**Operation Contracts for Use Cases**

**CreateAccount(String username, String password): → Account Information** Precondition:

User must input a username and password Username and password must meet security criteria

Postcondition:

User has access to personal account information

**EventSearch(String searchQuery): → Events**

Precondition:

User must input a string in the search box

Postcondition:

User is returned the events matching or similar to the search query

**EventPurchase(Event Object: x, PaymentMethod): → Access to Event** Precondition:

User must select an available event.User must have a valid payment method

Postcondition:

User account is given a ticket to the event

**TicketConfirmation(EventPurchase(x, y) ==True), eMail: → Digital Confirmation / Ticket**

Precondition:

User has successfully paid for a valid event - EventPurchase function is true

Postcondition:

User account is emailed a confirmation of their purchase User is presented with a digital ticket, valid for entry to event

**LimitTicketAmount()**

Pre condition:

User is trying to purchase as many tickets as possible in the hopes of reselling the tickets for financial gain

Postcondition:

User is limited to specified amount of tickets to buy depending on a preset value set by the event management

**MultipleAccountsCheck(User Object)**

Precondition:

User uses multiple accounts to attempt to purchase more tickets for desired reasons

Postcondition:

System cross references user's name and ip address to make sure they are not creating dummy accounts.