Programming Fundamentals 2

Repeat Assignment – August 2022

1. Grade for this repeat assignment is 100%.

2. The assignment brief for this assignment will be an enhanced version of Assignment 2 as per the original spec (existing brief will score max **50 marks**)

3. Additional requirements include adding:
    A. **22 marks:** Add in the licence field into app class. A licence can be one of
        o Trial;
        o Floating; or
        o Subscription

You should write a LicenceUtility class that uses an ArrayList of Strings (using the three values above). (**Hint** : Use the RatingUtility class already given to help you in Assignment 2 and the CategoryUtility from assignment 1. The licence utility should be used to validate the user input etc. You should also write a Test class for this new utility based on other utility tests given previously here:

Marks breakdown –

-   add in new field + updating constructors, toString, equals, setters, getters   **(5 Marks)**,
-   LicenceUtility Class + LicenceUtilityTest (test)Class **(8 Marks)**
-   Updating EducationAppTest(given for Assignment 2) to incorporate the new field**. (5 Marks)**
-   Update AppStoreApi and Driver to incorporate the new licence field in App. **(4 Marks)**

    B. **5 marks:** Javadoc on AppStoreApi class.
    C. **11 marks:** Update the Developer class to have the following additional fields and validation:
        a. developerPhoneNumber (String) – must only contain numbers.
        b. developerCountry (String) – max 80 chars
        c. developerLatitude (double) – values between -90 and 90.
        d. developerLongitude (double): values between -180 and 180 inclusive.
        e. Ensure that you have getters, setters for each new field and that the toString uses these new fields.

D. 11 marks: Updating DeveloperAPI and Driver (to incorporate new Developer fields)

    a. Ensure that all fields are updated when updating a developer.
    b. Add a listing method that lists all Apps from developers in a given country.
    c. Update the driver to ask for these new fields in the add and the update menu options