

Test Plan

I will be testing this solution for the way data is handled within it, meaning the algorithms used, and the transfer of data between the database and the Visual Basic front end application. The forms will each have a set amount of data to be tested with, three (3) pieces of normal data, three (3) pieces of erroneous data (to catch errors/bugs), and three (3) pieces of extreme data. Each form will be tested one by one for all of its data handling in the following order:



- New Releases
- Add Item to Stock List / Search for Item
- New Mail Orders / Edit Mail Orders
- Part Order
- Suppliers List
- Print New Releases
- Print List of Orders

Test Data

The following tables show the test data I will use in each form, including the predicted outcome. As each form is different, different data will be required.

New Releases

Typical Data:

Product No.	32-500B	R2613	V2500
Description	Bachmann St Mary	Hornby Dutchman	Vitrains CI 58
Price	65.00	74.00	54.95

This data should be entered into the database without errors.

Erroneous Data:

Product No.	(no data)	HEUSTDFESYSSQWASDERT	(no data)
Description	(100 character long string)	(no data)	(no data)
Price	3E.00	TT	-1

Having no description should mean "0" is entered into the database in the place of (no data), and the prices with text characters in should return a message box inside the VB front end and requires a price to be entered. Product No. Can only handle 10 chars, an error may be returned. The 100 character long string should return an error due to the limit being at 75 characters

Extreme Data:

Product No.	A	ABCDEFGHJIJ	ABCDEFGHJIJK
Description	B	(75 Character long string)	(76 Character long string)
Price	65.00	74.00	54.95

Product number can handle 10 characters, and so 1 and 10 characters have been chosen, along with 11 characters, of which the first two will be fine, whilst the third will return an error. Likewise with the Description, having a 75 character limit. The price doesn't have a limit however, and can't really be tested for extreme data

Add Item to Stock List

Typical Data:

Product No.	32-500B	R2613	V2500
Description	Bachmann St Mary	Hornby Dutchman	Vitrains CI 58
Price	65.00	74.00	54.95
Location	64	84	21

This data should be entered into the database without errors.

Erroneous Data:

Product No.	(no data)	HEUSTDFESYSSQWASDERT	(no data)
Description	(100 character long string)	(no data)	(no data)
Price	3E.00	TT	-1
Location	(no data)	(no data)	21

Having no description should mean "0" is entered into the database in the place of (no data), and the prices with text characters in should return a message box inside the VB front end and requires a price to be entered. Product

No. Can only handle 10 chars, an error may be returned. The 100 character long string should return an error due to the limit being at 75 characters

Extreme Data:

Product No.	A	ABCDEFGHJI	ABCDEFGHIJK
Description	B	(75 Character long string)	(76 Character long string)
Price	65.00	74.00	54.95
Location	A	(50 character long string)	(51 character long string)

Product number can handle 10 characters, and so 1 and 10 characters have been chosen, along with 11 characters, of which the first two will be fine, whilst the third will return an error. Likewise with the Description, having a 75 character limit. The price doesn't have a limit however, and can't really be tested for extreme data. The location can be tested because of its 50 character limit, which should return an error with the 3rd piece, and handle the first two fine.

Mail Orders

Typical Data:

Surname	Morris	Eastwood	Hughes
Initials	J	J	J
Address	7 Dormington Road, Hereford	8 Pendock Close, Quedgley, Gloucester	Rowberry, Lugwardine, Hereford
Postcode	HR14FA	GL215FT	HR14DS
Telephone	01432850565	01542689751	01432856874
Card Number	1234 5678 9012 3456	0123 4567 8901 2345 12	9012 4356 7809 1234
Valid From	03 08	03 09	03 10
Valid To	03 11	03 12	03 13
Issue Number	(no data)	2	(no data)
Security Digits	789	456	123
Item/Price/Quantity 1	32-500B/(no data)/2	R2613/(no data)/3	V2500/(no data)/2
Item/Price/Quantity 2	(no data)	32-500B/(no data)/1	(no data)
Item/Price/Quantity 3	(no data)	(no data)	(no data)
Item/Price/Quantity 4	(no data)	(no data)	(no data)
Item/Price/Quantity 5	(no data)	(no data)	(no data)
Item/Price/Quantity 6	(no data)	(no data)	R2613/(no data)/3
Item/Price/Quantity 7	(no data)	(no data)	(no data)
Item/Price/Quantity 8	R2613/(no data)/1	(no data)	(no data)
Item/Price/Quantity 9	(no data)	(no data)	(no data)
Item/Price/Quantity 10	(no data)	(no data)	(no data)
Item/Price/Quantity 11	(no data)	(no data)	(no data)
Item/Price/Quantity 12	(no data)	(no data)	32-500B/(no data)/2
Postage Cost (Combo)	1 st Class	Special Delivery	(no data)
Postage Cost (Textbox)	(no data)	(no data)	6.50
Voucher Receipt	(no data)	(no data)	3456
Mail Sent (Checkbox)	0	0	1

This data should be entered into the database without errors.

Erroneous Data:

Surname	Morris	Eastwood	Hughes
Initials	J	J	J
Address	7 Dormington Road, Hereford	8 Pendock Close, Quedgley, Gloucester	Rowberry, Lugwardine, Hereford
Postcode	HR14FA	GL25FT	HR14DS
Telephone	01432850565	01542689751	0143285687412
Card Number	1234 5678 9012 3456	0123 4567 8901 2345 1234	9012 4356 7809 1234
Valid From	03 08	03 09	03 10
Valid To	03 11	03 12	03 13
Issue Number	(no data)	2	(no data)
Security Digits	-1	456	123
Item/Price/Quantity 1	32-500B/(no data)/2	R2613/(no data)/3	V2500/(no data)/2
Item/Price/Quantity 2	(no data)	32-500B/(no data)/1	(no data)
Item/Price/Quantity 3	(no data)	(no data)	(no data)
Item/Price/Quantity 4	(no data)	(no data)	(no data)
Item/Price/Quantity 5	(no data)	(no data)	(no data)
Item/Price/Quantity 6	(no data)	(no data)	R2613/(no data)/3
Item/Price/Quantity 7	(no data)	(no data)	(no data)
Item/Price/Quantity 8	R2613/(no data)/1	(no data)	(no data)
Item/Price/Quantity 9	(no data)	(no data)	(no data)
Item/Price/Quantity 10	(no data)	(no data)	(no data)
Item/Price/Quantity 11	(no data)	(no data)	(no data)
Item/Price/Quantity 12	(no data)	(no data)	32-500B/(no data)/2
Postage Cost (Combo)	1 st Class	Special Delivery	(no data)
Postage Cost (Textbox)	(no data)	(no data)	6.50
Voucher Receipt	(no data)	(no data)	3456
Mail Sent (Checkbox)	0	0	1

In the first, the security digits field is erroneous with "-1", which will return an error. In the second, card number is over the 18 character limit, which will return an error. Finally, the telephone number has been given an additional 2 digits to test the string length of 11 in that field.

Extreme Data:

Surname	Morris	Eastwood	Hughes
Initials	J	J	J
Address	A	(75 Character long string)	(76 Character long string)
Postcode	HR14FA	GL25FT	HR14DS
Telephone	01432850565	01542689751	01432856874
Card Number	1234 5678 9012 3456	0123 4567 8901 2345	9012 4356 7809 1234
Valid From	03 08	03 09	03 10
Valid To	03 11	03 12	03 13
Issue Number	(no data)	2	(no data)
Security Digits	789	456	123
Item/Price/Quantity 1	32-500B/(no data)/2	R2613/(no data)/3	V2500/(no data)/2
Item/Price/Quantity 2	(no data)	32-500B/(no data)/1	(no data)
Item/Price/Quantity 3	(no data)	(no data)	(no data)
Item/Price/Quantity 4	(no data)	(no data)	(no data)
Item/Price/Quantity 5	(no data)	(no data)	(no data)
Item/Price/Quantity 6	(no data)	(no data)	R2613/(no data)/3

Item/Price/Quantity 7	(no data)	(no data)	(no data)
Item/Price/Quantity 8	R2613/(no data)/1	(no data)	(no data)
Item/Price/Quantity 9	(no data)	(no data)	(no data)
Item/Price/Quantity 10	(no data)	(no data)	(no data)
Item/Price/Quantity 11	(no data)	(no data)	(no data)
Item/Price/Quantity 12	(no data)	(no data)	32-500B/(no data)/2
Postage Cost (Combo)	1 st Class	Special Delivery	(no data)
Postage Cost (Textbox)	(no data)	(no data)	6.50
Voucher Receipt	(no data)	(no data)	3456
Mail Sent (Checkbox)	0	0	1

As there's not much to test due to lenient validation rules, the address will be tested with extreme data. The first with a single character, the second with a 75 character long string, and the 3rd with a 76 character long string. The predicated outcome will be the first two succeeding whereas the 3rd will fail and return an error.

Part Order

Typical Data:

Item	HPI 50003	Ripmax N4502	HPI 50026
Customer Name	Eastman J	Morris J	Townsend R
Customer Phone	01432850565	01432354321	01432789456
Customer Mobile	07952823799	07952123456	07952456123
Item Ordered (Checkbox)	1	0	1
Item Arrived (Checkbox)	0	0	1

This data should be entered into the database without errors.

Erroneous Data:

Item	HPI 50003	Ripmax N4502	HPI 50026
Customer Name	(no data)	(35 character long string)	Townsend R
Customer Phone	01432850565	01432354321	014327894560
Customer Mobile	07952823799	07952123456	079524561230
Item Ordered (Checkbox)	1	0	1
Item Arrived (Checkbox)	0	0	1

The customer name has a limit of 30 characters, so by having (no data) and (35 character long string) we can find both ends of the error. With the latter record, the customer phone/mobile numbers have an extra digit to ensure an error with their 11 character limit.

Extreme Data:

Item	HPI 50003	Ripmax N4502	HPI 50026
Customer Name	A	(30 Character long string)	(31 Character long string)
Customer Phone	01432850565	01432354321	01432789456
Customer Mobile	07952823799	07952123456	07952456123
Item Ordered (Checkbox)	1	0	1
Item Arrived (Checkbox)	0	0	1

Testing both ends of the accepted limit for customer name is the extreme data I need, and the 31 character long string will hopefully return an error to prove the system works right.

Suppliers ListTypical Data:

Company Name	Bachmann	Hornby	Peco
Contact 1	Beth	Jon	Humphrey
Contact 2	Jon	Humphrey	Beth
Contact 3	Humphrey	Beth	Jon
Address 1	3	7	18
Address 2	Crescent Walk	Bell Park	Rough Close
Address 3	Hereford	Hereford	Hereford
Address 4	(no data)	Herefordshire	(no data)
Postcode	HR1 1BB	HR1 7AO	HR1 9RC
Country	UK	UK	UK
Homepage	www.bachmann.co.uk	www.hornby.com	www.peco.org
Email	beth@bachmann.co.uk	Jon@hornby.com	Humphrey@peco.org
Account Number	01234	56789	01234
Phone 1	01432123456	01432789456	01423654987
Type 1	Land	Land	Land
Phone 2	07952456789	07952456788	07952123456
Type 2	Mobile	Mobile	Mobile
Notes	Nice HQ	(no data)	Cheap prices

This data should be entered into the database without errors.

Erroneous Data:

Company Name	Bachmann	Hornby	(no data)
Contact 1	(no data)	Jon	Humphrey
Contact 2	(no data)	Humphrey	Beth
Contact 3	(no data)	Beth	Jon
Address 1	3	(no data)	18
Address 2	Crescent Walk	(no data)	Rough Close
Address 3	Hereford	(no data)	Hereford
Address 4	(no data)	(no data)	(no data)
Postcode	HR1 1BB	HR1 7AO	HR1 9RC
Country	UK	UK	UK
Homepage	www.bachmann.co.uk	www.hornby.com	www.peco.org
Email	beth@bachmann.co.uk	Jon@hornby.com	Humphrey@peco.org
Account Number	01234	56789	01234
Phone 1	01432123456	01432789456	01423654987
Type 1	Land	Land	Land
Phone 2	07952456789	07952456788	07952123456
Type 2	Mobile	Mobile	Mobile
Notes	Nice HQ	(no data)	Cheap prices

The first record uses no contacts, which should return an error and prompt the user to enter at least one. The second record should return an error for not using an address, and will prompt the user to either enter it or the data will have to be omitted. The third record should return an error for not using a company name, and the user should be prompted about it.

Extreme Data:

Company Name	A	(30 Character long string)	(31 Character long string)
Contact 1	Beth	Jon	Humphrey
Contact 2	Jon	Humphrey	Beth
Contact 3	Humphrey	Beth	Jon
Address 1	3	7	18
Address 2	Crescent Walk	Bell Park	Rough Close
Address 3	Hereford	Hereford	Hereford
Address 4	(no data)	Herefordshire	(no data)
Postcode	HR1 1BB	HR1 7AO	HR1 9RC
Country	UK	UK	UK
Homepage	www.bachmann.co.uk	www.hornby.com	www.peco.org
Email	beth@bachmann.co.uk	Jon@hornby.com	Humphrey@peco.org
Account Number	01234	56789	01234
Phone 1	01432123456	01432789456	01423654987
Type 1	Land	Land	Land
Phone 2	07952456789	07952456788	07952123456
Type 2	Mobile	Mobile	Mobile
Notes	Nice HQ	(no data)	Cheap prices

This set of data tests the Company name field with extreme data, firstly with 1 character, then 30 characters, then 31 characters, testing the boundaries of the field character limit, and using the 31 character long string to generate an error to prove the system works right.