**Voucher Management System (VMS)**

**Status Transitions**

The Voucher Management System (VMS) must handle various status transitions to manage each voucher's lifecycle, initiated by external triggers like APIs and internal processes, as detailed below.

Voucher Transaction

Inactive -> Ready

|  |  |
| --- | --- |
| Inactive |  |
| Ready |  |

**Active -> Reserved -> Issued**

|  |  |
| --- | --- |
| Active to Reserved | The transition occurs when a voucher is reserved for a specific customer or purpose, typically triggered by an API call from the CRM or ERP system. |
| Reserved to Issued | The reserved voucher is issued to the customer, triggered by an external trigger like an API call, initiating a status change. |

**Reserved -> Active (if cancellation API is called)**

The voucher's reserved status can be restored to its active state upon receiving a cancellation request, which is triggered by the cancellation API call.

**Transition to 'Cancel' or 'Abandoned' status from any status**

|  |  |
| --- | --- |
| Cancel | A voucher can be canceled by calling a cancellation API or if the system determines it needs to be canceled due to errors, customer requests, or other administrative reasons. |
| Abandoned | The 'Abandoned' status signifies that the voucher is no longer in use and is void. This status can be determined by triggers or business rules, such as prolonged inactivity or manual administrative decisions. |

**Summary of Status Transitions**

|  |  |  |
| --- | --- | --- |
| Current Status | Transition to Next Status |  |
| Active | Reserved | Reservation API call from CRM/ERP |
| Reserved | Issued | Issuance API call confirming the issuance |
| Reserved | Active | Cancellation API call |
| Any Status | Cancel | Cancellation API call or admin decision |
| Any Status | Abandoned | Business rule trigger or admin decision |

**Implementation Requirements**

|  |  |
| --- | --- |
| External Triggers and APIs | Create and configure APIs for handling external triggers for status transitions, ensuring their security and seamless integration with existing systems like CRM and ERP. |
| Status Transition Logic | The VMS should be configured to handle transitions accurately, ensuring that status updates accurately reflect the current state of each voucher. |
| Logging and Monitoring | The task involves maintaining logs of status transitions, implementing monitoring tools to track voucher status, and identifying any issues in real-time. |
| Administrative Controls | The proposal aims to offer admin interfaces that enable users to manually adjust statuses, thereby enhancing their efficiency in managing vouchers. |