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Framework And User Interface For Aggregated Multi-domain Tasks

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ABSTRACT

Task management user interfaces, such as those utilized by merchants that manage storefronts on online retail platforms, are complex and difficult to use. For example, different tasks such as orders, returns/refunds, customer requests, etc. may each be associated with corresponding data and may be managed via different tools and/or user interfaces. The separation of tasks across different domains does not allow users to understand the relative priorities for various tasks. This disclosure describes a templatized generic task definition framework that allows tasks from different domains to be defined in a common format. The common task format includes rich contextual information such as task metadata and the primary and secondary actions to complete the task. The templatized task definition framework can be used to containerize the information relevant for decision making related to the task and the corresponding user actions into a single interface and to provide a unified task management user interface. Further, the task metadata stored per the framework can be used for prioritization across tasks from different domains to infer priority across different task and task types to make it easier to manage the overall workload.

KEYWORDS

- Electronic commerce
- Task management
- Task definition
- Task priority
- Customer service
- Online retail

BACKGROUND

Online retail platforms enable retail businesses (merchants) to display their store and product information online to shoppers over the Internet. Shoppers can search for products, view product listings, and place orders with the merchants via the online retail platform. Business users from the merchants then work towards fulfilling these orders by performing tasks such as conveying the shipping details to the customer, managing customer interactions, addressing complaints, and handling returns and refunds. Many of these tasks are currently performed using multiple tools. These different tools have their own ways of presenting domain-specific information and displaying tasks based on priority.

In online retail platforms, tasks related to the list of orders, list of returns, list of messages from customers, etc. are independent of each other and are displayed in multiple different user interfaces. To prioritize across tasks from different domains, a business user is required to view the multiple UIs and make their own evaluations of task priority. Additionally, the information displayed in one domain (e.g., orders) does not include any additional context beyond data from the same domain, e.g., from another domain such as returns. For example, when a customer message about a damaged product is viewed in the user interface, the order or shipping details are often not available. The business user therefore needs to refer to multiple screens and applications to gather all the relevant information for task fulfilment. There is no single portal for business users to view tasks from different domains along with domain specific context and relative priority.

Many business users resort to separate task management solutions and tools such as to-do lists to organize tasks from multiple domains. However, these solutions are generic in nature, and

do not pull in additional context pertaining to the tasks. Further, generic task management solutions do not provide any cues or calls to action (CTA) that are helpful to users.

DESCRIPTION

This disclosure describes a templatized generic task definition framework that allows tasks from different domains to be defined in a common format. The common task format includes rich contextual information such as task metadata and the primary and secondary actions to complete the task. The templatized task definition framework can be used to containerize the information relevant for decision making related to the task and the corresponding user actions into a single interface and to provide a unified task management user interface. Further, the task metadata stored per the framework can be used for prioritization across tasks from different domains.

The unified task management framework is explained below with an example from the e-commerce domain for merchant users, but is applicable in other contexts where tasks are spread across multiple domains. Merchants that operate e-commerce storefronts are responsible for tasks such as processing orders, returns, customer service requests, etc. in order to serve their customers. Different tasks may be associated with respective service levels (e.g., subject to service level agreements - SLAs).

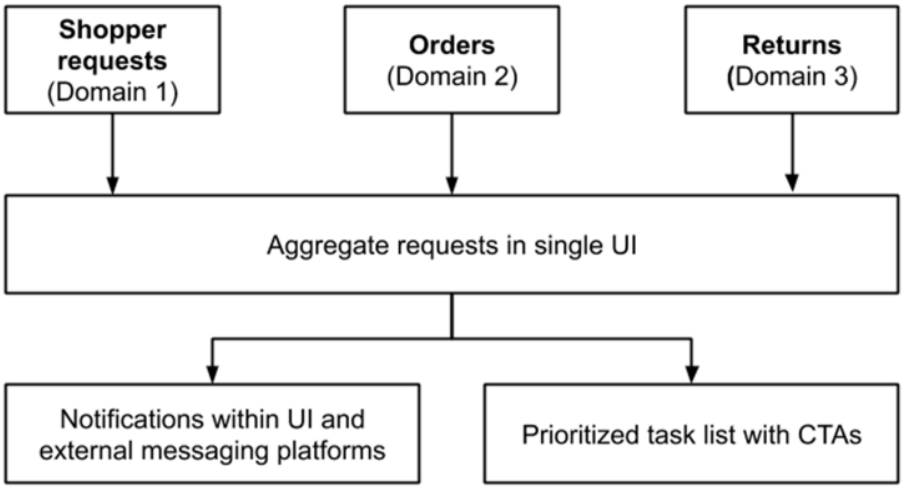

Fig. 1: Flow diagram for generating prioritized task list

Fig. 1 illustrates a flow diagram to generate a prioritized task list using a unified task management framework, per techniques of this disclosure. Tasks originating from different domains, e.g., shopper requests, orders, returns, etc. are aggregated and displayed in a single interface. The aggregated list is usable to generate notifications that are displayed within the UI and in external messaging platforms, e.g., email, chat, or other messaging services that may be used by merchants. The aggregated requests can also be used to generate a prioritized cross-domain task list with the associated standard calls-to-action (CTA).

Each task in the unified task management framework includes associated contextual data such as order details and customer ID, and task metadata such as request type, deadline for response, assignee, primary and secondary call to action, request status etc. For example, a task that is generated in response to a damaged product message from a customer can include contextual information such as customer ID, order details, product details, and the message from the customer.

The standard CTAs for a task generated by request type “damaged product,” e.g., “Generate return label,” “Order replacement product,” etc. are displayed as options for the

business user to choose from. Additionally, a “damaged product” request type is defined that has an associated deadline as per the SLA configured by the merchant or the online retail platform. Task metadata such as request type, deadline, request status, etc. can be used to automatically prioritize across tasks from different domains. The availability of contextual information and standard calls to action in an aggregated user interface improves the user experience for merchants to fulfill tasks via the online retail platform.

The task framework and the aggregated task user interface can include calls to action that address the most common use cases. Processes and workflows that relate to other use cases can be addressed by redirecting users to specialized tools/ user interfaces designed for such processes, which may include extra complexity. In this manner, the user interface can ensure that a majority of tasks can be completed easily, while retaining the flexibility to handle tasks that occur less frequently. Further, the user interface is simpler, since the complexity associated with infrequent tasks is not exposed.

CONCLUSION

This disclosure describes a templatized generic task definition framework that allows tasks from different domains to be defined in a common format. The common task format includes rich contextual information such as task metadata and the primary and secondary actions to complete the task. The templatized task definition framework can be used to containerize the information relevant for decision making related to the task and the corresponding user actions into a single interface and to provide a unified task management user interface. Further, the task metadata stored per the framework can be used for prioritization across tasks from different domains to infer priority across different task and task types to make it easier to manage the overall workload.