Table A-2 TTS to CSA Requirements Traceability Matrix

| TTS  Requirement  Number | Requirement Description | CSA  Requirement  Number | Use Case | Activity Diagram | Sequence Diagram |
| --- | --- | --- | --- | --- | --- |
| REQ100 | The system shall have the capability to search for events. | CUS102 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| REQ101 | The system shall have the capability to search for event seats. | CUS103  CUS105 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| REQ102 | The system shall have the capability to verify that a seat is in an unlocked state. | CUS103 | 4.1.1.1  4.1.5.1 | 4.1.1.2  4.1.5.2 | 4.1.1.3  4.1.5.3 |
| REQ103 | The system shall have the capability to lock a seat. | CUS106  CUS104  CUS105  CUS109  CUS110  CUS111 | 4.1.1.1  4.1.3.1  4.1.4.1  4.1.6.1 | 4.1.1.2  4.1.3.2  4.1.4.2  4.1.6.2 | 4.1.1.3  4.1.3.3  4.1.4.3  4.1.6.3 |
| REQ104 | The system shall have the capability to search for a patron. | CUS100 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| REQ105 | The system shall have the capability to only allow a seat to be reserved by a patron with a special accommodation status. | CUS100 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| REQ106 | The system shall have the capability to associate a patron with a seat. | CUS104  CUS105  CUS109  CUS110  CUS111 | 4.1.1.1  4.1.2.1  4.1.3.1 | 4.1.1.2  4.1.2.2  4.1.3.2 | 4.1.1.3  4.1.2.3  4.1.3.3 |
| REQ107 | The system shall have the capability to select a seat marked VIP. | CUS110 | 4.1.1.1  4.1.2.1  4.1.3.1 | 4.1.1.2  4.1.2.2  4.1.3.2 | 4.1.1.3  4.1.2.3  4.1.3.3 |
| REQ108 | The system shall have the capability to select a seat marked general admission. | CUS105 | 4.1.1.1  4.1.2.1  4.1.3.1 | 4.1.1.2  4.1.2.2  4.1.3.2 | 4.1.1.3  4.1.2.3  4.1.3.3 |
| REQ109 | The system shall have the capability to search for venues. | CUS101 | 4.1.1.1  4.1.2.1  4.1.3.1  4.1.6.1 | 4.1.1.2  4.1.2.2  4.1.3.2  4.1.6.2 | 4.1.1.3  4.1.2.3  4.1.3.3  4.1.6.3 |
| REQ110 | The system shall have the capability to search for events by venue. | CUS101 | 4.1.6.1 | 4.1.6.2 | 4.1.6.2 |
| REQ111 | The system shall have the capability to filter events by date range at a venue. | CUS101 | 4.1.7.1 | 4.1.7.2 | 4.1.7.3 |
| REQ112 | The system shall have the capability to search for event bookings | CUS104  CUS105 | 4.1.12.1 | 4.1.12.2 | 4.1.12.3 |
| REQ113 | The system shall have the capability to verify an event booking is marked refundable. | CUS108 | 4.1.7.1  4.1.8.1 | 4.1.7.2  4.1.8.2 | 4.1.7.3  4.1.8.3 |
| REQ114 | The system shall have the capability to unlock a seat. | CUS108  CUS107 | 4.1.7.1  4.1.8.1  4.1.11.1 | 4.1.7.2  4.1.8.2  4.1.11.2 | 4.1.7.3  4.1.8.3  4.1.11.3 |
| REQ115 | The system shall have the capability to request a refund from the third-party payment gateway. | CUS108 | 4.1.7.1  4.1.8.1 | 4.1.7.2  4.1.8.2 | 4.1.7.3  4.1.8.3 |
| REQ117 | The system shall have the capability to create a new record for a patron. | CUS100 | 4.1.9.1 | 4.1.9.2 | 4.1.9.3 |
| REQ118 | The system shall have the capability to update information of a patron. | CUS100 | 4.1.9.1 | 4.1.9.2 | 4.1.9.3 |
| REQ119 | The system shall have the capability to deactivate a patron. | CUS100 | 4.1.9.1 | 4.1.9.2 | 4.1.9.3 |
| REQ120 | The system shall have the capability to search for a reservation by reservation number. | CUS104  CUS105  CUS110  CUS111 | 4.1.12.1 | 4.1.12.2 | 4.1.12.3 |
| REQ121 | The system shall have the capability to search for a reservation by patron. | CUS100 | 4.1.10.1 | 4.1.10.2 | 4.1.10.3 |
| REQ122 | The system shall have the capability to select an existing reservation. | CUS104  CUS105  CUS110  CUS111 | 4.1.12.1 | 4.1.12.2 | 4.1.12.3 |
| REQ123 | The system shall have the capability to deactivate an existing reservation. | CUS108 | 4.1.9.1 | 4.1.9.2 | 4.1.9.3 |
| REQ124 | The system shall have an interface to display search results for event seats. | CUS103 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| REQ125 | The system shall have the capability to assign a unique number to a reservation. | CUS104  CUS105  CUS109  CUS110  CUS111 | 4.1.1.1  4.1.2.1  4.1.3.1  4.1.12.1 | 4.1.1.2  4.1.2.2  4.1.3.2  4.1.12.2 | 4.1.1.3  4.1.2.3  4.1.3.3  4.1.12.3 |
| REQ126 | The system shall have the capability to select a seat marked special accommodation. | CUS111 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT100 | The system shall have an interface to search for events. | CUS102 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT101 | The system shall have an interface to search for event seats. | CUS103 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT102 | The system shall have an interface to display search results for an event. | CUS102 | 4.1.1.1  4.1.4.1 | 4.1.1.2  4.1.4.2 | 4.1.1.3  4.1.4.3 |
| RINT103 | The system shall have an interface to select an event seat. | CUS103 | 4.1.1.1  4.1.5.1 | 4.1.1.2  4.1.5.2 | 4.1.1.3  4.1.5.3 |
| RINT104 | The system shall have an interface to display that a seat is locked. | CUS103 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT105 | The system shall have an interface to request patron information. | CUS100 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT106 | The system shall have an interface to display patron search results. | CUS100 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT107 | The system shall have an interface to allow the CSA to select a patron. | CUS100 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT108 | The system shall have an interface to allow the CSA to submit the selected patron. | CUS100 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT109 | The system shall have an interface to display reserved status. | CUS104 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT110 | The system shall have an interface to search for venues. | CUS101 | 4.1.6.1 | 4.1.6.2 | 4.1.6.3 |
| RINT111 | The system shall have an interface to display venue results. | CUS101 | 4.1.6.1 | 4.1.6.2 | 4.1.6.3 |
| RINT112 | The system shall have an interface to select a venue | CUS101 | 4.1.6.1 | 4.1.6.2 | 4.1.6.3 |
| RINT113 | The system shall have an interface to display event results by venue. | CUS101 | 4.1.7.1 | 4.1.7.2 | 4.1.7.3 |
| RINT114 | The system shall have an interface to input a date range used to filter event results by venue. | CUS101 | 4.1.6.1 | 4.1.6.2 | 4.1.6.3 |
| RINT115 | The system shall have an interface to search for event bookings. | CUS104  CUS105  CUS110  CUS111 | 4.1.12.1 | 4.1.12.2 | 4.1.12.3 |
| RINT116 | The system shall have an interface to display event bookings. | CUS104  CUS105  CUS110  CUS111 | 4.1.12.1 | 4.1.12.2 | 4.12.3 |
| RINT117 | The system shall have an interface to select an event booking. | CUS104  CUS105  CUS109  CUS110  CUS111 | 4.1.12.1 | 4.1.12.2 | 4.112.3 |
| RINT118 | The system shall have an interface to display a refund confirmation. | CUS108 | 4.1.8.1 | 4.1.8.2 | 4.1.8.3 |
| RINT119 | The system shall have an interface to select all event bookings for an event. | CUS104  CUS105  CUS110  CUS111 | 4.1.12.1 | 4.1.12.2 | 4.1.12.3 |
| RINT120 | The system shall have the interface to verify seat availability. | CUS103 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |
| RINT121 | The system shall have the interface to search for a patron. | CUS100 | 4.1.9.1 | 4.1.9.2 | 4.1.9.3 |
| RINT122 | The system shall have the interface to create a new record for a patron. | CUS100 | 4.1.9.1 | 4.1.9.2 | 4.1.9.3 |
| RINT123 | The system shall have the interface to update information of a patron. | CUS100 | 4.1.9.1 | 4.1.9.2 | 4.1.9.3 |
| RINT124 | The system shall have the interface to deactivate a patron. | CUS100 | 4.1.9.1 | 4.1.9.2 | 4.1.9.3 |
| RINT125 | The system shall have an interface to search for a reservation by reservation number. | CUS104  CUS105  CUS109  CUS110  CUS111 | 4.1.10.1  4.1.12.1 | 4.1.10.2  4.1.12.2 | 4.1.10.3  4.1.12.3 |
| RINT126 | The system shall have an interface to search for a reservation by patron. | CUS100  CUS110 | 4.1.10.1 | 4.1.10.2 | 4.1.10.3 |
| RINT127 | The system shall have an interface to display reservation search results by reservation number. | CUS104  CUS105  CUS111 | 4.1.10.1  4.1.12.1 | 4.1.10.2  4.1.12.2 | 4.1.10.3  4.1.12.3 |
| RINT128 | The system shall have an interface to display reservation search results by patron. | CUS100 | 4.1.10.1 | 4.1.10.2 | 4.1.10.3 |
| RINT129 | The system shall have an interface to allow the CSA to select an existing reservation. | CUS104  CUS105  CUS108  CUS111 | 4.1.10.1 | 4.1.10.2 | 4.1.10.3 |
| RINT130 | The system shall have an interface to allow the CSA to select an existing by patron. | CUS100 | 4.1.10.1 | 4.1.10.2 | 4.1.10.3 |
| RINT131 | The system shall have an interface to allow the CSA to deactivate an existing reservation. | CUS108 | 4.1.10.1 | 4.1.10.2 | 4.1.10.3 |
| RINT132 | The system shall have an interface to display search results for event seats. | CUS103  CUS108 | 4.1.1.1 | 4.1.1.2 | 4.1.1.3 |