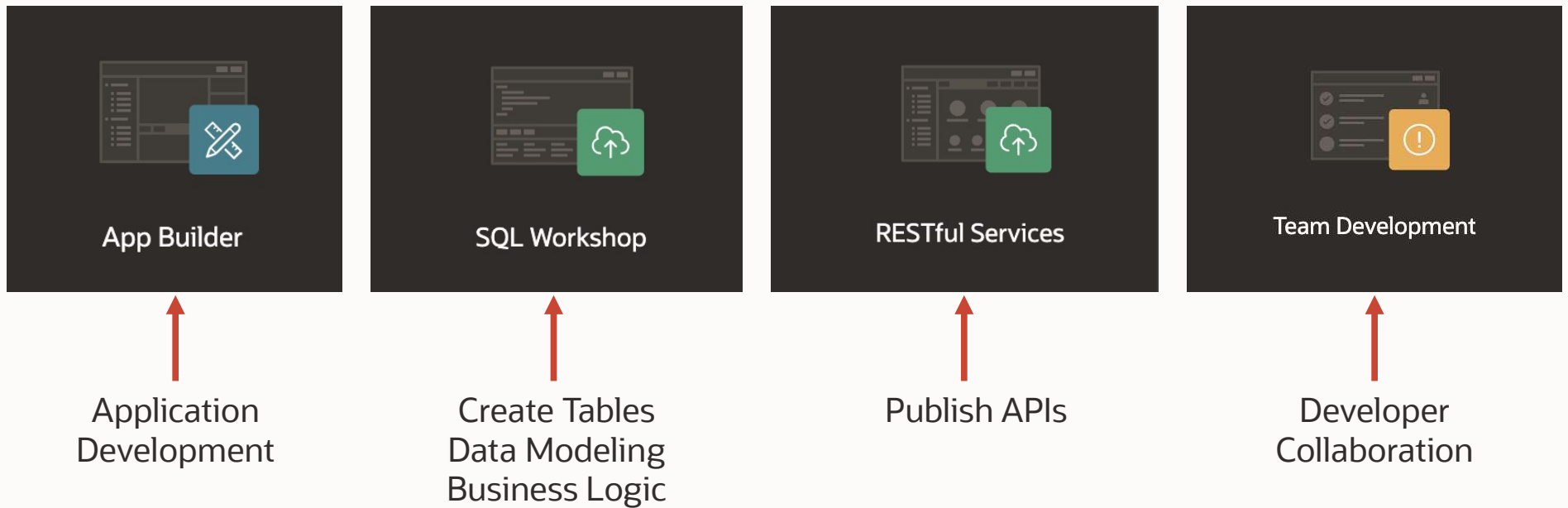# Oracle APEX Application Development – Framework

Develop desktop and
mobile web apps

Visualize and maintain
database data

**Leverage** SQL Skills and
database capabilities

Oracle APEX
A complete platform

App Builder	SQL Workshop	RESTful Services	Team Development
↑	↑	↑	↑
Application Development	Create Tables Data Modeling Business Logic	Publish APIs	Developer Collaboration

Includes life cycle management, debugging, advisors and one click remote app deployment

Oracle APEX Application Development - Characteristics
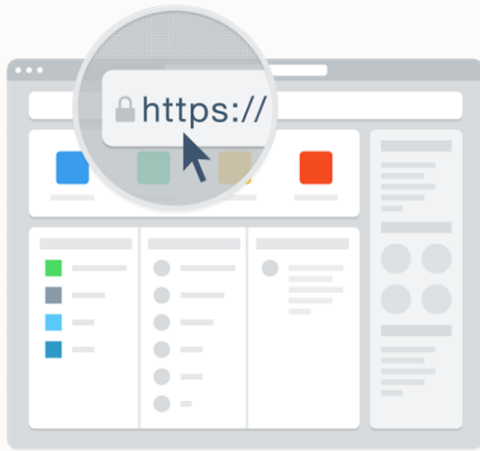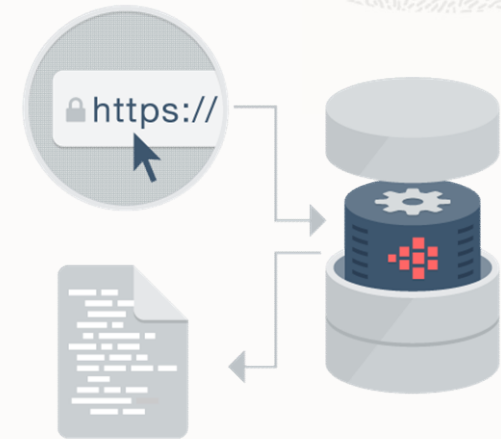
App Development IDE is a
web browser

No client software
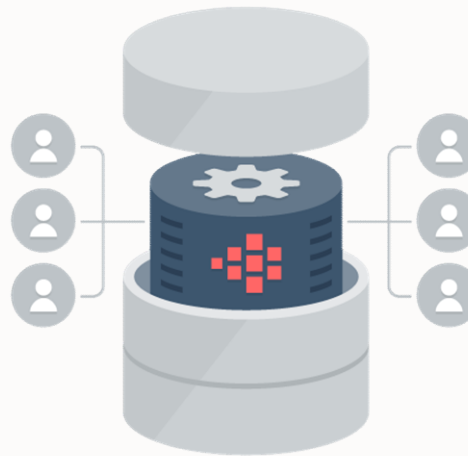
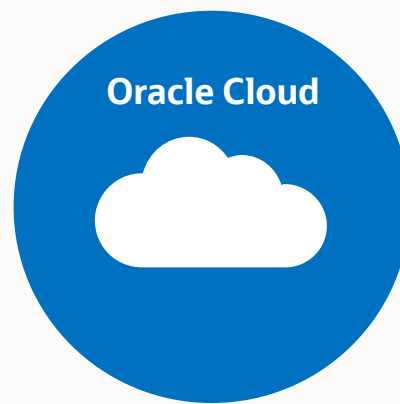App definitions are stored as
meta data

Declarative - no code
generation

Efficient execution with only
one request and one response

Zero latency data access

Oracle APEX

Development and deployment Options

On-Premises

Oracle Cloud

Third Party

- Available in all editions of Oracle Database on-prem including no cost Oracle XE
- APEX is a no cost feature of the Oracle Database
- Available in all Oracle Database Cloud services including the new APEX Service
- Available in multiple third-party cloud providers

Oracle APEX Application Development on Oracle Cloud Infrastructure

- **APEX Development:** Low-Code
  - Easy declarative development for citizen and pro developers
  - Rapidly create and iterate apps to match evolving business needs

- **APEX Deployment:** Zero OPS for Application or Data
  - Fully managed autonomous infrastructure
  - Automatically scales up and down, auto scale is available

- **Low Cost:** $358/month for 1 OCPU and 1 TB
  - No extra fees per-user, per-developer, per-application, data egress
  - Billed by the hour; $240 per OCPU, $118 per TB, up to 128 OCPUs and over a petabyte
 - Always free tier with 1 oversubscribed OCPU and 20GB of storage

Address your business app needs quickly using APEX

- ✓ Transform your spreadsheets to web apps in minutes

- ✓ Accelerating productivity using free self-service web apps

- ✓ Oracle Forms modernization

- ✓ Build or Extend enterprise applications

- ✓ Rapid application development

- ✓ Integrated App Dev as a Service

Full spectrum of apps

No code　　　　**Low code**　　　　**High code**
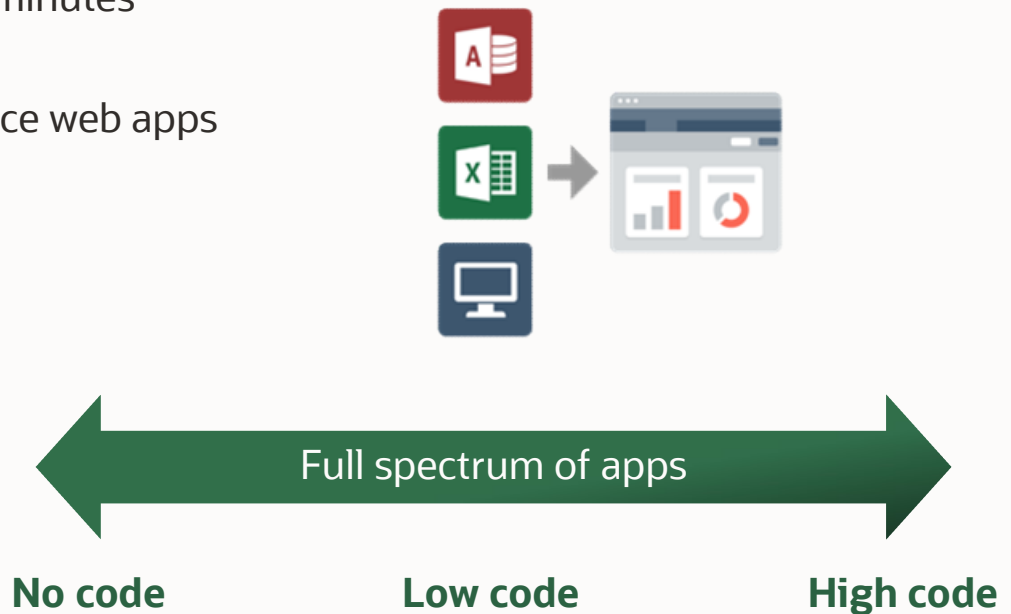
Oracle APEX Application Development
No shortage of application development use cases
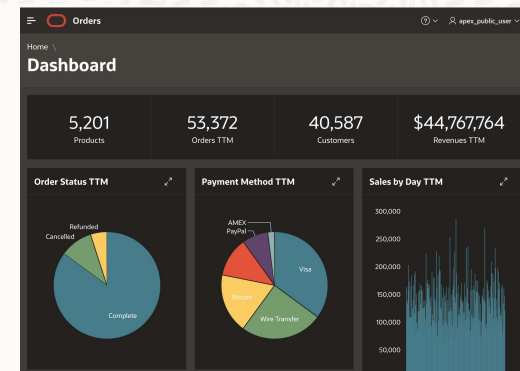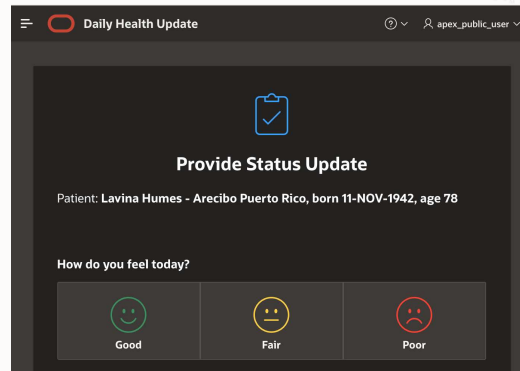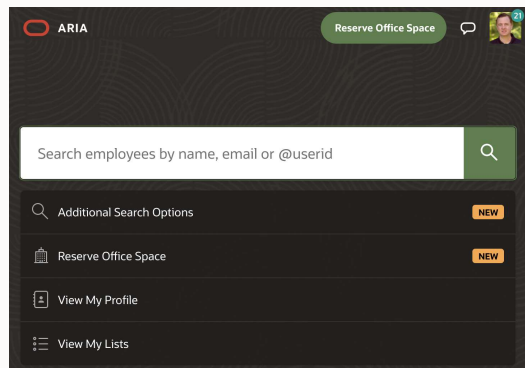
- Bespoke App Dev
- SaaS Extensions
- Spreadsheet Replacement
- Legacy Modernization
- Backoffice Apps
- Opportunistic AppDev

- LoB App Dev
- Process Automation
- SaaS Systems Development
- External Data Sharing
- Analytic Apps
- Personal Productivity Apps

- Digitization
- Enterprise App Dev
- Mobile App Dev
- SaaS Systems Development
- Dashboarding
- Data Visualization

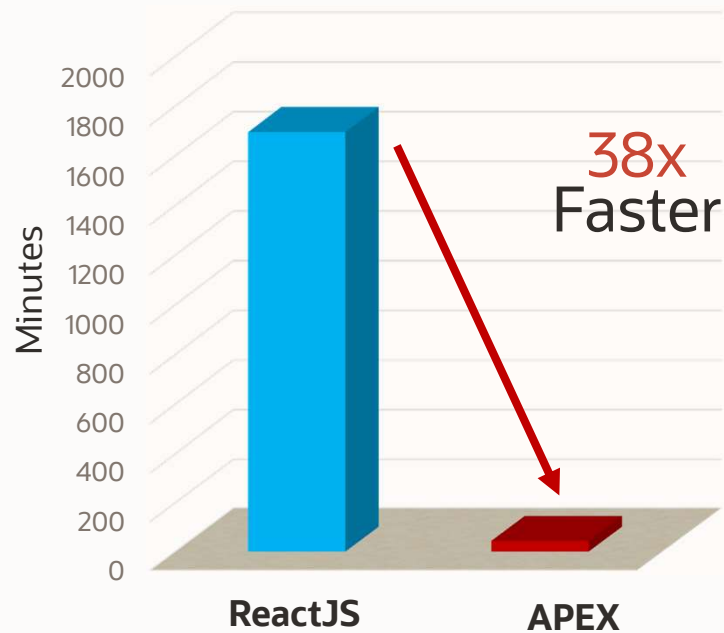Low code addresses industry shortages of time, money, developers, and expertise
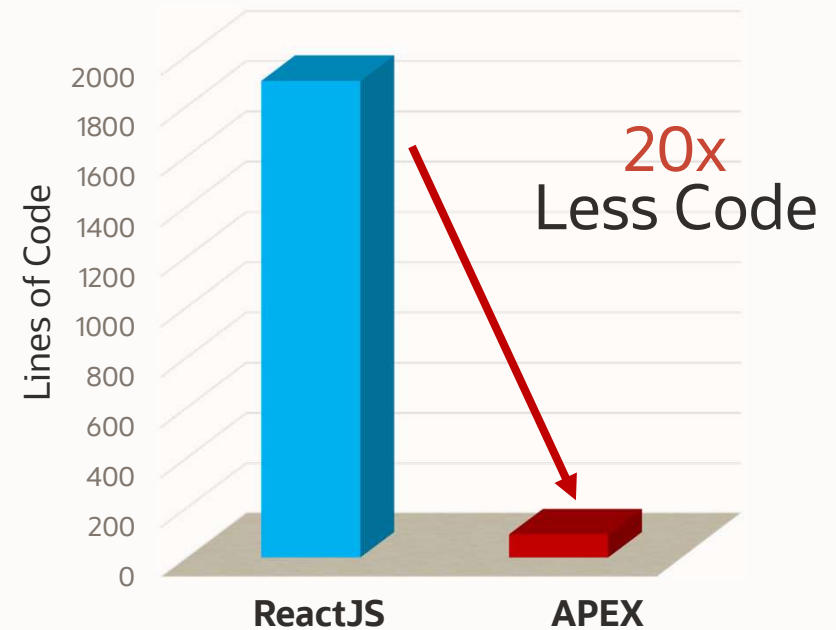
Radically Faster and Simpler App Development
Time and Motion Study : ReactJS vs. Low-Code APEX

Development Time

38x
Faster
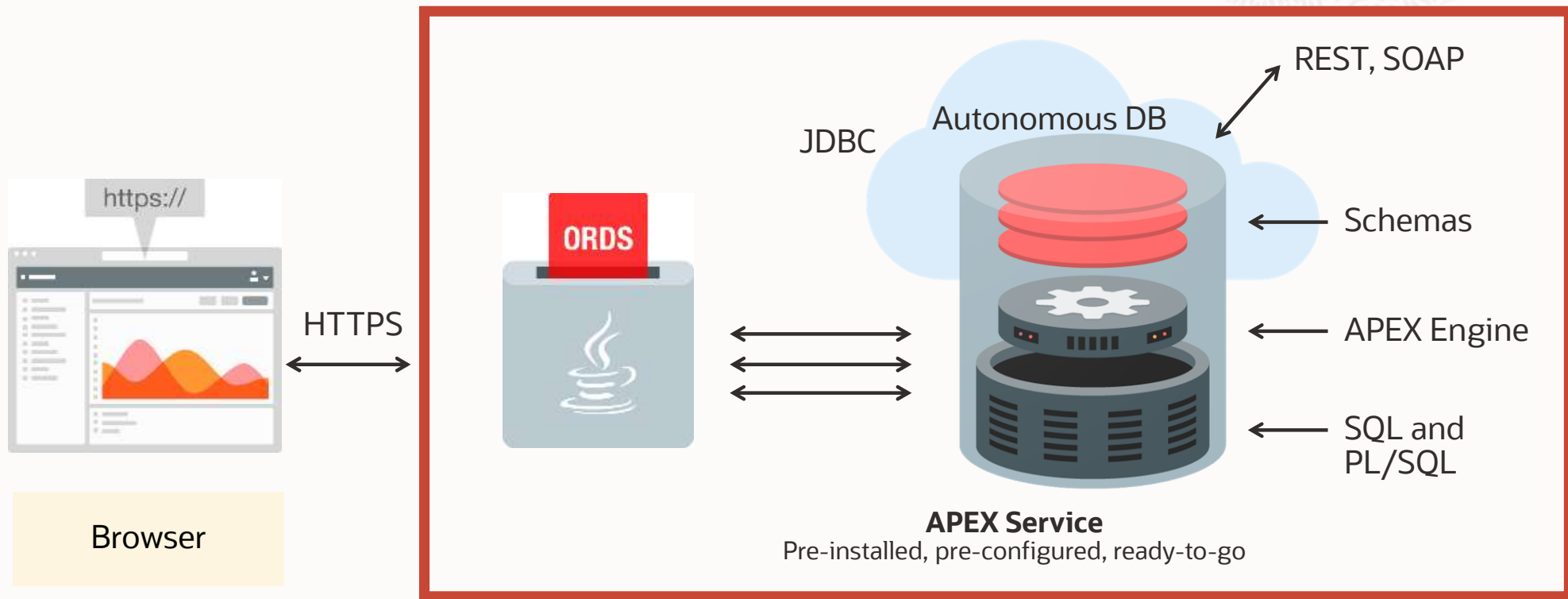
Minutes

ReactJS   APEX

Lines of Code

20x
Less Code

Lines of Code

ReactJS   APEX

Most systems don't need to be hand coded, hand coding should be the exception not the rule

Oracle APEX Service - **Architecture**

REST, SOAP

Autonomous DB

JDBC

Schemas

HTTPS

APEX Engine

SQL and PL/SQL

Browser

APEX Service
Pre-installed, pre-configured, ready-to-go

APEX Architecture: Unique In-Database Low-Code

- Model Driven Execution Engine
  - Not a code generator
  - Applications are just meta data (in-database)
  - A single Oracle Database easily service 1,000s of apps

- In-Database Engine
  - App server and database server in one tier, one computer
  - Access data without traversing a network improves response times
  - Avoids complex object relational mapping
  - Session state is automatic and in-database
  - Failover of database also fails over applications
  - Scaling up database scales up applications
  - One tier to debug and manage
  - Counterintuitive – Uses less CPU than traditional 3 tier applications

Request

Response
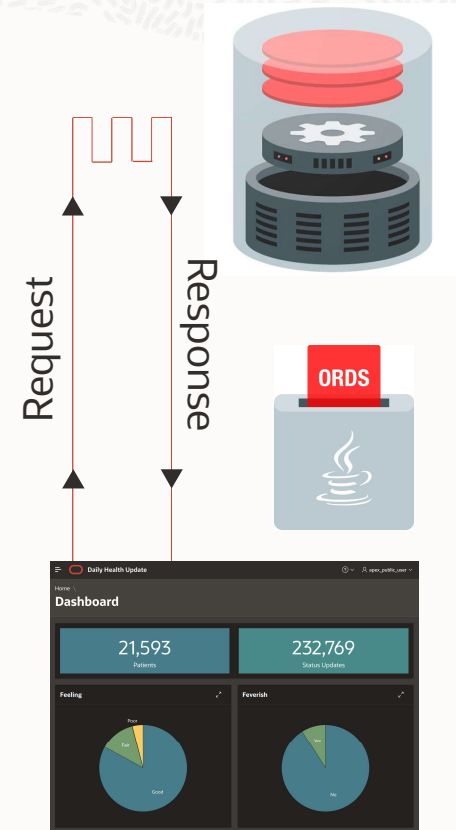
Oracle APEX Application Development: Competitive Advantages

- ✓ Highly productive low code application development
- ✓ Fully managed service in Oracle Cloud
- ✓ No extra costs per application, developer or end user
- ✓ Suitable for both citizen and professional developers
- ✓ Includes enterprise capabilities of Oracle Database (spatial & graph, machine learning, analytics)
- ✓ Segregate different lines of business on a single service
- ✓ One-click upgrade to virtually limitless capacity

Demo Time!

Poll

Based on what you heard today in the introductory session for Oracle APEX on OCI, are you interested in attending a deeper dive session to learn more about APEX Application Development?

1) Yes

2) No

Additional resources

Product Information

Oracle APEX Application Development

Oracle APEX

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Poll

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How satisfied were you with today's content?
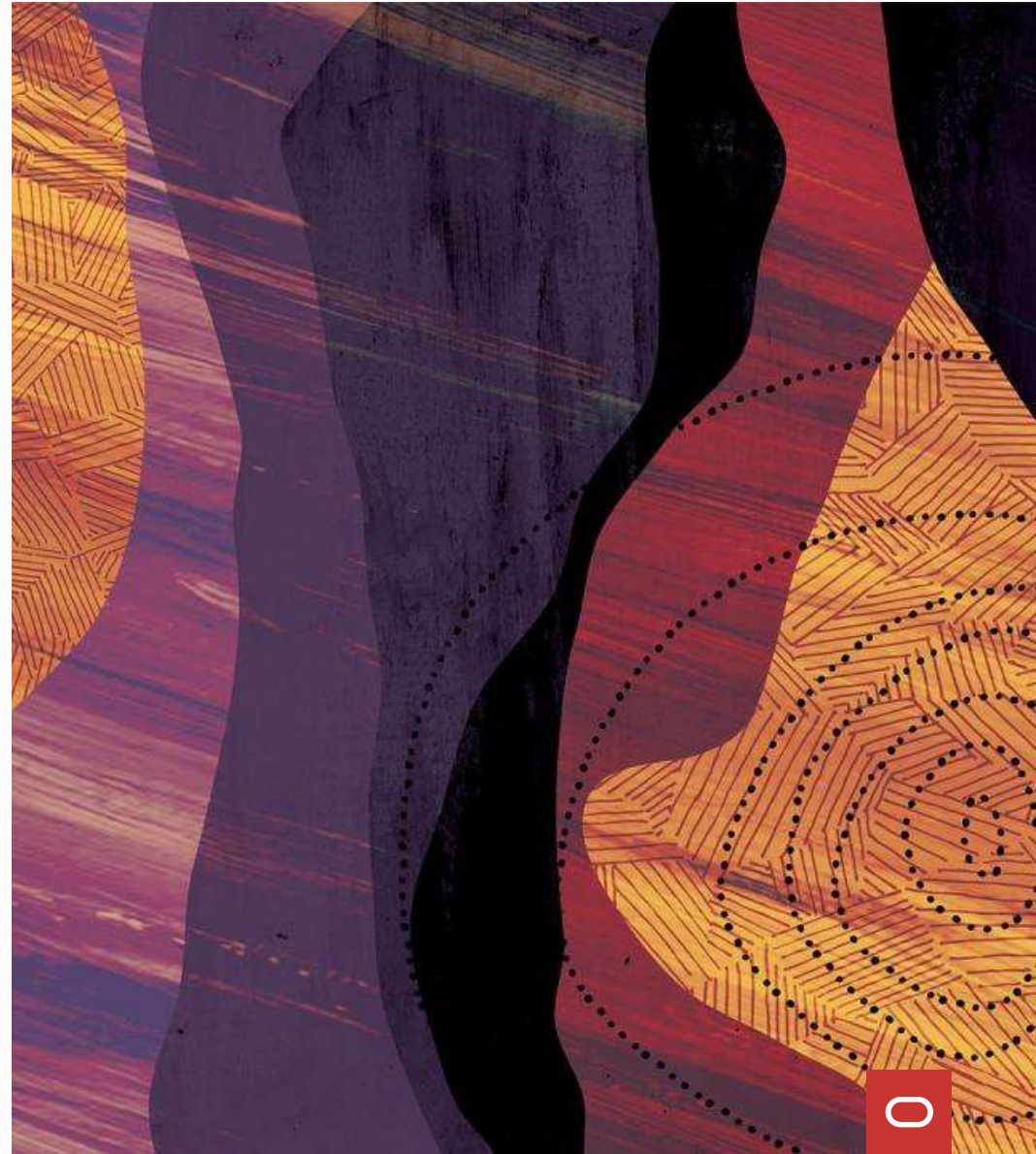
Did you learn something new today?

Do you know where to locate additional resources?

Thank you.

—

Manish Kapur

Our mission is to help people see data in new ways, discover insights, unlock endless possibilities.