Oracle Application Express (APEX)

Oracle Global Leaders Summit Meeting Americas 2020 September 3, 2020



Safe Harbor

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.

Statements in this presentation relating to Oracle's future plans, expectations, beliefs, intentions and prospects are "forward-looking statements" and are subject to material risks and uncertainties. A detailed discussion of these factors and other risks that affect our business is contained in Oracle's Securities and Exchange Commission (SEC) filings, including our most recent reports on Form 10-K and Form 10-Q under the heading "Risk Factors." These filings are available on the SEC's website or on Oracle's website at http://www.oracle.com/investor. All information in this presentation is current as of September 2019 and Oracle undertakes no duty to update any statement in light of new information or future events.

Joel R. Kallman

- Oracle America, 1996
- Based in Columbus, Ohio USA
- Co-creator of Oracle APEX

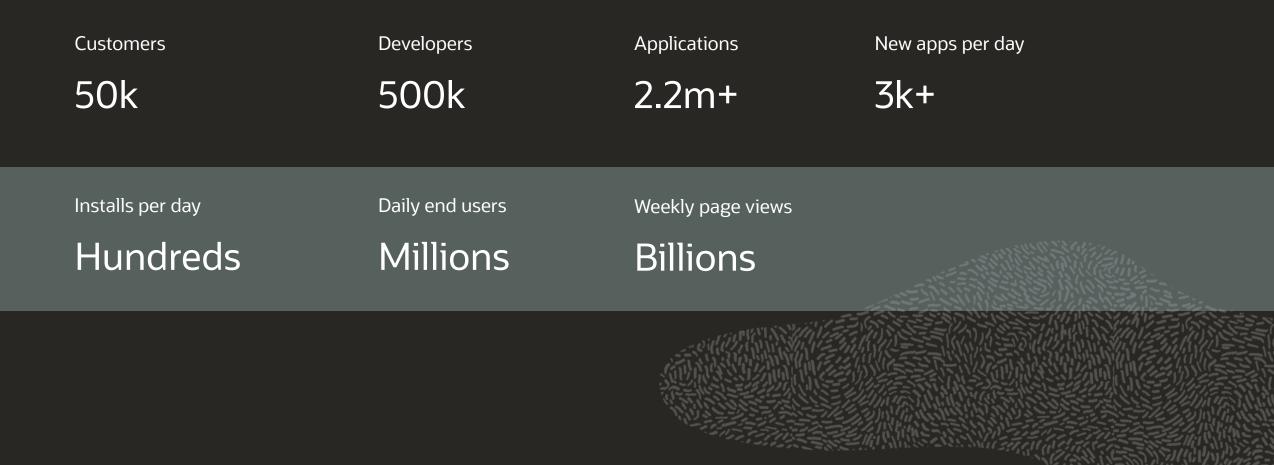


Responsible for Oracle APEX development & product management





APEX is the industry's most-used Enterprise Low Code Platform



Low Code versus Traditional Coding

- "10 times faster than traditional methods" Forrester
- "By 2024, low-code application development will be responsible for more than 65% of application development activity."
- "…compelling productivity gains for professional and citizen development, as well as speed-of-delivery benefits."
 Gartner

The Benefits of Low Code

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Faster Delivery



Greater Quality & Consistency

- Easier to Learn



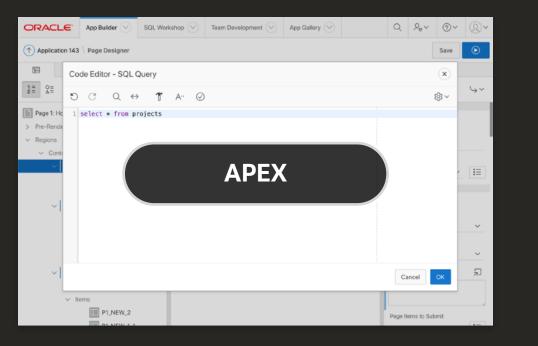
- Less Cost
- $\widehat{\mathcal{T}}$ More Reliable





Productivity vs Hand Coding

Low Code



Lots of Code



Oracle APEX is 20x faster with 100x less code

Oracle APEX

Low Code Application Development Framework



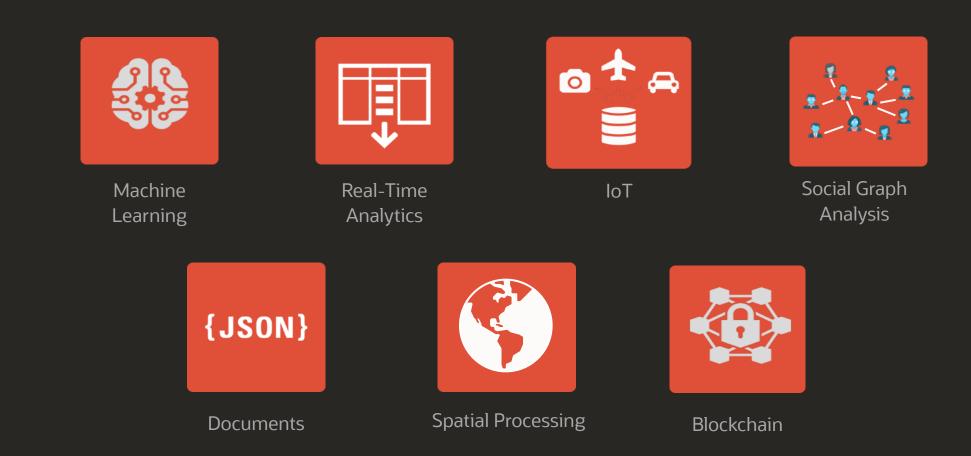




Develop desktop and mobile web apps Visualize and maintain database data

Leverage SQL Skills and database capabilities

Build APEX apps using native SQL



Common uses of APEX

- Spreadsheet Replacement
- Opportunistic Apps
- Process Digitization / Inefficient Processes
- Oracle Forms Replacement / Legacy App Modernization
- External Data Sharing
- ERP / SaaS Reporting & Extension



Oracle APEX Everywhere

APEX included with every Oracle Database, including Oracle Autonomous Database

- No cost fully-supported feature
 - All supported DB editions and versions
- No limits on developers, end users, apps
- Available in all Database Cloud Services
- Run on-premises, Oracle Cloud, other clouds

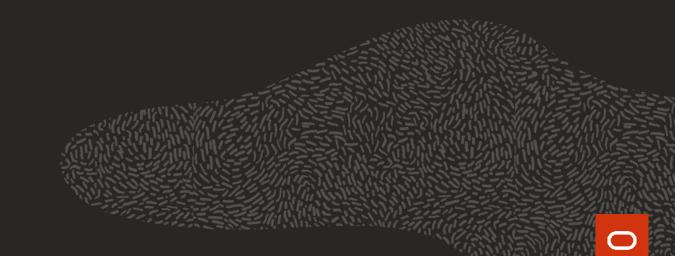
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Demonstration

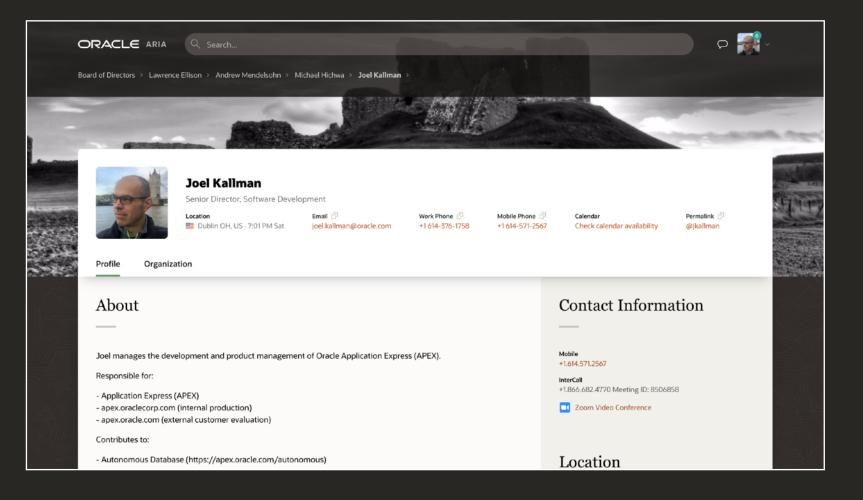


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3	APEX Environ	ment Configuration	Determine Web listener configuration(s)	10/18/2020	10/18/2020	Closed	James Cassidy	100	100	0 <u> </u>				framework		
4	APEX Environ	ment Configuration	Specify security authentication scheme(s)	10/19/2020	10/21/2020	Closed	John Watson	200	300					Database.		
5	APEX Environ	ment Configuration	Select servers for Development, Test, Production	10/19/2020	10/24/2020	Closed	James Cassidy	200	600					Learn Mor	e	
6	APEX Environ	ment Configuration	Run installation	10/27/2020	10/27/2020	Closed	James Cassidy	100	100							
7	APEX Environ	ment Configuration	Configure Workspace provisioning	10/26/2020	10/26/2020	Closed	John Watson	200	100					Dashboar	d	
8	APEX Environ	ment Configuration	Create pilot workspace	10/26/2020	10/26/2020	Closed	John Watson	100	100	Team Developmen	t	App Gallery		Bushboar		
9	Bug Tracker		Train developers on tracking bugs	1/7/2020	2/27/2020	On-Hold	Myra Sutcliff	0	2,000							
10	Bug Tracker		Measure effectiveness of improved QA	1/19/2020	2/19/2020	Pending	Myra Sutcliff	0	1,500					<u>^</u>		<u> </u>
11	Bug Tracker		Document quality assurance procedures	12/3/2020	1/6/2020	Open	Myra Sutcliff	3,500	4,000		Messages			0		0
12	Bug Tracker		Review automated testing tools	11/1/2020	12/2/2020	On-Hold	Myra Sutcliff	2,750	1,500							
13	Bug Tracker		Implement bug tracking software	10/31/2020	10/31/2020	Closed	Myra Sutcliff	100		174				Applicatio	ons	Tables
14	Convert Excel	I Spreadsheet	Collect mission-critical spreadsheets			Open	Pam King	2,500		174						
15	Convert Excel	I Spreadsheet	Lock spreadsheets			Open	Pam King	1,000	800							
10			Create APEX applications from spreadsheets			Open	Pam King	10,000						0		0
17			Send links to previous spreadsheet owners			Open	Pam King	1,000								
18	Discussion Fo		Identify owners			Closed	Hank Davis	250	300					Productivity	Apps	Issues
19	Discussion Fo		Install APEX application on internet server	12/14/2020			Hank Davis	100								
20	Discussion Fo		Monitor participation	12/15/2020		-	Hank Davis	450	N					Resources	5	
21	Email Integra			11/27/2020			Mark Nile	200								
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23	Email Integra		Complete plan	10/24/2020		Closed	Mark Nile	3,000						anexwork	4	
24	Email Integra		Purchase backup server	12/30/2020			Mark Nile	1 200	3,000					apex.world		
25		isfaction Survey	Complete questionnaire	12/5/2020			Irene Jones	1,200	400					Blog		
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29	Forms Conver			12/13/2020		Open	Pam King		12,000							
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APEX in the Real World

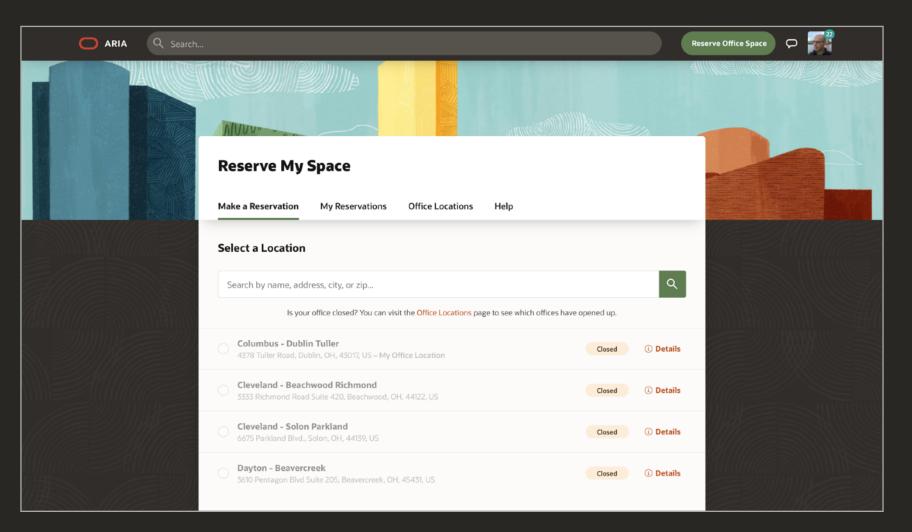


Aria People: Employee Directory

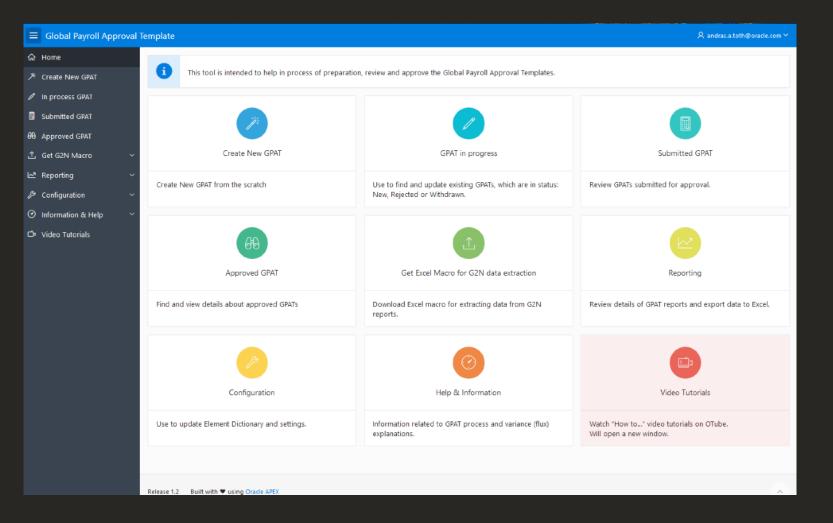


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Reserve My Space: Office Reservations



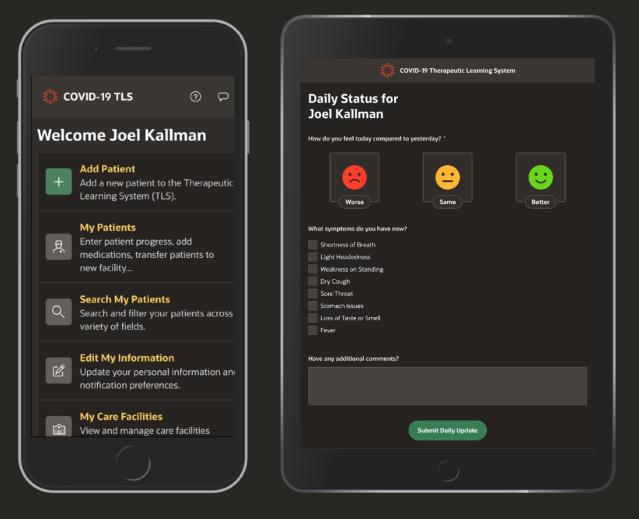
Payroll Approvals



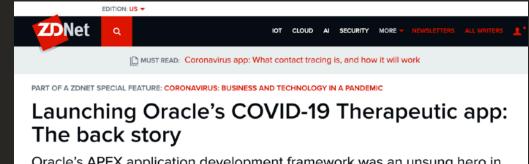
COVID-19 Therapeutic Learning System

- Collects real world data about COVID-19 patients and their prescribed treatments
- Fast way to study COVID-19 patient outcomes in aggregate
- Developed and deployed in under 2 weeks

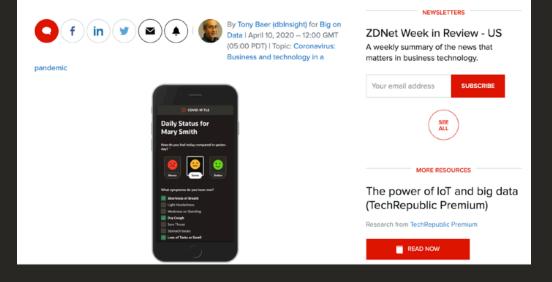
- Healthcare practitioner registers and adds their patients
- Patients receive daily email or SMS reminders to provide an update on their status



COVID-19 Therapeutic Learning System



Oracle's APEX application development framework was an unsung hero in enabling a drug treatment reporting app to make it from design to full national rollout in the US in barely two weeks. Here's how it happened.





Coronavirus Prevention Network Vaccine Trials (CoVPN)

Developed and deployed in ~2 weeks with Oracle APEX

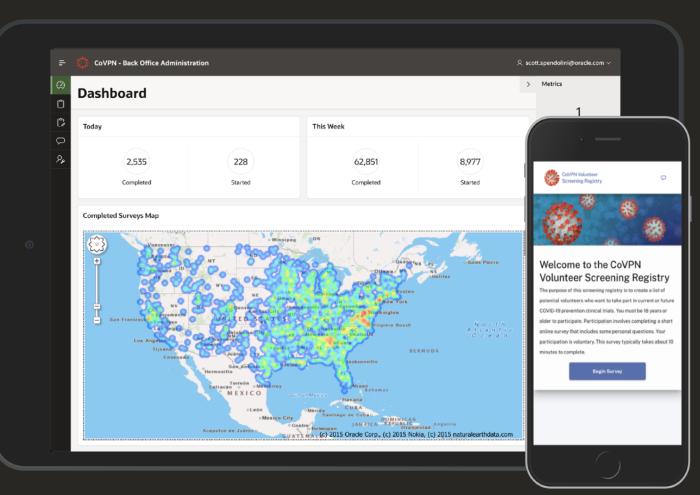
What it does:

• Intake survey designed to collect volunteers for CoVPN

How it works:

- 1. Patients register online and take quick survey
- 2. Results are analyzed and scored
- 3. Patients who meet criteria are advanced to clinical vaccine trials





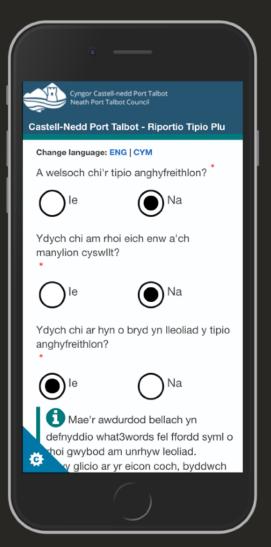
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Home 🕑 COVID-19 Apps Beginners 🕑 Post Jobs & Find Developers 🕑 Meetings & Trainings 😒 Plug-Ins 📀 Community 😒										
COVID-19 APEX Apps										
COVID-19 Therapeutic Learning System	APEX App to follow the COVID-19 Virus	COVID19 Masks								
What drugs are effective in treating or preventing the COVID-19 virus? Scope: USA Language: English Author: Larry Elison	APEX App to follow the COVID-19 Virus Scope: Global Language: English Author: Renny Welß	We're connecting hospitals, doctors, and healthcare workers in urgent need of Personal Protective Equipment to the volunteers around the world who want to help. Scope: Glebal Language: English Author: Anton Nielsen								
Corona Hilfe Angebote in der Region Lüneburg	Help Exchange	Daily Grocery Status								
Diese Anwendung soll zur Koordination der Hilfsangebote im Bereich Lüneburg dienen. Download the app to use it with your community. Scope: Local Language: German for new Author: Bernhard Fischer-Wasels	The portal supports Polish hospitals and other public institutions in informing about their current needs. Companies and institutions who offer support can also publish information about their free help. Portal is non-profit. Scope: Peland Language: English, Polski Author: Przemysław Kantyka	This application was quickly designed to combat the panic buying at grocery stores by providing a crowd-sourced list of which store has what supplies. If you would like to add a new city, please leave some feedback or send me an e-mail at dailygrocerystatus@gmail.com. Thanks! Scope: Glebal Language: English Autror: Scott Spendolini								
Pandemic Volunteer Virtual Projects	For Each Other	APEX_GY COVID-19 Virus Cases								
PVP is just a simple registry app that should give us an idea of the projects that are suggested or are in progress. Add projects, give suggestions, or look for a team that needs resources. Scope: Global Language: English Author; Jason Aughenbeugh	This app offers a way to give and receive help during a time of crisis. Scope: Global Language: English, Croatian Author: Goran Zebee	To inform Guyanese public of worldwide effect of COVID-19 cases and to inform them about local alerts from the Department of Public Information (DPI). Scope: Guyana Language: English Author: Nicholas Sestaram, Darshani Jumma								
COVID-19 Tracker	Covid-19 in Italy	GLOBAL COVID'19 Tracker								
COVID-19 Tracker is an application developed to track and analyze the propagation of the virus around the world. Scope: Global Language: Portugeese (pt-br), English Author: Luis Ricardo Oliveira	Deep dive Apex Charts using data provided by Italian "Protezione Civile" An application that graphically shows the data communicated daily by the "Italian Civil Protection" relating to the situation in Italy, of those infected with COVID-19, of the recovered, hospitalized patients, Tests performed, Home isolated and any variation and trend for each day. Scope: Italy Langage: Italian Author: Alessandro Bracchini, Federico Bernardini, Francesco Scarano	Description: Its a web based user-friendly application to track global stats for the corona virus outbreak. It consumes live data from trusted APIs. Every 15 minutes, data will be refreshed automatically. Scope: Global Language: English Author: Karkuvelraja Thangamariappan [4] Apps Solutions]								
Buit with ♥ using APEX Set Screen Reader Mode On										

Neath Port Talbot Council

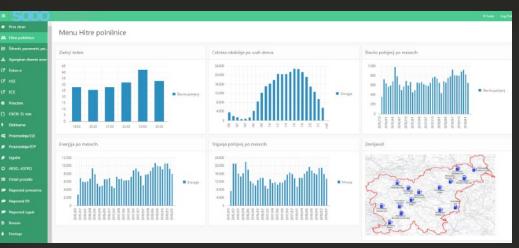
Mobile app for citizen incident reporting, spatial integration

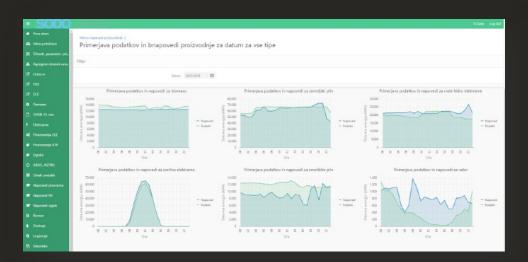
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Do you want to provide your name and contact information? *	
Ves No	
Are you currently at the location of the fly tip? *	
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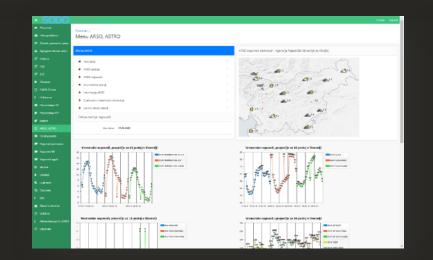


SODO doo (Slovenia) Electricity distribution system operator, entire back office systems









Abu Dhabi Vocational Education and Training Institute

Online course registration

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Ho	ome Registration More	Information		Applicants Report More Information Admin Users Email Status My Apps						
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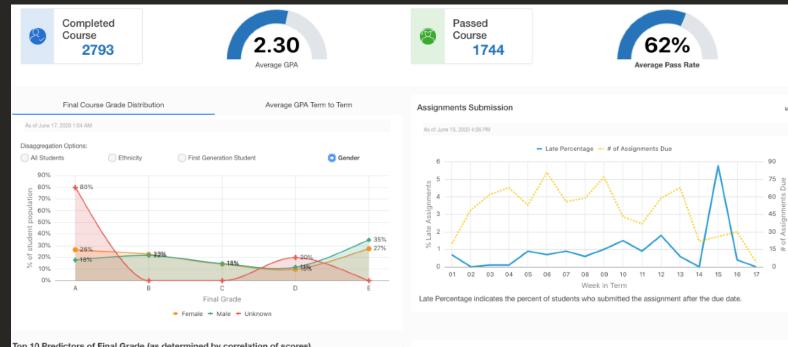
This week my team rolled out a new Faculty Dashboard to our 3000+ faculty at SLCC. I am so excited about the analytics in it! We built it in Oracle APEX. Blog coming soon. #TransformingHigherEd #IRwatercooler

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Salt Lake Community College

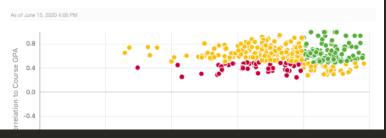
Faculty Dashboard



Top 10 Predictors of Final Grade (as determined by correlation of scores)

Assignment Title	Average Asssignment Score	Correlation Coefficient	Percent of Passing Assignment	Percent of Passing Assignment and Course
Mod 9: Mini Exercises [myBusinessCourse]	86.6	1	80 %	53 %
Mod 5: Exercises [myBusinessCourse]	82.2	1	80 %	53 %
Ch. 2 Red Co.	86.25	1	75 %	60 %
Mod 10: Mini Exercises [myBusinessCourse]	86.6	1	80 %	53 %
Ch. 8 Exercises	90	1	75 %	56 %

Assignment Correlation to Average Final Course Grade



Direction & Summary



Oracle APEX - Short Term Features

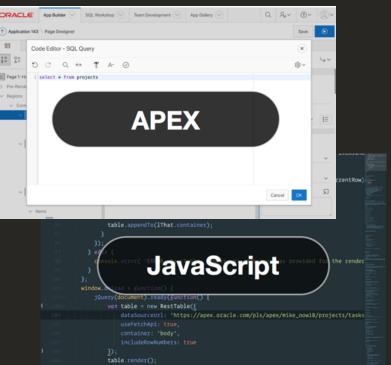
- New Oracle APEX Cloud Service
- Native support for server-side JavaScript (Multilingual Engine)
- Support for MySQL as a data source
- Automations (asynchronous actions)
- Data Loading from OCI Object Store
- Native support for Autonomous Data Warehouse service levels



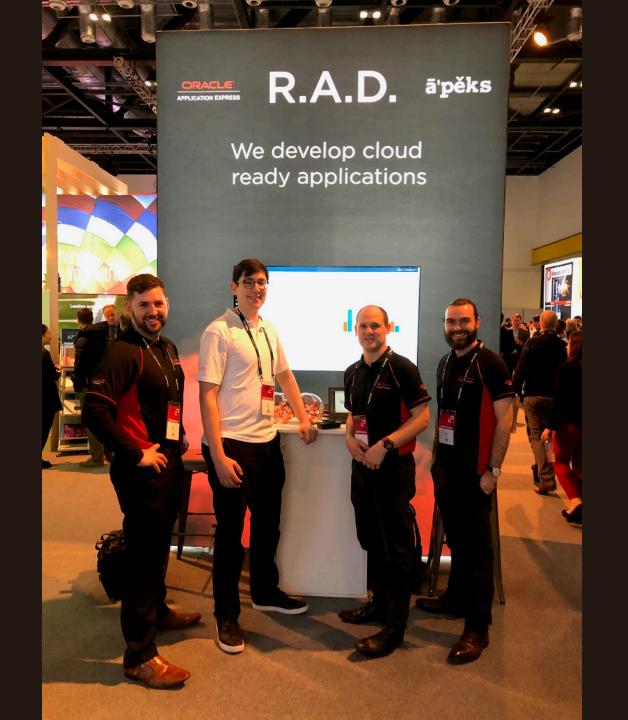
Oracle APEX

- Industry leading low code app dev platform
- Easy to learn and get started
- SQL and REST friendly
- Build responsive & mobile apps
- Included (free) with all Oracle Databases
- Part of Always Free Oracle Cloud
- Global success stories across all industries
- Loved by 500K+ developer community

20x faster with 100x less code







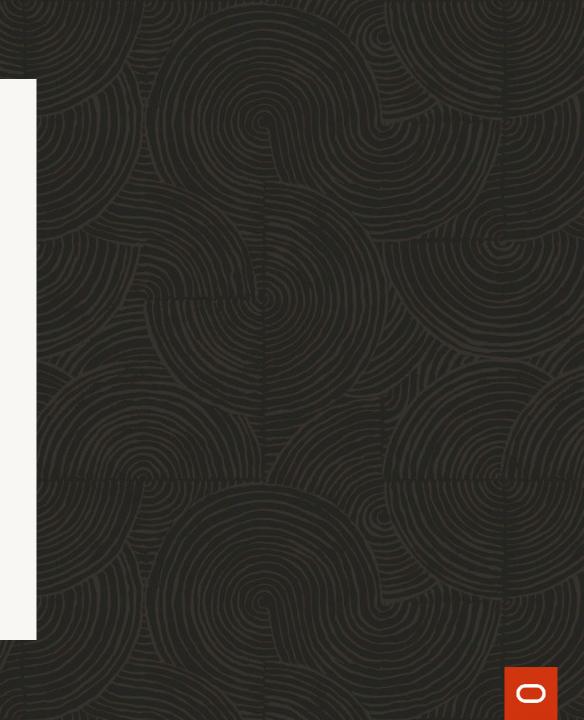
More information about Oracle APEX

apex.oracle.com

Thank You

Joel R. Kallman

Senior Director, Software Development Oracle Database Server Technologies





Oracle was named a November 2019 Gartner Peer Insights Customers' Choice for Enterprise Low-Code Application Platforms for Oracle APEX.



Reviews from enterprise peers—verified by Gartner gartner.com/reviews/customers-choice/enterprise-low-code-application-platform

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G2 Crowd:

Best Low-Code Development Platforms Software

Best Low-Code Development Platforms Software

What is Low-Code Development Platforms Software?

Low-code development platforms provide development environments that allow businesses to develop software quickly with minimal coding, reducing the need for extensive coding experience. The platforms provide base-level code, scripts, and integrations so companies can prototype, build, or scale applications without developing complex infrastructures. Both developers and non-developers can use these tools to practice rapid application development with customized workflows and functionality. Some products are geared more toward developers and require coding for functionality, while others provide element libraries for design. Many products can interpret information from databases or spreadsheets and quickly create applications to access and manage information.

These products differ from **no-code development platforms** because they focus on a greater level of functionality with customized code. While some no-code development platforms are code extensible, low-code platforms feature code customization as a primary function rather than an "as needed" solution. Their functionality also differs from that of a full **integrated development environment**, which provides the framework to program complete applications from scratch.

To qualify for inclusion in the Low-Code Development Platforms category, a product must:

Generate source code as a base for customization Allow developers to customize HTML markup and source code as a primary function Integrate with databases, web services, or APIs to connect data

Show Less

Top 10 Low-Code Development Platforms Software 🕕

OutSystems | Spring Boot | Claris | Salesforce Lightning Platform | Pega Platform | Kissflow | IAR Embedded Workbench | Oracle Application Express | Mendix | Zoho Creator

Constellation ShortList[™] Enterprise Low Code Tools & Platforms

