

2019학년도 2학기
JAVA 프로그래밍 II

514770
2019년 가을학기
11/06/2019
박경신

과제 Lab6_1

<https://bmi-calories.com/bmi-calculator.html>

- dto 패키지 안에 BMICalculator, BMRCalculator, BFPCalculator을 작성한다.
 - enum Gender { MALE, FEMALE }
 - enum BMI { UNDERWEIGHT, NORMAL, OVERWEIGHT, OBESITY }
 - interface HealthCalcualtor { double getIndex(); }
 - class Person – age, gender, height, weight, neck, waist, hip
 - class BMICalculator extends Person implements HealthCalculator – Body Mass Index(BMI)
 - weight, height, index, BMI
 - class BMRCalculator extends Person implements HealthCalculator – Basal Metabolic Rate(BMR)
 - age, gender, weight, height, index
 - class BFPCalculator extends Person implements HealthCalculator – Body Fat Percentage(BFP)
 - gender, height, neck, waist, hip, index
 - class CCalculator extends Person implements HealthCalculator – Calorie Intake (CI)
 - age, gender, weight, height, activity, index

과제 Lab6_1

- dao 패키지 안에 Parser, DataImporter, Manager를 작성한다.
 - interface Parser<T> { T parse(String[] items); }
 - class PersonParser implements Parser<Person>
 - public Person parse(String[] items) // csv String[] -> Person
 - class BMICalculatorParser implements Parser<BMICalculator>
 - public BMICalculator parse(String[] items) // csv String[] -> BMICalculator
 - class BMRCalculatorParser implements Parser<BMRCalculator>
 - public BMRCalculator parse(String[] items) // csv String[] -> BMRCalculator
 - class BFPCalculatorParser implements Parser<BFPCalculator>
 - public BFPCalculator parse(String[] items) // csv String[] -> BFPCalculator
 - class CCalculatorParser implements Parser<CCalculator>
 - public CCalculator parse(String[] items) // csv String[] -> CCalculator
 - class DataImporter<T>
 - public DataImporter(Parser parser)
 - public <T> List<T> loadCSV(String filename) // load list of data using parser
 - public void saveCSV(String path, List<?> data)

과제 Lab6_1

- class Manager<T> implements Iterable<T>
 - private class ManagerIterator<T> implements Iterator<T> { /* 내부 구현 */ }
 - public Manager(); // 생성자
 - public T get(int index) // get data
 - public List<T> getList() // get list of data
 - public List<T> getListBy(Predicate<? Super T> predicate) // get data using filter
 - public void add(T t) // add data
 - public void addList(List<T> list) // add list of data
 - public void insert(int index, T data) // insert data at the index
 - public void removeAll() // clear list of data
 - public void remove(T data) // remove data
 - public void remove(int index) // remove data by index
 - public T find(T data) // find data
 - public void replace(T olddata, T newdata) // replace old data to newdata
 - public void sort(Comparator<? super T> comparator)
 - public Iterator<T> iterator(); // iterator 객체를 반환

과제 Lab6_1

- Lab6_1에서는 "people.csv" 파일을 로딩해서 각종 테스트한다.
- 본인이 추가로 각종 테스트를 한다.

과제 제출

- Lab6_1과 보고서를 전체적으로 묶어서 e-learning에 과제 제출