

Kateryna Verbytska Variant 3 Equivalence partitioning and Boundary value analysis

Internal telephone system for a company with 100 telephones has 3-digit extension numbers from 100 to 199. In a system designed to support registration of telephone number user should enter unique phone number and user's first and last names. Partitions should be designed for phone number field. Build equivalence classes (partitions) based on given information Stand Out boundary values

тестові дані:

1. будь-які номераб які не є 3-х значними будуть НЕВАЛІДНІ
2. будь-який 3-х значний номер від 0-99- буде НЕВАЛІДНИМ
3. будь-який 3-х значний номер від 100-199 буде ВАЛІДНИМ
4. будь-який 3-х значний номер від 200- 999 буде НЕВАЛІДНИМ

Класи еквівалентності:

- | |
|---------------------|
| 1. клас- від 0- 99 |
| 2 клас від 100- 199 |
| 3 клас від 200 -999 |

1 клас

2 клас

3 клас

0-99

100-199

200-999

Граничні значення: 0, 99, 100, 199, 200,999

2 Decision tables

If you are a new customer opening a credit card account, you will get a 5% discount on all your purchases today. If you are an existing customer and works with bank more than a year, you will get a 15% discount. If you are a bank client and works with bank less than a year, you will get a 10% discount. If you have a coupon, you can get 20% off today (but it can't be used with the 'new customer' and 'less than a year existing customer' discounts).

Build decision table based on given information

- new customer- get a 5% discount on all purchases today

-existing customer and works with bank <1 year - a 15% discount

- a bank client and works with bank > 1 year, - 10% discount

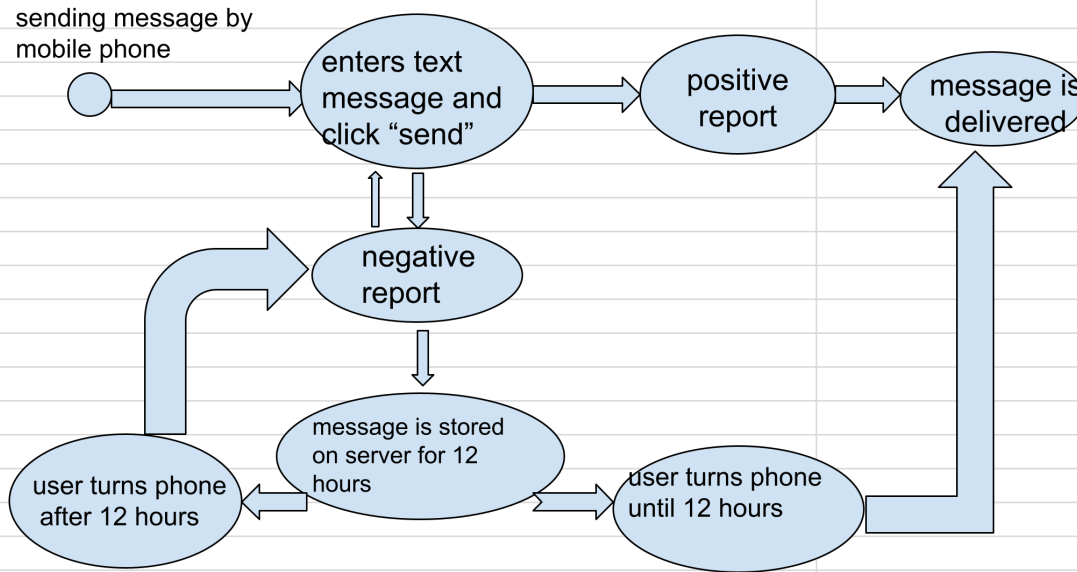
- have a coupon, get 20% off today (but it can't be used with the 'new customer' and 'less than a year existing customer' discounts)

Causes inputs	R1	R2	R3	R4	R5	R6	R7	R8
New Customer	Y	Y	N	N	N	N	N	N
Existing customer with bank <1 year	N	N	Y	Y	N	N	N	N
Bank client with bank > 1 year	N	N	N	N	Y	Y	N	N
Customer have coupon	N	Y	N	Y	N	Y	Y	N
Effect output								
Discount (%)	5%	20%	15%	35%	10%	10%	20%	0%
Error Message		*				*		

Condition	Outcome
A new customer	5% discount on all purchases today
A new customer and has coupon	20% discount today for a coupon only
existing customer with bank <1 year	a 15% discount
existing customer with bank <1 year + coupon	35 % discount
bank client with bank > 1 year	10% discount
bank client with bank > 1 year + coupon	10% discount
Only have coupon	20% discount
have nothing	0% discount

State transition

User sends message using mobile phone. He enters a text of a message, and then phone number of recipient and click 'Send'. Assume that delivery report option is enabled. If user gets positive delivery report, then message will be delivered to recipient. If not, then message will be stored on server for 12 hours. If recipient turns on the phone until 12 hours over, then message will be delivered. If not, then user will get negative delivery report and should re-send message again. Build state transition diagram based on given information Cover requirements above by tests (write test cases' names and objectives) based on state transition analysis



1. User enters text message and clicks "Send"- gets positive report- message is delivered to recipient

test passed

2. User enters text message and clicks "Send"- gets negative report- message is stored on server for 12 hours - user turns phone until 12 hours- message is delivered to recipient

test passed

3. User enters text message and clicks "Send"- gets negative report- message is stored on server for 12 hours - user turns phone after 12 hours- user gets negative report- user should re-send message

test failed