ITP20003 Java Programming

Lab 6. Raise Family

Lab 6

- Examples
  - LinkedQueue
  - SortedList
  - Hierarchical Tangram
  - Generic LinkedList

- Missions 10,11 &12
  - Team →

Team1	김지민	Wongani
Team2	김소은	이한빈
Team3	김시온	유채우
Team4	김아론	이지행
Team5	김예군	김재윤
Team6	박수현	황보효정
Team7	박혜빈	양예진
Team8	백주열	윤석규
Team9	심충일	전혜원
Team10	이종원	이혁재

StrSequence and SortedStrList

- StrSequence extends StrList
  - add concat()

- SortedStrList extends StrList
  - override add()   (i.e., redefine add())

Mission 10. UniqueStrList

- construct UniqueStrList by extending StrList

- implement contains(str) which returns true when str is already in the list

- add() adds a string to the list only if the given string is not already in the list

- show that UniqueStrList is correct by UniqueStrListTest

LinkedList and ArrayList

- Generalize StrList into LinkedList which can hold objects of any class
  - c.f. Object class
    - Every class in Java is an extension of the Object class
    - Common interface methods: equal(), toString(), hashCode(), etc.

- Generalize LinkedList into List
  - LinkedList extends List
  - ArrayList extends List

Revised Figures

- Define Circle, Square, Triangle as children of Figure

Mission 11. Revise Tangram

- Replace Circle, Triangle and Square of your Tangram work with the revised version

- Redefine the other figures as children of Figure

- Add new figures Hexagon and Ellipse
  - An Hexagon can be defined with a centroid and a radius
  - An Ellipse can be defined with a centroid, a width and a height