SJIF Impact Factor(2024) : 8.402
ISI I.F.Value : 1.188

ISSN (Online): 2455-3662
DOI : 10.36713/epra2013

EPRA International Journal of

MULTIDISCIPLINARY RESEARCH

Monthly, Peer Reviewed (Refereed) & Indexed International Journal

Volume - 10 Issue - 2 February 2024

I J M R

ISSN (Online) : 2455 - 3662
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EPRA International Journal of

Multidisciplinary Research

Monthly Peer Reviewed & Indexed International Online Journal

Volume: 10 Issue: 2 February 2024

Indexed By:

Published By :EPRA Publishing

CC License

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 10| Issue: 2| February 2024|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2024: 8.402 || ISI Value: 1.188

UNIFYING ENTERPRISE USER EXPERIENCE: PEGA COSMOS AND ENTERPRISE SUBSTANCES INTEGRATION

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Article DOI: https://doi.org/10.36713/epra15936
DOI No: 10.36713/epra15936

ABSTRACT

Pega, renowned for its low-code platform, introduces an innovative approach to transform enterprise user experiences. This article delves into the integration of Pega Cosmos and Enterprise Substances, offering insights into the Center-Out methodology and its impact on scalability. This paradigm shift toward a unified user experience not only addresses challenges in traditional enterprise applications but also aligns with sustainability goals.

KEYWORDS: *Pega Cosmos, Software Ecosystem, Enterprise Substances, Low-code platform, Center-Out methodology, Unified user experience, Theme Cosmos, Constellation (Cosmos React), UI architecture, Inheritance and packaging rules, Sustainability in application development, Green skilling, Carbon footprint reduction, User interface consistency, Enterprise application development, User experience design, Reusable UI elements, Development efficiency, Legacy UI architectures, Application branding, and Green technology in IT*

INTRODUCTION

Enterprise applications often grapple with low user adoption due to complex interfaces. Pega's Center-Out methodology, designed for adaptability, establishes a foundation for the transformative integration of Pega Cosmos and Enterprise Substances. This article explores how this integration streamlines user experiences, empowers enterprises, and contributes to sustainability efforts.

Pega Cosmos Architecture

Architecture	Description
Theme Cosmos	Section-based architecture that allows applications to inherit a unified UI skin from the Cosmos Skin.
Constellation (Cosmos React)	View-based approach providing an alternative method to achieve a cohesive user experience.

In Theme Cosmos, applications inherit a unified UI skin from the Cosmos Skin. This inheritance extends to components such as buttons and form elements, ensuring a consistent look and feel throughout the application. However, the flexibility is maintained, allowing applications to override inheritance and apply custom changes as needed.

Constellation (Cosmos React) diverges with its view-based approach, offering an alternative avenue for achieving a seamless user experience. This adaptability is crucial in accommodating varying enterprise landscapes with different interaction patterns and branding needs.

Addressing Inconsistencies in Enterprise Landscape

Enterprise landscapes are often characterized by diverse branding, work assignment structures, and interaction patterns. The inconsistency across applications presents a significant hurdle for users navigating through multiple platforms. The introduction of an "Enterprise Skin" offers a robust solution.

Strategy	Description
Create “Enterprise Skin”	Inherit from Cosmos skin, tailor to incorporate corporate branding, and configure based on specific requirements.
Package into a separate ruleset	Streamline development by packaging the Enterprise Skin into a separate ruleset for subsequent applications to inherit from.

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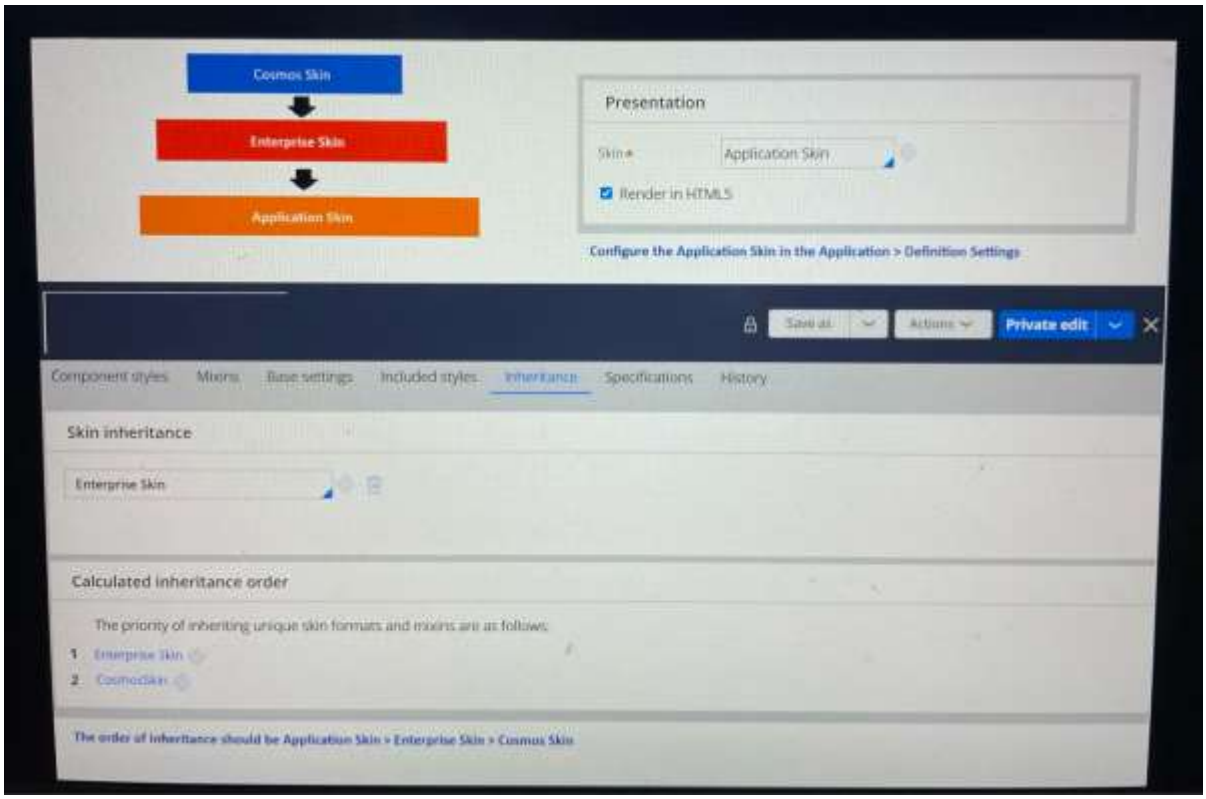
Methods: Leveraging Inheritance and Packaging Rules

To streamline development processes, organizations can package the customized "Enterprise Skin" into a separate ruleset. This ruleset, a compilation of UI configurations and branding elements, simplifies subsequent application development. Inheriting from the packaged "Enterprise Skin" eliminates the need for direct inheritance from Cosmos, promoting consistency and efficiency across applications in the enterprise landscape.



Inheritance order for configuring skin in the application setup

Helper Classes

Beyond the incorporation of the enterprise skin and pre-defined Cosmos Helper classes, organizations have the flexibility to introduce enterprise-specific helper classes tailored to their unique requirements. This approach ensures the maintenance of system sanity while providing the adaptability needed to customize the solution according to specific business needs.

Development Code Snippets:

```
/*******************

Type: Helper-class

Name: text-highlight

Category: cell

Description: styling for highlighted text

****************/
```

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```
.text-highlight {
  color: #008000;
  font-family: "Fanwood Text";
  src: url("fonts/fanwood-text/fanwood-text-regular.eot");
  src: url("fonts/fanwood-text/fanwood-text-regular.eot?#iefix")
format("embedded-opentype"), url("fonts/fanwood-text/fanwood-text-regular.woff2")
format("woff2"),url("fonts/fanwood-text/fanwood-text-regular.woff")
format("truetype",url("fonts/fanwood-text/fanwood-text-regular.svg#FanwoodText")
format("svg");
font-style: normal;
font-weight: 400;
}

/*******************

Type: Helper-class

Name: Hide object

Category: object

Description: Make an object hidden

*****************/

.hiddenObject {
Display: none;
}
```

The specific helper classes can be maintained as a separate entity and added to the enterprise skin under included styles > additional style sheets.

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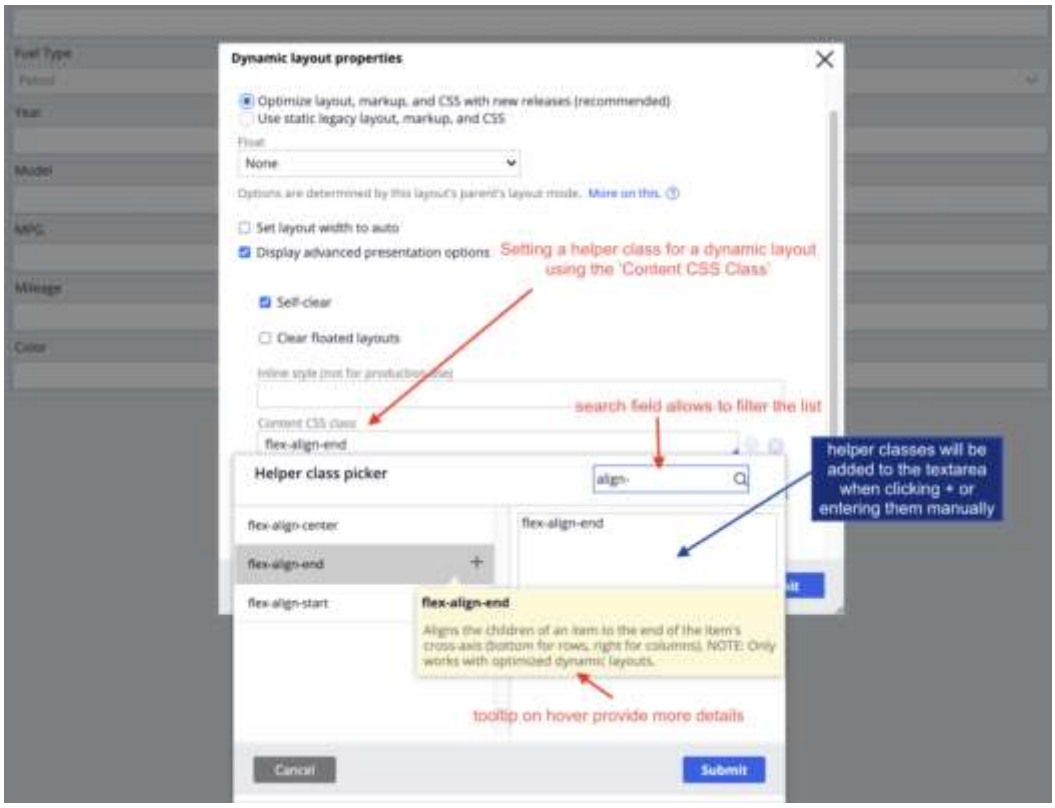

Referencing helper class in the layout after added to the skin

Applicability Beyond Cosmos UI Architecture

While the focus has been on the Cosmos UI architecture, the proposed approach extends its applicability to legacy UI architectures such as UI Kits. The flexibility in inheritance and packaging rules offers a versatile solution, revolutionizing development processes beyond the Cosmos framework.

Ecosystem - Unifying User Experience in the Enterprise Landscape

Unifying the user experience, especially in the enterprise landscape, creates an opportunity to develop a solid foundation for the software ecosystem. Here, the user interface acts as a platform or mediating proxies for connecting services and interdependencies of various applications. It also provides a gateway for mashups and web embeds, reducing the need to switch context and move from screen to screen or sometimes applications to applications.

A unified look and feel, consistent experience enable users to easily cross-train applications. This eliminates concerns about variations in work intake, processing, and uploading challenges across applications. The reduction of human slips and mistakes allows easy data sharing between individuals and collaborators toward organizational and users' goals.

Inclusive UX and Accessibility

This approach also supports inclusive UX and accessibility needs, even if it is a short-term concern at work. By unifying the user experience, enterprises can create environments that accommodate diverse user needs and ensure accessibility compliance, fostering an inclusive and user-friendly ecosystem.

Sustainability and Green Skilling

A crucial dimension in the evolving landscape of enterprise application development is sustainability. Pega's approach to reducing unnecessary codes contributes significantly to sustainability efforts. By minimizing redundant code, the carbon footprint associated with application execution is curtailed.

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Sustainability Aspect	Description
Reduction of Unnecessary Codes	Contributing to a lower carbon footprint by minimizing redundant code.
Alignment with Green Skilling Initiatives	Empowering development teams to adopt sustainable practices, contributing to a skilled workforce in eco-friendly applications.

Benefits

The benefits of this integrated approach extend beyond efficiency and consistency:

Benefit	Description
Effective Business Operations	Flexibility in role transitions with a focus on business content. Reduction of training time on application-specific details.
Accelerated Delivery	Utilization of reusable elements expedites development.
Reduced Time on Custom UI Components	Streamlined development by minimizing the time spent on designing custom UI components.
Sustainability and Green Skilling	Reduction of unnecessary codes contributes to a lower carbon footprint. Empowers development teams to adopt sustainable practices.
Game-changer for the Enterprise	Transformation of the enterprise landscape with consistent branding and a unified user experience.

Conclusion

In conclusion, the integration of Cosmos and Enterprise Substances stands as a testament to its commitment to innovation and adaptability. This approach not only addresses longstanding challenges in enterprise application development but also aligns with global sustainability goals. By empowering enterprises to streamline user experiences and fostering green skilling initiatives, it sets a new standard in the era of low-code development.

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https://www.pega.com/technology/center-out

ABOUT THE AUTHOR

***Sreedhar Srinivasan**, a distinguished User Experience specialist, brings a wealth of expertise in Human-Computer Interaction (HCI) and Information Technology. With a background in computer science and certifications as a UI Specialist and Certified System Architect, Sreedhar seamlessly combines engineering and design prowess to deliver solutions that captivate and delight users. His leadership skills, technical acumen, and commitment to sustainable practices make him a valuable asset in the ever-evolving landscape of application development.*