LU12.L02 - Hofladen

Funktionen

```python
def input_int(prompt):
    """
    reads an integer input from the user
    :param text: the prompt to be shown
    :return: the integer number
    """
    pass


def input_float(prompt):
    """
    reads a decimal number input from the user
    :param text: the prompt to be shown
    :return: the decimal number
    """
    pass


def find_article(list, name):
    """
    finds an article in the article list
    :param list: the article list
    :param name: the article name to be found
    :return: article or None=not found
    """
    pass
```

Vorgehensschritte

- Schritt 1
- Schritt 2
- Schritt 3

1. Erstelle eine leere Liste für die Artikel
2. Eingabe des Artikelnamens
3. Solange Artikelname nicht Exit ist
    1. Suche den Artikel in der Liste
    2. Falls keine Artikel gefunden wurde
        1. Erstelle ein neues Artikel-Objekt und speichere es in der Liste
        2. Speichere den Artikelnamen
        3. Eingabe des Preises
    3. Sonst
        1. Ausgabe des aktuellen Bestands
    4. Eingabe der Menge

5. Addiere die Menge zum Bestand
6. Eingabe des Artikelnamens
4. Gib die Artikelliste als Returnwert zurück

Sourcecode

article.py

```python
from dataclasses import dataclass


@dataclass
class Article:
    """
    an article in the farmshop
    """
    name: str
    price: float
    stock: int


if __name__ == '__main__':
    pass
```

shop.py

```python
from article import Article


def main():
    article_list = []
    article_name = input('Artikelname > ')
    while article_name != 'Exit':

        article = find_article(article_list, article_name)
        if article is None:
            article = Article(article_name, 0.0, 0)
            article_list.append(article)
            article.price = input_float('Preis      > ')
        else:
            print('Bestand    : ' + str(article.stock))

        amount = input_float('Menge      > ')
        article.stock = (article.stock + amount)
        article_name = input('Artikelname > ')
```

```python
        return article_list

def input_int(prompt):
    """
    reads an integer input from the user
    :param text: the prompt to be shown
    :return: the integer number
    """
    number = None
    while number is None:
        try:
            number = int(input(prompt))
        except ValueError:
            print("Please, enter a whole number!")
            continue
    return number

def input_float(prompt):
    """
    reads a decimal number input from the user
    :param text: the prompt to be shown
    :return: the decimal number
    """
    number = None
    while number is None:
        try:
            number = float(input(prompt))
        except ValueError:
            print("Please, enter a real number!")
            continue
    return number


def find_article(list, name):
    """
    finds an article in the article list
    :param list: the article list
    :param name: the article name to be found
    :return: article or None=not found
    """
    for article in list:
        if article.name == name:
            return article
    return None

if __name__ == '__main__':
    main()
```

From: