

GenAI Labs Demo Portal UI/UX discussion - phase 1

Mingfei Bi, UI/UX Designer, [WWSO Generative AI](#)

Purpose

This document opens the floor for discussing areas where the [demo portal](#) can be improved from a design perspective. We also want to consider all topics based on the working backwards mechanism. Additionally, this document serves as a living document to update the status of feature enhancements.

Glossary:(Inspired by [Nielsen Norman group](#) and we adapted to our project)

UX severity:the UX severity scale ranges from 1 to 5, each level representing a different degree of user impact and urgency for resolution:

1: Usability catastrophe. It's imperative to fix this before the product can be released. This is the most severe rank and indicates that the issue is a blocker, preventing customers from completing a refund task.

2: Major usability problem. This issue significantly reduces the efficiency of task completion, requiring the agent to seek external help. It's important to fix this, and it should be given high priority.

3: Minor usability problem. This level indicates that the UI/interaction design is confusing for agents, forcing them to guess what happens next or to redo their actions. Fixing this should be given low priority.

4: Cosmetic problem only. These are minor issues that do not need to be fixed unless extra time is available on the project.

5: Very trivial issue. These issues can be fixed and released alongside other issues. They have minimal impact on the usability of the system.

Topic list

	A	B	C	D	E	F	G	H	I	J
1	Page	Feature/design topic name	Design category	Done check	UX Severity	Priority(Manager input)	Estimated development time(Eng. input)	Status	Comments	Relevant topics
2	Homepage	Confusion between search and explore experiences	Page info architecture	0	1 - Usability catastrophe					

3	Homepage	Search experience	UX Interaction	0	2 - Major usability problem					
4	Homepage	Homepage - Search experience - type search keyword	UX Interaction	0	1 - Usability catastrophe					
5	Homepage	Popular demos - UX discussion	Component info architecture	0	3 - Minor usability problem					
6	Homepage	Popular demos - Working backwards discussion	Page info architecture	0	2 - Major usability problem					
7	Homepage	Most recently used	Component info architecture		3 - Minor usability problem					
8	Homepage	Homepage - Page UX writing (working on this session)	UX writing		3 - Minor usability problem					
9	Search results page	Search criteria section on result page	UX Interaction		3 - Minor usability problem					
10	Search results page	Search result list	Component info architecture		3 - Minor usability problem					
11	Demo detail page	Demo detail page - page info architecture	Page info architecture		4 - Cosmetic problem only					

1	Dem	Demo detail	UX	3 - Minor					
2	o	page - overview	Interaction	usability					
	detail	section		problem					
	l								
	page								

Detailed explanation

1. Confusion between search and explore experiences
 - a. **Topic statement:** On the landing page of our demo portal, there are three main working components: Popular Demos, Search for Demos, and Most Recently Used. It's important to note that the Popular Demos and Most Recently Used sections are not searchable; they are more for exploring demo videos. The second section includes a search bar, but right below it, we see the pagination for Popular Demos.
 - b. **Issue analysis:** The main reason this page feels overwhelming is the lack of clear information and visual hierarchy, leading customers to feel unsure where to begin. A second confusion arises from the pagination dots above the search bar, which are actually related to the Popular Demos section above and not to the search function. This misalignment can make customers question whether they are searching within the Popular Demos or for something specific they want, adding to the overwhelming feel of the page. Additionally, the lack of a clear primary and secondary order for the images on the page contributes to this feeling. We will emphasize this point in the analysis of card components below.
 - c. **Potential solution:** Our potential solution involves clarifying the main action customers are meant to perform on this page—whether we want them to focus more on exploring or on searching. In defining the main task of this page, we must prioritize one over the other, not treat all tasks at the same level. Prioritizing tasks properly should, if done correctly, significantly smooth out the reorganization of this page.

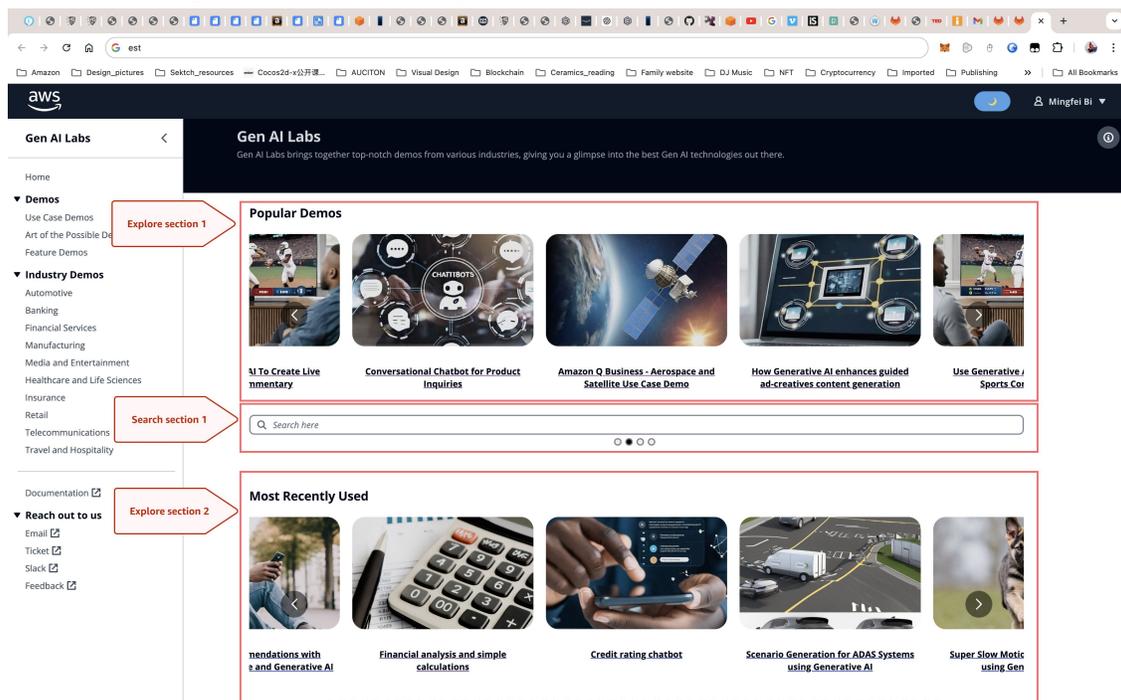


Image - Confusion between search and explore experiences

1. Search experience default presentation

- a. **Topic Statement:** The search interaction on this page can be challenging for customers to understand, as it is not very intuitive.
- b. **Issue Analysis:** Firstly, the search bar itself is located beneath the pagination of the popular demos section, which functions as an automatic carousel. This causes the pagination dots to move in conjunction with the images above, creating a distracting experience for customers who cannot focus solely on the search function. Secondly, the search bar itself has a placeholder but lacks a distinct title, reducing its visual prominence on the page. This often leads to it being overlooked, which is an issue when it serves as the default function.
- c. **Potential Solution:** The first step is to enhance the placement of the search bar, perhaps moving it to the top of the page. This would depend on defining the primary task customers are expected to perform on this page—if the decision is that search is the most important task, then positioning it at the top and providing it with a proper title would be optimal. Additionally, instead of having customers press 'enter' to search, providing a dedicated search button could be more effective. This is not a limitation but a design choice that should be considered carefully. I will further discuss this issue in the next sections regarding search input and results.

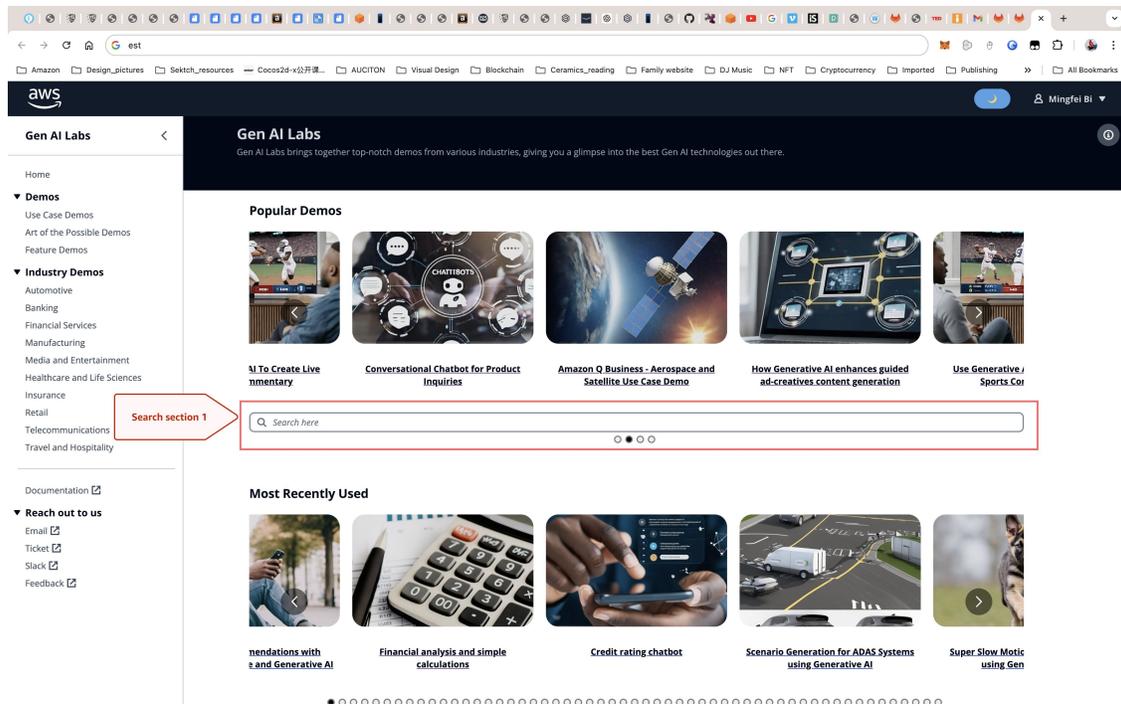


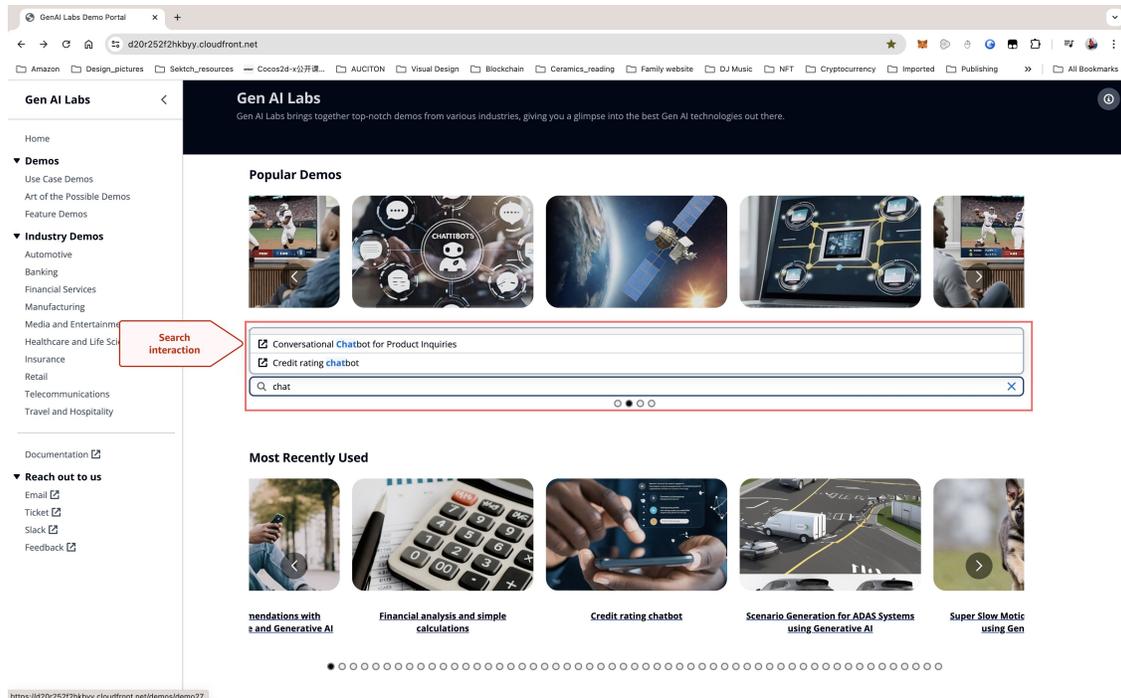
Image - Homepage - Search experience default presentation

1. Search experience - type search key word
 - a. **Topic Statement:** The topic focuses on the search interaction within the demo portal, highlighting the challenges customers face when trying to understand and use the search function effectively.
 - b. **Issue Analysis:** The initial user interaction with the search input presents a dropdown that lists all demos on the portal. However, this dropdown has issues:
 - i. It only displays demo titles without a clear sorting method, which can confuse customers as they browse through the options.
 - ii. The titles alone do not provide enough information for customers to determine which video they want to watch, lacking additional details like tags or descriptions that could aid in decision-making.
 - iii. If a user types a keyword like "chatbot," the system filters to show only relevant videos, but with minimal information provided, customers struggle to make informed choices. see image [Homepage - Search experience - type search key word - 2](#)
 - iv. The external link icons next to video titles open in the same tab rather than a new one, potentially disrupting the user's navigation.
 - v. The search system's slow response time after hitting "enter" without any loading status leaves customers unsure if their input was successful, contributing to a non-intuitive and user-unfriendly experience.
 - c. **Potential Solution:**
 - i. Enhance the dropdown functionality by including not just titles but also tags or a brief description to provide customers with sufficient information to make an informed selection.
 - ii. Modify the external link behavior to open in a new tab, thereby preserving the user's place on the current page.
 - iii. Improve system responsiveness by optimizing backend processes or at least providing a loading indicator to inform customers that their action is being processed.
 - iv. Replace the "enter" key action with a more explicit search button labeled "Search All" or "Search More" to clarify that pressing this button will lead to a comprehensive list of search results. This button should be designed to be easily identifiable as a primary action for customers seeking to perform a detailed search.

Image - Homepage - Search experience - type search key word - 1

Image - Homepage - Search experience - type search key word - 2

1. Popular demos - UX discussion
 - a. **Topic Statement:** The discussion centers on the Popular Demos component of the demo portal, highlighting its integration and functional challenges as a major element of the user interface.



b. Issue Analysis:

- i. **Component Division:** The biggest issue with Popular Demos is that it is split into two parts by the 'search here' bar, separating the images and titles from their pagination. This division creates a significant comprehension challenge regarding the component's structure.
 - ii. **Motion and Delay:** The motion within the Popular Demos component often begins only after a delay, likely due to internet speed, which can leave it static for the first few seconds after the page loads. Once it starts moving, there's no straightforward way for users to pause this motion to more closely examine a title or detail, leading to potential user confusion.
 - iii. **Navigation Arrows:** The navigation arrows for scrolling through demos, which exceed the width of a single line and thus require horizontal scrolling, overlap the demo images. This overlap can obscure the arrows, especially since the thumbnail images are quite noisy, making it hard for users to identify and use these navigation aids effectively.
 - iv. **Visual Noise and Spacing:** All images appear noisy and lack uniformity in presentation, contributing to a visually overwhelming experience. Additionally, the excessive spacing between video titles and images suggests a lack of connection, potentially misleading users into perceiving them as separate pieces of information rather than parts of a whole.
- c. **Potential Solution:** The issues with Popular Demos need to be addressed within the broader context of the portal's information architecture rather than in isolation. Solutions should focus on:

- i. **Improving Component Integration:** Redesigning how the search bar interacts with the Popular Demos component to maintain visual and functional cohesion.
- ii. **Enhancing Motion Control:** Implementing user control over the motion of demos to allow for pausing and examining content at will.
- iii. **Clarifying Navigation:** Redesigning the navigation arrows to make them more visible against noisy backgrounds and ensuring they do not overlap important content.
- iv. **Reducing Visual Noise:** Standardizing the presentation of images and reducing the spacing between titles and images to reinforce their connection, making the interface less overwhelming and more intuitive.
- v. These solutions will be further refined in the context of the overall portal design during discussions on the information architecture strategy, ensuring that any changes align with the portal's visual and functional goals. See

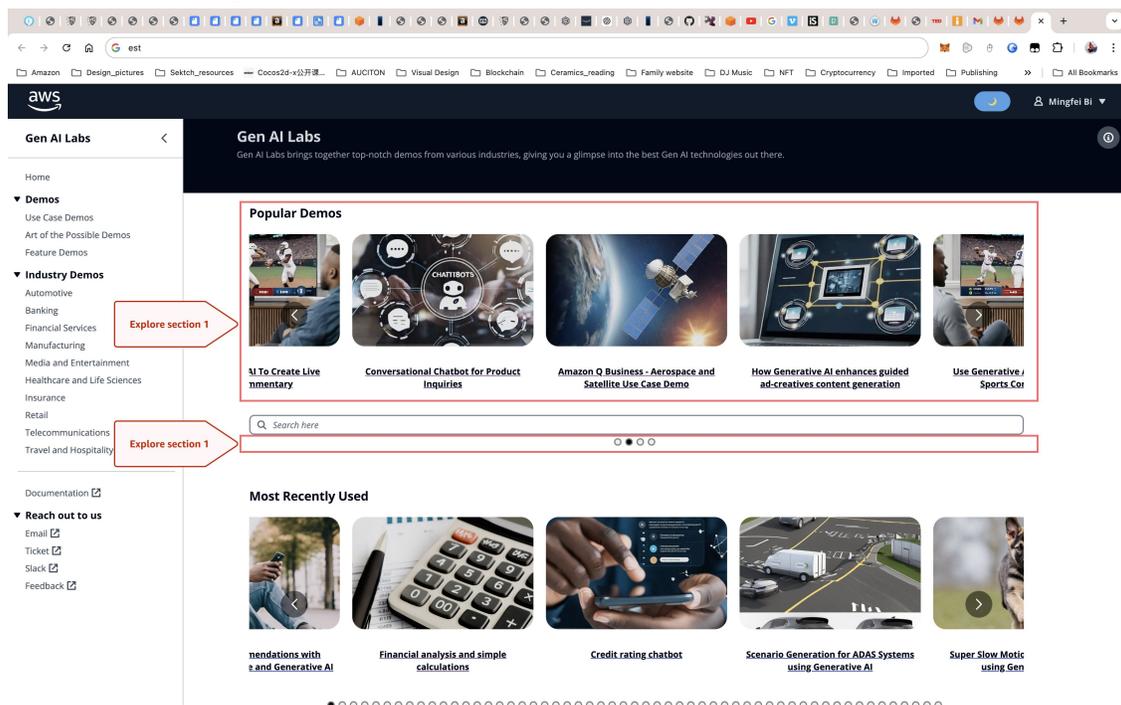


Image - Popular demos

1. Popular demos - Working backwards discussion
 - a. **Topic Statement:** The discussion aims to explore the purpose of the "Popular Demos" section on the homepage from customer's perspective, moving beyond just focusing on component design to consider the strategic rationale for its placement and function.
 - b. **Issue Analysis:** The "Popular Demos" section currently displays videos based on site-wide customer engagement metrics, highlighting the most viewed content.

This approach may not align well with individual customer relevance, potentially detracting from the customer experience. The concern is that while these demos are popular across all customers,, they may not be directly relevant or new to returning visitors. Repeatedly featuring the same popular content can render this section less meaningful over time for customers familiar with the demos.

- c. **Potential Solution:** A potential solution could involve shifting the focus from "Popular Demos" to "Latest Updated Demos." This change would ensure the section presents new content that customers have not seen since their last visit, increasing its relevance and engagement potential. By providing an updated browsing experience rather than a search-focused one, the section could offer customers a chance to discover the most recent and pertinent information related to their industry or general interests within AI labs. This approach would make the section more informative and valuable, particularly for returning customers seeking fresh content. Such a strategic pivot could foster more meaningful interactions with the portal and align better with customers needs, enhancing overall engagement with the platform. This topic is introduced for broader discussion to refine and validate the approach.
1. Most recently used
 - a. **Topic Statement:** The discussion revolves around the "Most Recently Used" section on the demo portal's landing page, emphasizing its similarity in purpose and user experience to the "Popular Demos" section, albeit with its own unique placement and intent.
 - b. **Issue Analysis:** Positioned at the bottom of the landing page, the "Most Recently Used" section aims to aid users in revisiting demos they have previously interacted with. The term "used" currently employed to describe this section might be considered weak or unclear from a UX writing perspective, potentially confusing users about the content's nature. This section mirrors the information architecture and user engagement strategy of the "Popular Demos" section, suggesting that similar challenges and opportunities for improvement might exist here as well.
 - c. **Potential Solution:** While the specific UX writing improvements for this section will be addressed separately, enhancing the clarity and impact of the label and description could immediately make the section more understandable and engaging. Considering the strategic placement of this section at the bottom of the page, it might also benefit from more dynamic features, such as personalized prompts that draw users' attention to their previously interacted demos. This approach could make revisiting familiar content more appealing and intuitive, enhancing user engagement and satisfaction. The broader discussions and solutions applicable to the "Popular Demos" will similarly apply here, focusing on refining user interaction and enhancing content relevance to improve overall user experience.

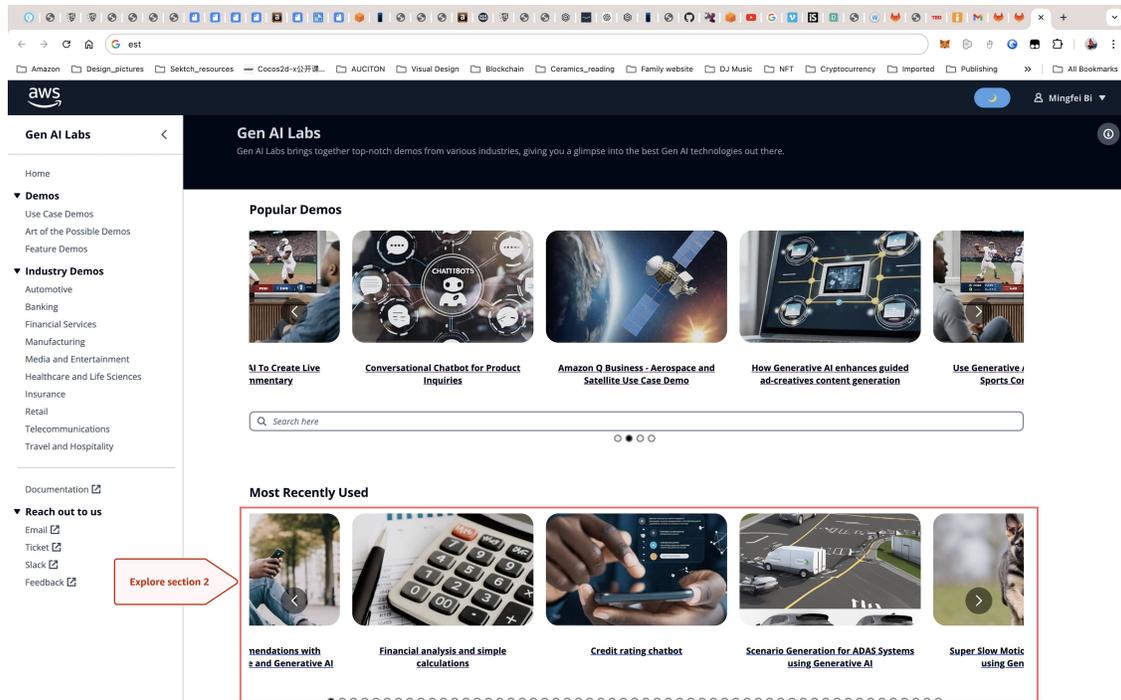


Image - Most recently used

1. Search criteria section on results page

- a. **Topic Statement:** The discussion centers around the Search Criteria section on the Search Result Page, which uses a card format to repeat the user's input keywords from the homepage. This section aims to connect the search initiation with the outcomes visually and textually.
- b. **Issue Analysis:** Challenges arise due to the visual and textual discrepancies between this section and the homepage. Firstly, there is a lack of continuity in language; the homepage labels the search as "search here," while the results page uses "found demos," which may confuse users about the continuity of the search process. Secondly, the search function is limited to names and does not include other potentially useful features such as descriptions or text, raising questions about whether this is due to technical constraints or deliberate design choices. Additionally, the use of pagination in the card list format does not align well with user expectations. Pagination in a card-based display, especially without infinite scrolling, disrupts the user experience by limiting visibility and access to results, contrary to the more modern approach of an infinite table that allows continuous exploration without interruption.
- c. **Potential Solution:** To address these issues, the following solutions are proposed:
 - i. **Language Consistency:** Standardize the language across all pages to ensure users understand they are part of the same search process. Using consistent terms or phrases can help maintain continuity.

- ii. **Expand Search Capabilities:** Consider including additional searchable features such as descriptions or text, depending on user needs and technical feasibility, to enhance the depth and utility of the search function.
- iii. **Rethink Pagination and results display:** Evaluate the necessity and functionality of pagination in the context of a card list. Shifting to an infinite scrolling model might better serve the user experience by allowing for uninterrupted browsing, especially when dealing with extensive results. This would ensure that users have a smoother, more engaging interaction with the search results.

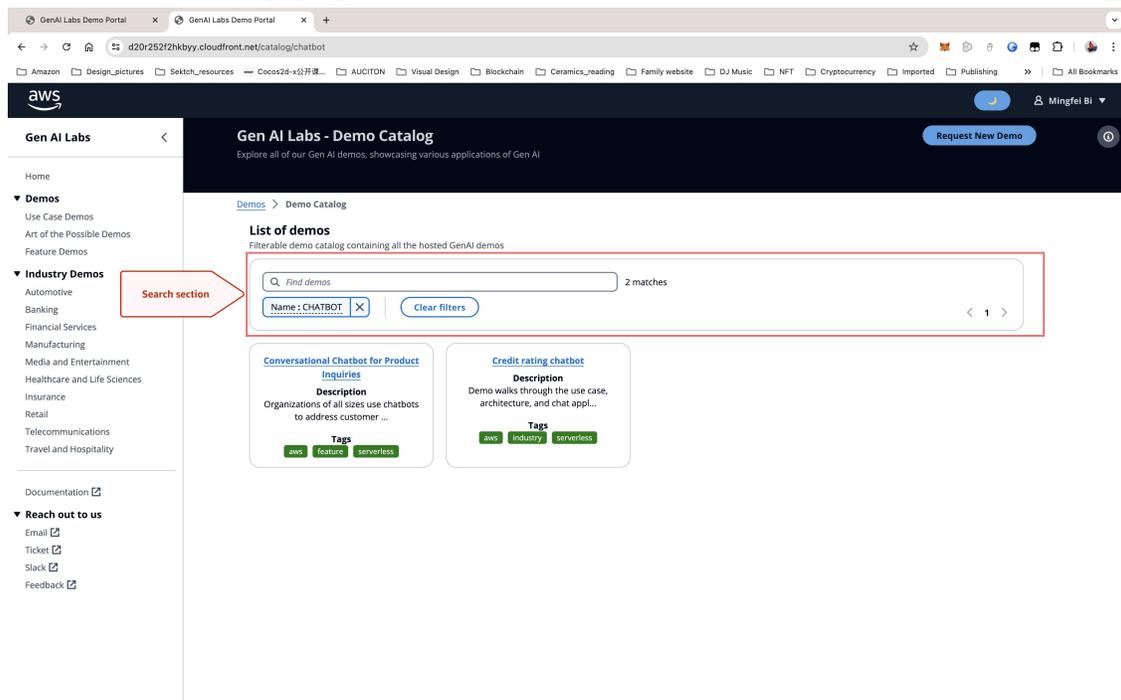


Image - Search criteria section on results page

1. Search result list

- a. **Topic Statement:** The discussion focuses on the display format of search results, which currently uses a four-card-per-row layout. This layout, while visually appealing for displaying comparative results, poses challenges in usability for customers due to varying content sizes within the cards.
- b. **Issue Analysis:** The main challenge with the current card grid layout is the difficulty in comparing information across cards. Variations in the length of titles, descriptions, and the number of tags can cause inconsistent card heights, making it hard for users to scan and compare information efficiently. This inconsistency can hinder users from making quick and informed decisions without needing to click into specific content for more details. Furthermore, the placement of

pagination elements may be misleading, as they are associated more with search criteria than with the actual search results, causing confusion about their relevance and function.

- c. **Potential Solution:** To address these challenges, consider the following adjustments:
 - i. **Switch to a Card List Format:** Adopt a card list layout where each row contains a single card. This change would allow for more space per card, facilitating a more detailed and easier comparison of video content directly from the search results page. This layout can better accommodate varying lengths of content and make the overall visual presentation more uniform and easier to navigate.
 - ii. **Revise Pagination Placement:** Re-evaluate the placement of pagination controls to align them more closely with the search results rather than the search criteria. This would clarify their purpose as navigation tools for browsing through search results, not for the criteria section.
 - iii. **Improve Sorting Mechanisms:** Consider the implications of the display format on sorting capabilities. The card grid layout does not naturally support effective sorting because it lacks a linear flow. Transitioning to a card list format could enhance the ability to sort results in a meaningful order, providing users with options to sort by relevance, date, popularity, etc., which aligns better with user expectations and search habits.

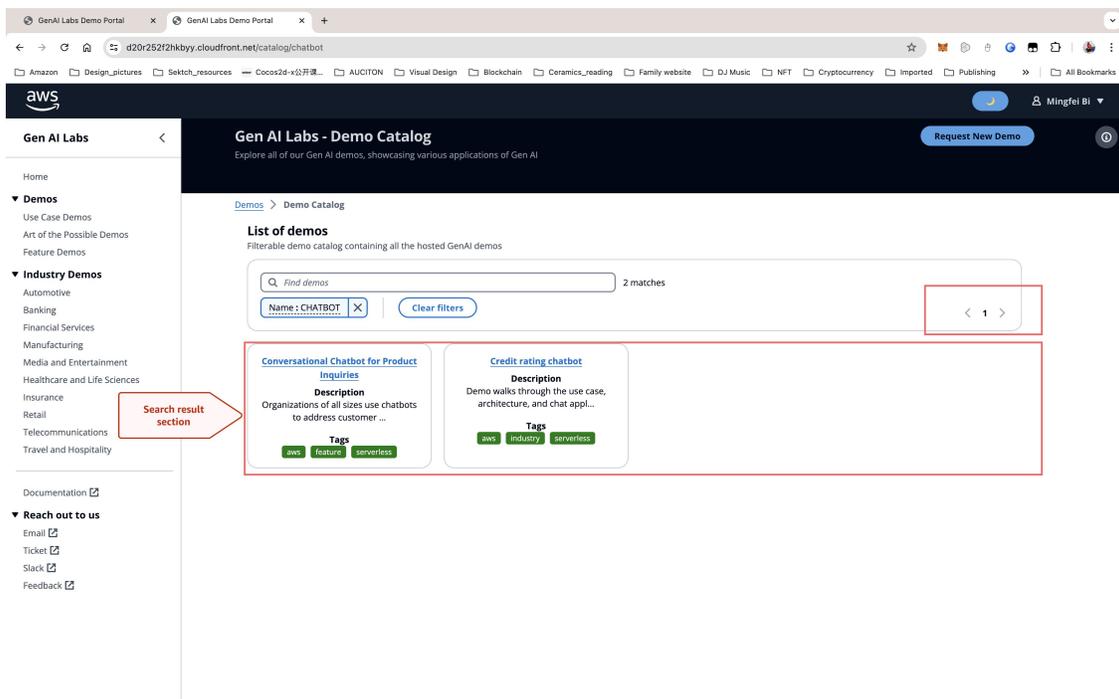


Image - Search result list

1. Demo detail page - page info architecture

- a. **Topic Statement:** Revising the demo detail page's layout to optimize content delivery for account managers and field SAs.
 - b. **Issue Analysis:** The current layout starts with demo architecture, which might not immediately show value to users who haven't watched the video yet. This setup can hinder the initial engagement and obscure the demo's business relevance.
 - c. **Potential Solution:** A restructured layout could lead with an overview highlighting key business points, followed by the video, enhancing context understanding before diving into technical details. This approach could improve user engagement by aligning the information presentation with typical consumption patterns—from broad context to specific details.
1. Demo detail page - overview section
 - a. **Topic Statement:** Optimizing the demo overview section on the demo detail page to enhance user understanding and decision-making of dive deep for this demo or not.
 - b. **Issue Analysis:** The current demo overview contains some redundant elements and may not present the most relevant information effectively. For example, repeating the demo's name in both the header and overview seems unnecessary. The version information serves internal purposes more than it aids customer comprehension, which could be replaced with 'last updated' dates to give users clearer insights into the content's recency. Additionally, the purpose of some elements like deep links and support links is unclear, which may confuse users about their usage.
 - c. **Potential Solution:**
 - i. **Remove Redundant Information:** Eliminate repetitive details such as the demo's name from the overview if it's already displayed in the header.
 - ii. **Update Versioning to Date:** Replace technical version information with 'last updated' dates to provide clarity on the content's recency.
 - iii. **Clarify Tags Usage:** Utilize tags to indicate the type or depth of the demo (e.g., user case, feature demo), helping users understand the relevance quickly.
 - iv. **Reassess Links:** Reevaluate the need and placement of additional links like code repositories and support; clarify their purposes to avoid user confusion.
 - v. **Consolidate Owner Information:** Ensure owner details are consistently useful; consider relocating repetitive information if identical across multiple demos to a less central location.
 - vi. **Focus on Decision-Making:** Streamline content to focus on aiding users in deciding whether to engage with the demo further.

Image - Demo detail page - page info architecture

Demos > Industry > Use Generative AI To Create Live Sports Commentary

Deploy to Account

Use Generative AI To Create Live Sports Commentary

The demo is built with AWS services focused in 3 workflows: 1. Live game telemetry data ingestion, 2. Perform Generative AI model inference, 3. Presents AI Generated commentary in the client. When a live event occurs, such as a play in American football game, or a turn over in a basketball game, the data that described the play is produced in realtime in continuous fashion. In this demo, we use Jurassic-2 Ultra model hosted in Amazon Bedrock for creating the live commentary.

Overview section

Demo Overview

Details of the demo artifacts

Name Use Generative AI To Create Live Sports Commentary	Tags Serverless	Support Link https://cti.amazon.com/cti-support	Owner Gen AI Labs
Version 1.0.0	Industries Media and Entertainment	Code Repo Link https://github.com/example/demo1	Owner Contact genailabs@amazon.com

Demo Architecture

Guidance for personalized live sports commentary using generative AI on AWS

The architecture diagram illustrates the following components and flow:

- Amazon Bedrock:** Hosts the Jurassic-2 Ultra model for generating commentary.
- Amazon Kinesis Data Streams:** Ingests live game telemetry data.
- Amazon Lambda:** Processes the ingested data and triggers the generative AI model.
- AWS Fargate:** Hosts the application logic for generating and publishing commentary.
- Amazon CloudFront:** Delivers the generated commentary to users.
- Users:** Access the commentary via a web browser or mobile app.

Key steps in the process:

- Live game telemetry data is ingested into Amazon Kinesis Data Streams.
- Amazon Lambda processes the data and triggers the generative AI model.
- AWS Lambda publishes the sports commentary to Amazon S3.
- AWS Fargate publishes the commentary to Amazon CloudFront.
- Users access the commentary via a web browser or mobile app.

Demo Script & Recording