

Task is:

1. Design tests applying test design techniques
2. Create Test Cases in Zephyr for JIRA for all designed tests

Variant 4

1. Equivalence partitioning and Boundary value analysis

In a system designed for postal services' payment: Letters up to 100g are called as 'light letters'. Postal rates for sending the light letters up to 10g are \$25. The next 40g should be played by \$35. Each next 25g up to 100g should be played by an extra \$10. Partitions should be designed for "grams".

Equivalence classes

#	Invalid	Valid for \$25	Valid for \$35	Valid for \$45	Valid for \$55	Invalid
Class	0g	1g-10g	11g-50g	51g-75g	76g-100g	>=101
EP	0	6	24	62	80	160

Equivalence partitioning: Test conditions

#	Condition	Expected Result
1	Enter the value 0 in the weight field	<u>Error message appears</u>
2	Enter the value 6 in the weight field	The amount to be paid is \$25
3	Enter the value 24 in the weight field	The amount to be paid is \$35
4	Enter the value 62 in the weight field	The amount to be paid is \$45
5	Enter the value 80 in the weight field	The amount to be paid is \$55
6	Enter the value 160 in the weight field	<u>Error message appears</u>

Boundary vaues

#	Invalid	Valid for \$25	Valid for \$35	Valid for \$45	Valid for \$55	Invalid
Class	0	1g-10g	11g-50g	51g-75g	76g-100g	>=101
BVA	0	1 10	11 50	51 75	76 100	101

Boundary values: Test conditions

#	Condition	Expected Result
1	Enter the value 0 in the weight field	Error message appears

2	Enter the value 1 in the weight field	The amount to be paid is \$25
3	Enter the value 10 in the weight field	The amount to be paid is \$25
4	Enter the value 11 in the weight field	The amount to be paid is \$35
5	Enter the value 50 in the weight field	The amount to be paid is \$35
6	Enter the value 51 in the weight field	The amount to be paid is \$45
7	Enter the value 75 in the weight field	The amount to be paid is \$45
8	Enter the value 76 in the weight field	The amount to be paid is \$55
9	Enter the value 100 in the weight field	The amount to be paid is \$55
10	Enter the value 101 in the weight field	Error message appears

EP and BVA: Test items

#	Test items	Test data
1	Verify that the amount to be paid will be \$25 if the entered weight is less than 11g	1. Any number from 1 to 10 (e.g. 6) 2. 1 3. 10
2	Verify that the amount to be paid will be \$35 if the entered weight is from 11g to 50g	1. Any number from 11 to 50 (e.g. 24) 2. 11 3. 50
3	Verify that the amount to be paid will be \$45 if the entered weight is from 51g to 75g	1. Any number from 51 to 75 (e.g. 62) 2. 51 3. 75
4	Verify that the amount to be paid will be \$55 if the entered weight is from 76g to 100g	1. Any number from 76 to 100 (e.g. 80) 2. 76 3. 100
5	Verify that the error message appears if incorrect data is entered	1. Any number <0 (e.g. -8) 2. Any number >100 (e.g. 160) 3. 0 4. 101 5. Alphabetic characters 6. Special characters 7. Decimal numbers
6	<u>Verify that the error message appears if the 'Weight' field is left empty</u>	No numbers entered

2. Decision table

If you are a new customer of Apple store and you made a purchase on \$500 and more, you will get a voucher on 10% discount for today's purchase. If your purchase worth is less than \$500, then you will get a voucher on 5% discount for today's purchase. If you are a gold customer of Apple store, then you will have 30% discount on all store assortments.

A new customer of Apple store and made a purchase on \$500 and more - 10%

A new customer of Apple store and made a purchase on less than \$500 - 5%

A gold customer of Apple store - 30%

Decision table

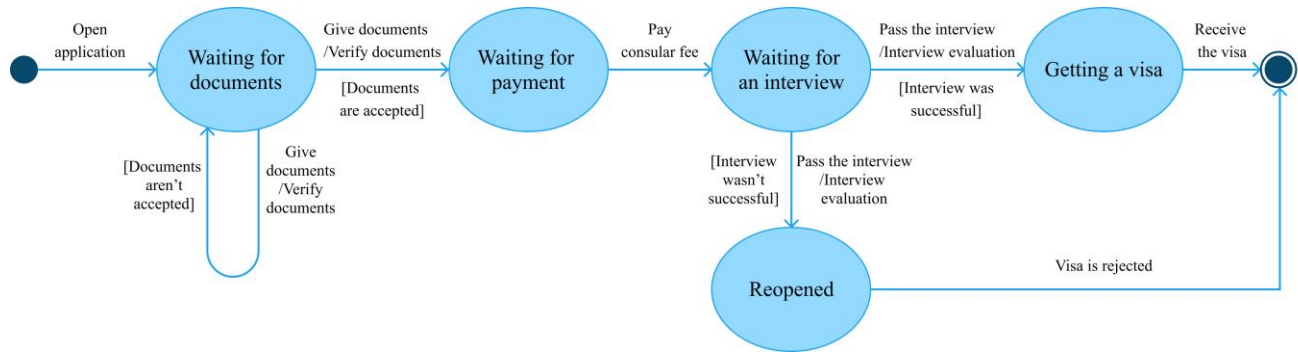
Causes (inputs)	R1	R2	R3	R4	R5	R6	R7	R8
New, purchase amount \geq \$500	Y	Y	Y	Y	N	N	N	N
New, purchase amount $<$ \$500	Y	Y	N	N	Y	Y	N	N
Gold	Y	N	Y	N	Y	N	Y	N
Effects (Outputs)								
Discount (%)	<u>X</u>	<u>X</u>	<u>X</u>	10%	<u>X</u>	5%	30%	0%

#	Condition	Outcome
1	A new customer of Apple store made a purchase on \$500 and more	A voucher on 10% for today's purchase
2	A new customer of Apple store made a purchase on less than \$500	A voucher on 5% for today's purchase
3	A gold customer of Apple store	30% discount on all store assortments
4	Unregistered user in Apple store	No discount

3. State transition

To open a visa you need to pass a list of steps in standard procedure. At first you need to get consultation or read some materials about documents which should be provided. Then you should prepare these documents according to templates and give them to tour agency for verification. If there are mistakes in the documents, they should be re-developed. If documents are prepared correctly, then you should pay \$80 for consular fee and pass interview with consul. If embassy accepts documents and you passed interview successfully, then you will get visa. If not, then you will need to try again.

State transition diagram



#	Test items
1	Verify that the client will receive a visa if he/she submit the correct documents and pass the interview the first time.
2	Verify that the client will receive a visa if he/she submits the documents a second time and passes the interview.
3	Verify that the visa will be rejected if the client fails the interview.