

## Requirements

- R1 - Several Deals can be applied to a pizza order.
- R2 – Deals should only be selected by the user when starting an order and any discounts should be applied correctly once the deal conditions have been met
- R3 – If an order changes so that the deal conditions are no longer met, the discount should be removed and the normal price shown.
- R4.1 – Two for One Tuesdays (2 medium/large, charged at highest cost pizza, collection/delivery)
- R4.2 – Three for Two Thursdays (3 medium, charged at height 2 costing pizzas, collection/delivery)
- R4.3 – Family Friday (4 named medium, charged £30, collection)
- R4.4 – Two Large (2 named large, charged £25, collection)
- R4.5 – Two Medium (2 named medium, charged £18, collection)
- R4.6 – Two Small (2 named small, charged £12, collection)
- R5 – The user should be authenticated when reaching checkout
- R6 – One or more items can be added to the cart
- R7 – A delivery type is supplied
- R8 – A pizza size must be supplied
- R9 – An authenticated user can save an order
- R10 – An authenticated user can retrieve a saved order

## Test Cases

### Normal

- N1 (R2, R4.1, R6, R7, R8) Two for One Tuesdays (Correct Data)
- N2 (R2, R4.2, R6, R7, R8) Three for Two Thursdays (Correct Data)
- N3 (R2, R4.3, R6, R7, R8) Family Friday (Correct Data)
- N4 (R2, R4.4, R6, R7, R8) Two Large (Correct Data)
- N5 (R2, R4.5, R6, R7, R8) Two Medium (Correct Data)
- N6 (R2, R4.6, R6, R7, R8) Two Small (Correct Data)
- N7 (R1, R2, R4.1, R4.4, R6, R7, R8) Multiple Deals - Two for One Tuesdays & Two Large (Correct Data)
- N8 (R9) – An authenticated user can save an order to the cart
- N9 (R10) - An authenticated user can retrieve an order to the cart

### Invalid

- I1 (R2, R3, R4.1, R6, R7, R8) Two for One Tuesdays (Conditions not met)
- I2 (R2, R3, R4.2, R6, R7, R8) Three for Two Thursdays (Conditions not met)
- I3 (R2, R3, R4.3, R6, R7, R8) Family Friday (Conditions not met)
- I4 (R2, R3, R4.4, R6, R7, R8) Two Large (Conditions not met)
- I5 (R2, R3, R4.5, R6, R7, R8) Two Medium (Conditions not met)
- I6 (R2, R3, R4.6, R6, R7, R8) Two Small (Conditions not met)
- I7 (R1, R2, R3, R4.1, R4.4, R6, R7, R8) Multiple Deals - Two for One Tuesdays & Two Large (Conditions not met)
- I8 (R7) – No delivery type selected
- I9 (R8) – No pizza size provided
- I10 (R9) – Unauthenticated user cannot save an order to the cart
- I11 (R10) - Unauthenticated user cannot retrieve an order to the cart

### Boundary

- B1 (R2, R3, R4.1, R6, R7, R8) Two for One Tuesdays (Some conditions met)
- B2 (R2, R3, R4.2, R6, R7, R8) Three for Two Thursdays (Some conditions met)
- B3 (R2, R3, R4.3, R6, R7, R8) Family Friday (Some conditions met – named pizzas)
- B4 (R2, R3, R4.3, R6, R7, R8) Family Friday (Some conditions met – some named pizzas)
- B5 (R2, R3, R4.4, R6, R7, R8) Two Large (Some conditions met – named pizzas)
- B6 (R2, R3, R4.4, R6, R7, R8) Two Large (Some conditions met – some named pizzas)
- B7 (R2, R3, R4.5, R6, R7, R8) Two Medium (Some conditions met – named pizzas)
- B8 (R2, R3, R4.5, R6, R7, R8) Two Medium (Some conditions met – some named pizzas)
- B9 (R2, R3, R4.6, R6, R7, R8) Two Small (Some conditions met – named pizzas)
- B10 (R2, R3, R4.6, R6, R7, R8) Two Small (Some conditions met – some named pizzas)
- B11 (R1, R2, R3, R4.1, R4.4, R6, R7, R8) Multiple Deals - Two for One Tuesdays & Two Large (One deal met, another not)
- B12 (R6, R7) – No items added to cart

### Special

- S1 (R5) – User is not logged in so is redirected to login
- S2 (R1) – No deals are provided
- S3 (R5) – Unauthenticated user trying to reach checkout

## Test Plan

Test No	Test	Testing	Data	Unit Test Name
UT1	S1	Authenticated User on Cart	No logged in user	testAuthenticatedCartSpecial
UT2	N1	Two for One Tuesdays Deal	Two medium pizzas for Collection	testTwoForOneTuesdaysNormal
UT3	I1		Two small pizzas for Collection	testTwoForOneTuesdaysInvalid
UT4	B1		One medium and one Large pizza for collection	testTwoForOneTuesdaysBoundary
UT5	N2	Three for Two Thursdays Deal	Three medium pizzas for Collection	testThreeForTwoThursdaysNormal
UT6	I2		One large pizza for Collection	testThreeForTwoThursdaysInvalid
UT7	B2		Four medium pizzas for collection	testThreeForTwoThursdaysBoundary
UT8	N3	Family Friday Deal	Four named medium pizzas for Collection	testFamilyFridayNormal
UT9	I3		Four named medium pizzas for Delivery	testFamilyFridayInvalid
UT10	B3		Four custom medium pizzas for Collection	testFamilyFridayBoundaryOne
UT11	B4		Three named and one custom pizza for Collection	testFamilyFridayBoundaryTwo
UT12	N4	Two Large Deal	Two named large Pizzas for Collection	testTwoLargeNormal
UT13	I4		Two named large Pizzas for Delivery	testTwoLargeInvalid
UT14	B5		Two custom large Pizzas for Collection	testTwoLargeBoundaryOne
UT15	B6		One named and one custom pizza for Collection	testTwoLargeBoundaryTwo
UT16	N5	Two Medium Deal	Two named medium Pizzas for Collection	testTwoMediumNormal
UT17	I5		Two named medium Pizzas for Delivery	testTwoMediumInvalid
UT18	B7		Two custom medium Pizzas for Collection	testTwoMediumBoundaryOne
UT19	B8		One named and one custom pizza for Collection	testTwoMediumBoundaryTwo
UT20	N6	Two Small Deal	Two named small Pizzas for Collection	testTwoSmallNormal
UT21	I6		Two named small Pizzas for Delivery	testTwoSmallInvalid
UT22	B9		Two custom small Pizzas for Collection	testTwoSmallBoundaryOne
UT23	B10		One named and one custom pizza for Collection	testTwoSmallBoundaryTwo
UT24	N7	Multiple Deals (Both Passing)	Two for One Tuesdays and Two Large deal conditions met	testMultipleDealsPass
UT25	B11	Multiple Deals (One Pass / One Fail)	Two for One Tuesday's conditions met and Two Large conditions deal not met	testMultipleDealsPassFail
UT26	I7	Multiple Deals (Both Failing)	Two for One Tuesdays and Two Large deal conditions not met	testMultipleDealsFail
UT27	S2	No Deals	No deals selected (Any Pizzas)	testNoDeals
UT28	N8	Cart Handling	Authenticated Save order	testAuthenticatedSaveOrder
UT29	I10		Unauthenticated Save order	testUnauthenticatedSaveOrder
UT30	N9		Authenticated Retrieve Order	testAuthenticatedRetrieveOrder
UT31	I11		Unauthenticated Retrieve Order	testUnauthenticatedRetrieveOrder
UT32	B12		No Items added to cart	testNoItemsInCart
UT33	I8	Order Handling	No Delivery type selected	testNoDeliveryType
UT34	I9		No Pizza size selected	testNoPizzaSize
UT35	S3	Checkout	Unauthenticated user tries to reach checkout	testUnauthenticatedCheckout