



## Console e-Shop

You need to **upgrade** console e-shop to v2.0.

After the initial login, the user should be able to choose from one of the **enhanced / additional** actions:

2. **[Enhancement]** Search the product catalog that should be populated upfront (hardcoded), and console write the whole list of products, including product name and price.

- a. Based on vendor name as key;
- b. Based on part of product name (including different vendors).

When searching the product catalog, the user should provide four parameters:

- Type of search criteria (VendorName | ProductNamePart);
- Search criteria (as described above);
- Sort by (ProductName | ProductPrice);
- Sort order (ASC | DESC).

7. **[Addition]** Proceed to payment, by choosing one of the following payment options:

- a. Pay with creditcard;
- b. Pay with PayPal.

Payment processing should be defined as an event, and based on the user input, an appropriate event handler should be added to the event delegate invocation list. Payment processing event handler should always execute successfully, and should console write the used type of payment.

8. **[Addition]** Ship the ordered items, by providing shipping address using the format [Street, Number, Place], and choosing shipping provider. The following places should be supported: Skopje, Bitola, Ohrid, Stip. The following shipping providers can be used: Makedonska Posta, DELCO.

Shipping scheduling should be also defined as an event, and also based on user input, an appropriate event handler should be added to this event delegate invocation list. Shipping event handler should console write the selected shipping details.

9. **[Addition]** Finally, move the order to an purchased orders history list, and enable the user to overview list of all purchased orders in the following modes:

- a. History list of cheap orders, where total price is less or equal than 1.000 MKD;
- b. History list of expensive orders, where total price is greater than 1.000 MKD;

Please use the C# elements that we have learned about within the first 6 modules of the C# advanced course, as well as all C# elements that you have learned within the Basic C# course.

### Bonus implementation

Try to implement the following enhancements:

- Extension method for formatting prices of products / ordered items / order total price, in the following format: #,##MKD (use , as decimal separator and . as thousands separator);
- Apply 'defensive coding' technique and implement data validation to all user input;
- Implement global error handler for all unhandled exceptions.
- Get the products from file system. example get products from csv/xml/json/.
- Export the receipt to file system as .txt file.