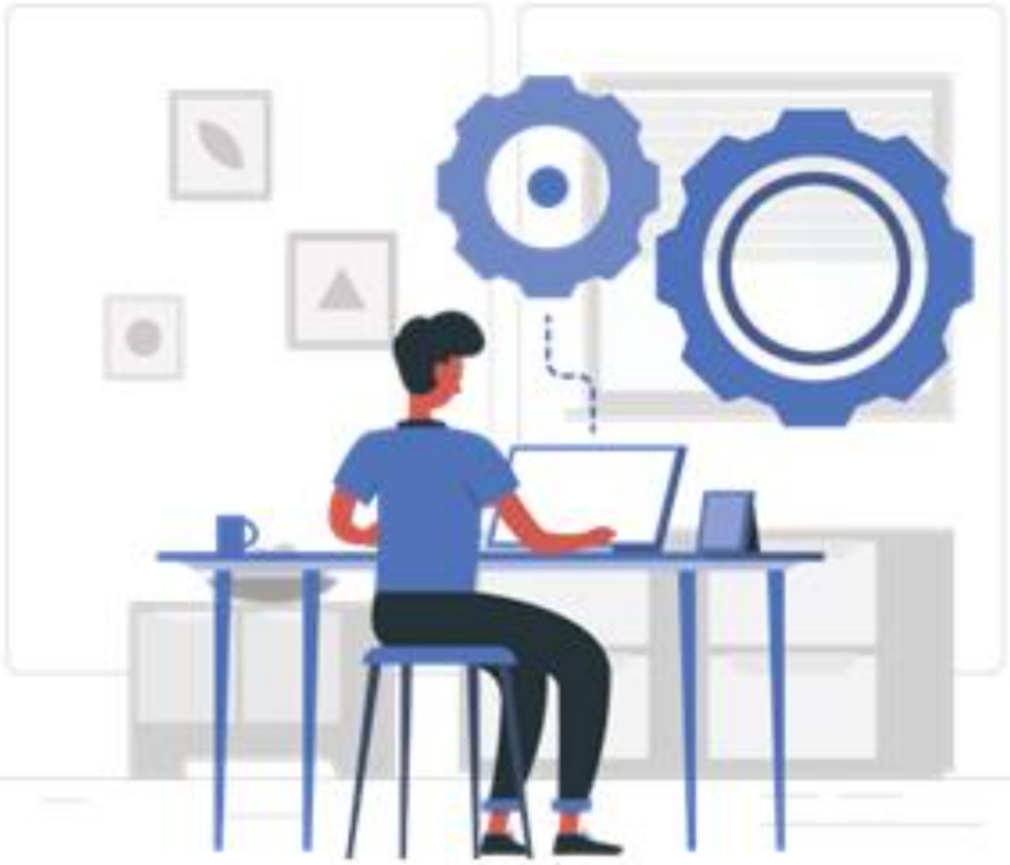

Practice

Store and Manipulate Objects Using Ordered Collections

Practice

- Electronics Search Service

Implementation Environment

- The practice or challenge must be done in the IntelliJ IDE.
- Click here to install IntelliJ
- You must have access to GitLab.
- Install git to be able to clone and push code to the repository.
- You must be familiar with forking and cloning a git repository.

PRACTICE

Electronics Search Service

John wants to build a program to add all kinds of electronic items. The program should only add unique items. If someone wants to search for any item, the program should return the index position of that item. Also, the program should delete the item from the list as per the requirement.

Help John to achieve this task.

Instructions for the Practice

- Click on the boilerplate.
- Fork the boilerplate using the fork button 

- Select your namespace to fork the project.
- Clone the project into your local system.
- Open the project in the IntelliJ IDE.
- Work on the solution.
- Execute the test cases given in the test folder.
- Push the solution to git.

Tasks

- Write all the logic for the program inside the provided `ElectronicListService` class.
  - Write the logic to add electronics items to a list; only unique items should be added. Return the list with unique items. The following logic should be written inside the method below. A string of electronic items is a method parameter.

```
public static List<String> addElectronicsItemsToList(String electronicsItems)
```

  - Sample Input -
    - String electronicsItems- "TV,Computer,Refrigerator,TV";
  - Sample Output -
    - List listItems - [TV, Computer, Fridge]
- Use generics for all the list objects.

Tasks (cont'd)

- Write logic to search for an electronic item in the given list and return the index position. Write logic inside the method below:

public static int searchElectronicItemInList(List<String> itemList, String searchItem)

  - Sample Input -
    - List itemList - [TV, Computer, Fridge]
    - String searchItem - "Computer"
  - Sample Output -
    - Int indexNumber – 1
- Use generics for all the list objects.

Tasks (cont'd)

- Write logic to remove a particular electronic item from the list.
- Use the iterator to iterate through the list.
- Use the iterator method `remove()` to remove the item from the list.
- Write the logic inside the given method and return the Boolean value.

public static boolean removeElectronicsItemFromList(List<String> itemList, String removeItem)

- Use generics for all the list objects.

Input and Output

- **Sample Input -**
  - `List itemList - [TV, Computer, Fridge]`
  - `String removeItem - "Computer"`
- **Sample Output -**
  - `Boolean flag  - true`