## **IDS401 Project Documentation**

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**Application**: Coupon Inventory System (Default)

## To run the project:

- 1. Open both files: IDS401Proj.java and Coupon.java
- 2. Read the comments in the beginning of the IDS401Proj.java file
- 3. Click Run
- 4. Select an option in the initial menu either read from file (must paste in the file path) or manual input (1 by 1)
- 5. Access options in the main menu.

## Classes included in this project and their methods:

- 1. IDS401Proj class:
  - a. **main**—responsible for running the project, includes both the initial and main menu of the application.
  - b. readCoupons responsible for reading the file to the ArrayList of Coupon objects
  - c. addCoupons allows the user to append the ArrayList with a manually input coupon
  - d. **searchCoupons** allows the user to search for a coupon by its fields:

Product name
Price
Status
Provider
Expiration
Status
Final Price

4. Discount Rate

e. **sortAndDisplay** – allows the user to view the coupons SORTED by either:

Product name
Price
Status
Provider
Expiration
Status
Final Price

4. Discount Rate

## 2. Coupon class:

- a. getProduct returns the product's name
- b. **getPrice** returns the product's initial price
- c. **getProvider** returns the coupon's provider
- d. getDiscountRate returns the discount rate, e.g. 20, 30...
- e. **getExpiration** returns the expiration in # of days
- f. **getStatus** returns the status (Unused/Redeemed)
- g. **getFinalPrice** returns the final price after the discount rate
- h. **@Override toString** overrides the default object printing method