

#### Coursework Assignment Brief

#### INST2002

Assignment Title	Coursework: An Online Dry-Food Store		
Component/Module	Programming Module		
Assignment Code/Number	В		
Set by	Luke Dickens		
Moderated by	Karen Stepanyan		

## Learning outcomes to be assessed:

- Understanding of terms: class, method, return value, input argument, code reuse, superclass, subclass, interface, apparent type, actual type, and casting.
- Mastery of keywords/operators: new, return, public, private, if, else, for, switch, case, this, final, static, ||, &&, ==, !=, !, <, > and [] (square brackets).
- Use of new keywords/operators: **super**, **extends**, **interface**, **implements**, **instanceof**, () for casting, and <> for generics.
- Mastery of type definitions: int, boolean, double, String and user defined types, for locally defined variables and method input arguments.
  - New uses of type definitions: upcasting, downcasting, List and ArrayList.
  - Understanding of concepts:
  - different apparent and actual types
  - interfaces as a contract
  - · superclass representing is-a relation
  - Problem Solving:
    - using class hierarchies to minimise duplication
    - inheriting attributes and methods
    - · reading and writing list elements
  - in place operations
  - opportunity to demonstrate understanding of recursion



### **Submission requirements:**

- Before attempting the task, students are strongly encouraged to familiarise themselves with the specification.
- Students should compile regularly throughout to ensure that the final submission compiles.
- Students should package the files and the local folders into a zip file and submit as a single ziparchive
- Submission is through the moodle submission page for INST2002 (link).

Basic Assignment Description	The student must complete an implementation of the online dry-food store in Java as described in the pdf document on moodle.
Conditions	Each student must work individually. A task description and code can be downloaded in advance, and a solution developed on the student's local machine. Submission is through moodle as a zip file. All work, including the submission, must be done by the student alone.
Marking Criteria and Weighting Rubric	The students code will be assessed for correct functionality and coding style. The total mark for this assessment consists of 70% for correct functionality and 30% for coding style. Of the mark for functionality 40% is assigned to the product-list and associated classes and 30% to the basket and associated classes.  If a student fails to meet the precise functionality for any part of the coursework, then partial credit will be given where the student goes some way towards meeting the requirements.  Good coding style includes: good variable names, appropriate use of control flow (e.g. for loops, if statements and recursion), appropriate variables with good names, code reuse and minimising duplication of code, appropriate helper methods & additional classes, appropriate use & handling of exceptions, meaningful &
	appropriate comments, good package structure, and consistent formatting.



The assignment is worth	60	% of the overall assessment for this course

This assignment **must** be completed: as an individual piece of work

Date work set (provisional): 12/12/2016

Date and time due in (provisional): 15:00 on 13/01/2017

# Standard lateness penalty will apply

Target date for return of marked work and full feedback (provisional): 10/02/2017 (tentatively within 4 working weeks, according to DIS policy)

A detailed description of the assignment is: available at the moodle course webpage <a href="here">here</a>.