

Bluegrass Community and Technical College

CIT 149: Java I



Array of Objects - Stately Information

You should use the Student Example discussed in this week's podcast as a model

Included with this assignment in Blackboard is a file named **States.txt**. It is a comma-delimited file with records that look similar to:

```
Alabama, Montgomery, Yellowhammer, Camellia
Alaska, Juneau, Willow Ptarmigan, Forget-me-not
Arizona, Phoenix, Cactus Wren, Saguaro Cactus Blossom
```

Each record contains 4 fields:

- State name
- State capital
- State bird
- State flower

Step 1: Create an Array of Objects (10 points)

While this assignment could be completed without arrays, the purpose of this assignment is to practice using an array of objects. The data file is provided simply to give you data to use in the program. Please use the following all of the guidelines below for this assignment.

- Read all of the records from the **States.txt** file and store data in an array of **State** objects.

Step 2: Use the Array of Objects (10 points)

- Display all of the state names and capitals in a nicely formatted manner using the array of **State** objects (and not directly from the file). This shows me you can use the array and the **State** class.

STATE NAME	CAPITAL NAME
Alabama	Montgomery
Alaska	Juneau
Arizona	Phoenix
...etc.	

- Below the list of states, create the following statistical data.

```
Number of states who have Cardinal as their state bird:           XX
Number of states who have some type of violet as their state flower: XX
```

- NOTE: For the flower, remember violet may be contained in the name (for example: Native Violet, Purple Violet, etc.)

Comments

In a real-world setting this could be done using file processing without any arrays at all. Remember – This exercise was designed for me to assess your manipulation of arrays. Please complete the steps above as indicated. This may mean separate loops for each section. In a real-world, we would not want this duplication of code, however, for this assignment I am interested in seeing you (1) load an array and (2) use an array to calculate results.

Zip your .java file, the State class, and the States.txt file together and submit in Blackboard for grading.