

Create test Cases for functional testing using the following techniques:

### 1. Boundary Value Analysis

Requirement: "The user is getting a discount if he/she is over 60s years. Age entering has a validation in the range: 0-999."

The age entering happens by user creation.

Invalid partition: age < 0 {Example: -3}

Valid partition not eligible: age between 0-60 {Example: 35}

Valid partition eligible: age > 60 && age <= 999 {Example: 63}

Invalid partition not eligible: age > 999 {Example: 1000}

### 2. Equivalence Class Partitioning

Example: Let's consider there is a Box Below like in the presentation from the lectures. The box will be for booking tickets in one row.

Ticket values in range 1 to 20 is considered valid. A success message is shown.

While value 21 to 99 are considered invalid for booking and error message will appear: "You can only book 20 tickets in a row."

Invalid	Valid	Invalid	Invalid
0	1 20	21 99	100
Portion 1	Portion 2	Portion 3	Portion 4

### 3. Decision Table Testing - search a ticket by criteria

#### **Legend:**

**E - entered condition**

**N - not entered condition**

**F - filtered result by the given criteria**

**A - return all tickets {because no criteria is entered}**

Conditions	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
<b>startDestination</b>	E	N	N	E	E	N	E	N
<b>endDestination</b>	N	E		E	N	E	E	N
<b>departureTime</b>	N	N	E		E	E	E	N
<b>Output</b>	F	F	F	F	F	F	F	A

Case 1: search only by start destination; the result should be a list of ticket filtered only by this criteria.

Case 2: search only by end destination; the result should be a list of ticket filtered only by this criteria.

Case 3: search only by departure time; the result should be a list of ticket filtered only by this criteria.

Case 4: search by start - and end destination; the result should be a list of ticket filtered only by this criteria.

Case 5: search by start destination and departure time; the result should be a list of ticket filtered only by this criteria.

Case 6: search by end destination and departure time; the result should be a list of ticket filtered only by this criteria.

Case 7: search by start-, end destination and departure time; the result should be a list of ticket filtered only by this criteria.

Case 8: search without a filter; the result should be a list of all available tickets.

#### 4. State Transition Testing:

There is a scanned document that will be attached in another pdf.