



ORACLE APEX AI APPLICATION GENERATOR

*From Code Generation to Application
Generation for the Enterprise*

A BLESSING AND A CURSE! *That's what I'm hearing about AI vibe coding from C-level execs in our larger enterprises. •*

Yes, thanks to vibe coding, business users can now use AI to generate their own business solutions! *Thank heaven!!* When a business executive needed an app — or a dashboard — for an extremely critical business problem, almost nothing was worse for IT. One had to drop everything and work like crazy to get something working and delivering results. Now, they can do it with their own staff with AI.

But wait! When they do that, they tend to ignore all the rules: no security, no governance, no auditability, no standards, no documentation. And would they use the certified, enterprise copy of the data? Not likely.

If it works, and stays in production, then it's a nightmare in terms of security and compliance. More likely, it only survives production for a month or two...then it gets dropped into IT's lap and it turns out to be unmodifiable and unmaintainable to boot.

So, AI vibe coding is simultaneously making things better, and making them much, much worse....

SOMETHING NEW UNDER THE SUN! Oracle has just announced something aimed at breaking this unwelcome pattern: *Oracle APEX AI Application Generator*. This version of APEX, which is **included in Oracle AI Database**, gives end-users a way to generate a business solution with a prompt to AI. But unlike other similar products, APEX does so **with enterprise-class security, governance and auditability**. And the result is reviewable by professional developers; maintainable; upgradable; and, understandable by other AIs. •

How is this possible? One key is a major difference in architecture, shown in **Figure 1** (page 3). Oracle APEX generates business solutions from a prompt, but it generates the solution in a different form. Instead of thousands of lines of source code in JavaScript,

Methodology

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PURPOSE AND METHODOLOGY FOR THIS REPORT

This *WinterCorp*
Research Note

covers Oracle's recent announcement of *Oracle APEX AI Application Generator*, related developments and their implications for customers. In creating this report, WinterCorp drew on its own independent research and experience, interviewed employees, attended Oracle events and analyzed Oracle documentation and literature. Oracle, in its capacity as the sponsor of this report, was provided an opportunity to comment on the paper with respect to facts. WinterCorp has final editorial control over the content of this publication and is solely responsible for any opinions expressed.

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Python, or some other procedural language, APEX generates a higher-level abstraction of the application, a structured application definition expressed in *APEXlang*, which APEX compiles into Oracle Database metadata and executes within its managed runtime. The abstraction is expressed in *APEXlang*, Oracle's domain-specific language for defining APEX applications. The abstraction itself can be understood by people and by other AI tools — and it can be modified. This difference alone sets the entire process apart from other systems on the market. It means that the AI prompt is used to create an understandable design that can be refined with use and updated as circumstances change.

But there is more to it. First, though the design exists as a higher-level abstraction, the application definition is expressed in a fully documented domain-specific language (DSL) which has a grammar; and formal rules. That means it is subject to audit, validation and modification by people and by AI tools as well.

Second, as it has for over twenty years, APEX complies with enterprise-class standards of security, governance and auditability. APEX provides application-level controls and a managed runtime, while applications also inherit foundational data-layer security capabilities directly from *Oracle AI Database*.

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EXAMPLE: In the demonstration I saw, the user created a display of outstanding “customer requests” with simple natural language prompt. The user then said, “add a chart that shows assignments by priority above the work area; make a bar chart and sort from most to least.” That produced the display in Figure 2 (page 3). ●

Note that the AI itself — an LLM-powered coding agent such as *Claude* or *Codex* — is not supplied by Oracle. It comes from the customer's provider of choice. But the APEX generator and the database it uses comes from Oracle.

So, end-users can create business solutions — apps, dashboards, reports, analytics — all while using a friendly interface that has substantial built-in graphics and that understands natural language. Using natural language, these solutions can be created and modified. They have built-in security, governance and auditability. They can later be analyzed at the design level (*APEXlang*) and reviewed, diffed and source-controlled as text-based application-definition artifacts by both AI tools and skilled people.

End-users get the flexibility, speed of implementation and autonomy that they want. And C-level execs get end-users — who are enjoying those benefits, while still maintaining security, governance and compliance.

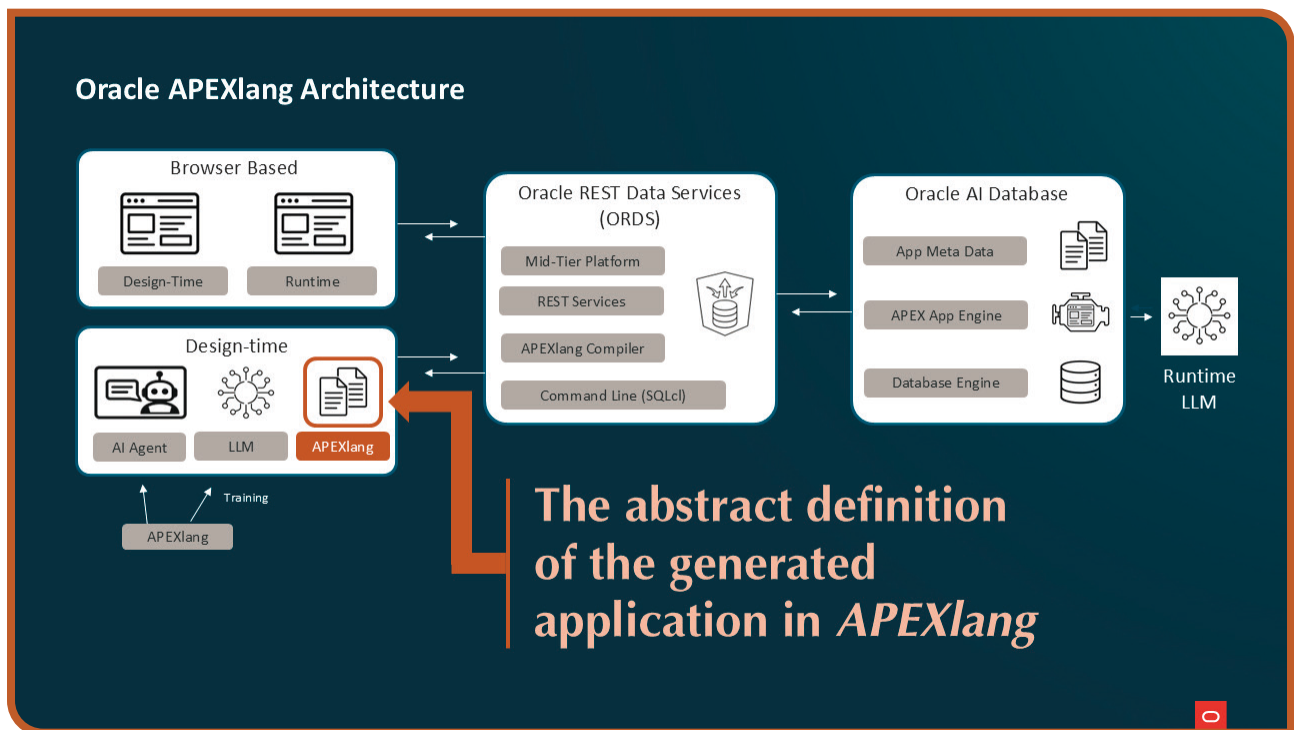


Figure 1: Oracle APEXlang Architecture (Source: Oracle Corporation)

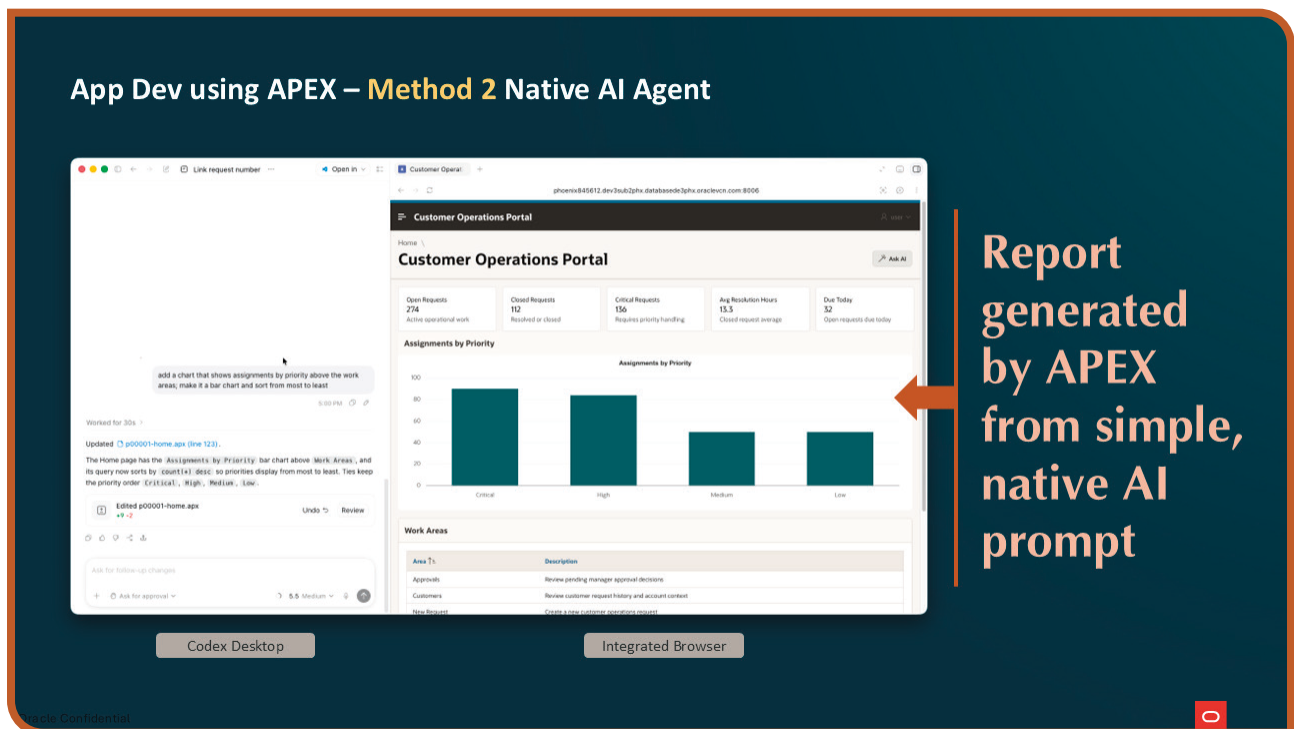


Figure 2: Example of a chart created by, with a natural language prompt to, Oracle APEX (Source: Oracle Corporation)

About WinterCorp

WinterCorp is an independent consulting firm expert in the strategy, architecture and scalability of the modern analytic data ecosystem, focusing on enterprise AI at scale.

Since our founding in 1992, we have architected and engineered solutions to some of the toughest and most demanding analytic data challenges, worldwide.

We help customers define their AI- and data-related business interests and vision; quantify their AI-related workloads and data platform requirements; develop their data strategies and architectures; select their data platforms; and engineer their solutions to optimize business value and obtain otherwise infeasible business outcomes.

Our customers get business results with analytics and AI in which their return is often ten or more times their investment.

When needed, we create and conduct simulations, benchmarks, proofs-of-concept, pilot programs and system engineering studies that help our clients manage profound technical risks, control costs and reach business goals.

With our in-depth knowledge and experience, we deliver unmatched insight into the issues that impede scalability, and into the technologies and practices that enable business success.

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Recommendation

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WINTERCORP RECOMMENDS that both **Oracle and non-Oracle customers** who want to empower end-users with the ability to create business solutions with data — business applications, dashboards, reports and analytics — **take a look at Oracle APEX AI Application Generator**. This is a new technology that builds on the 20-year-old proven and hardened foundation of APEX. It empowers business users to create their own solutions using AI and enterprise data, while still complying with enterprise standards for security, governance and data sharing.

Like other AI application generators, Oracle APEX can be controlled with natural language prompts. Unlike other AI application generators, it produces a maintainable, understandable, high-level abstraction of the result — *not* code — creating a uniquely beneficial, adaptable and maintainable type of business solution. ●