

## Document for Activities 3 and 4

### Test Plan (add additional rows as required)

Program language the product is to be produced in (tick box for language used):

Python ☐

C Family ☒

Test Number	Purpose of test	Test Data	Expected Result	Actual Result	Comments
1	Check GetString does not accept blank strings	Blank string on Customer Name input	Program displays “Invalid Input” and asks again for input.	As expected	
2	Check GetString accepts string inputs	Any string input on: Customer Name Customer Address Customer Phone Number	Program accepts input. Program continues to next step.	As expected	Could later improve with regex for enforcing pattern
3	Check GetInt does not accept values out of bounds	0 on Parcels Input 7 on Parcels Input	Program displays “Invalid input. Not between 1 and 6” for both. and asks again for input.	As expected	
4	Check Get Int does not accept non-integer values	2.3 on Parcels Input “Two” on Parcels Input	Program displays “Invalid input. Not an integer” and asks again for input.	As expected	
5	Check GetInt accepts values within range	1 on Parcels Input 6 on Parcels Input	Program accepts input. Program continues to next step.	As expected	
6	Check if maximum size is enforced	151 on Height Input 151 on Length Input 151 on Width Input	Program will display “Cannot be delivered!” under the parcel	As expected	
7	Check if maximum weight is enforced	31 on Weight	Program will display “Cannot be delivered!” under the parcel	As expected	

Test Number	Purpose of test	Test Data	Expected Result	Actual Result	Comments
8	Check if small parcel is working at highest	31 on Height Input 31 on Length Input 33 on Width Input 2 on Weight Input	Program will display Parcel Cost is £5.00	As expected	
9	Check if medium parcel is working at lowest	32 on Height Input 32 on Length Input 32 on Width Input 3 on Weight Input	Program will display Parcel Cost is £20.00	As expected	
10	Check if medium parcel is working at highest	50 on Height Input 50 on Length Input 50 on Width Input 15 on Weight Input	Program will display Parcel Cost is £20.00	As expected,	
11	Check if large parcel is working on at lowest	50 on Height Input 50 on Length Input 51 on Width Input 16 on Weight Input	Program will display Parcel Cost is £30.00	As expected	
12	Check if medium overrides small on size	32 on Height Input 32 on Length Input 32 on Width Input 2 on Weight Input	Program will display Parcel Cost is £20.00	As expected	
13	Check if medium overrides small on weight	31 on Height Input 31 on Length Input 33 on Width Input 3 on Weight Input	Program will display Parcel Cost is £20.00	As expected	
14	Check if large overrides small on size	50 on Height Input 50 on Length Input 51 on Width Input 2 on Weight Input	Program will display Parcel Cost is £30.00	As expected	

Test Number	Purpose of test	Test Data	Expected Result	Actual Result	Comments
15	Check if large overrides small on weight	31 on Height Input 31 on Length Input 33 on Width Input 16 on Weight Input	Program will display Parcel Cost is £30.00	As expected	
16	Check if large overrides medium on size	51 on Height Input 50 on Length Input 50 on Width Input 15 on Weight Input	Program will display Parcel Cost is £30.00	As expected	
17	Check if large overrides medium on width	50 on Height Input 50 on Length Input 50 on Width Input 16 on Weight Input	Program will display Parcel Cost is £30.00	As expected	
18	GetBool only accepts "Y" or "N"	Press all keys except "Y" and "N". Then press "Y". Repeat and press "N"	Program will not continue until "Y" or "N" is pressed	As expected	
19	Tracking adds £5.00 to cost	"Y" on Tracking Input "N" on Signature Input	Program will show parcel's total cost is £5.00 higher than cost.	As expected	
20	Signature adds £2.00 to cost	"N" on Tracking Input "Y" on Signature Input	Program will show parcel's total cost is £2.00 higher than cost.	As expected	
21	Signature and Tracking adds £5.00 & £2.00 to cost	"Y" on Tracking Input "Y" on Signature Input	Program will show parcels total cost is increased by £7.00. Both Signature and Tracking costs independently shown.	As expected	

Test Number	Purpose of test	Test Data	Expected Result	Actual Result	Comments
22	No Signature and Tracking does not show total cost increase	“N” on Tracking Input “N” on Signature Input	Program will show Parcel’s cost and not a total cost or signature and tracking costs.	As expected	
23	Collection Cost is accurately calculated	One or more valid parcels	Program will show Collection Cost as a total of all parcel costs	As expected	
24	Invalid packages are not included in price	One or more valid and one or more invalid parcels with tracking and signatures	Program will show Collection Cost as a total of all parcel costs. Invalid parcels will not be counted	As expected	
25	Check behaviour if no parcels can be delivered	One or more invalid parcels. No valid parcels	Program will show all parcels cannot be delivered and a total cost of £0.00	As expected	
26	All currency is displayed to 2 decimal places	Normal valid data for inputs.	All calculations are shown to 2 D.P.	As expected	
27	Customer details are displayed	Valid customer information	All customer information is displayed as inputted	As expected	
28	Check program functions on Windows 10	Run all previous tests on Windows 10	All tests passed	As expected	