Homework Packet – Data Type Classes

Students will refer to this document throughout the week as nightly homework will require completely a few items at a time.

To Get Started:

- Create a new Github repository by clicking create under the Github section in the Team Explorer.
- Add a new solution to the repository by clicking the "New" button under the solutions section of the Team Explorer (appears after you create the repository).
- Click to expand "Other Project Types" down the left-hand side of the pop-up and then click on "Visual Studio Solutions". Select "Blank Solution" as the project type.
- Name the solution CSF2Homework and uncheck the box for "Create directory for solution" then click Ok.
- Open the Solution Explorer, right click on the Solution and select Add > New Project.
- Select Console App (.NET Framework) as the project type and make sure the location for the project is the CSF2Homework solution folder. Name the project TesterProgram and click Ok.
- Open the Solution Explorer, right click on the Solution and select Add > New Project.
- Select Class Library (.NET Framework) as the project type and make sure the location for the project is the CSF2Homework solution folder. Name the project ClassesLibrary and click Ok.
- Click on the changes tab in Team Explorer. Write "Initial Commit" for your commit message and click Commit All. Then push the master branch to the remote repo.
- Create a new branch for each problem below. In that branch, add a class in the ClassesLibrary project that represents the real-world object indicated in the problem. Make sure to include all fields, properties, two constructors (default and fully qualified), and a ToString() for each class. Then test the class you created in the TesterProgram project by creating objects using both constructors and writing them to the screen.
- Merge each completed branch back into the Master branch and push master to the remote repo.

LAB SETS	
1. Student	firstName – string lastName – string

	id – string gpa – float
2. Vehicle	make – string model – string year – int weight – float
3. Login	username – string password – string
4. ContactInfo	streetAddress – string city – string state – string zip – string phone – string email – string
5. Customer	customerId – string firstName – string lastName – string contactInformation – ContactInfo
6. CreditCardAccount	accountNumber – int customerInfo – Customer balance – decimal isPastDue – bool annualInterestRate – decimal
7. Book	title – string author – string numberOfPages – int
8. Library	books – List<Book> libraryName – string streetAddress – string city – string state – string zip – string
9. Song	artist – string title – string lengthInSeconds – int
10. Artist	tracks – Song[] title – string genre – string
11. MotorHome – extend Vehicle	numberOfBeds – int
12. Truck – extend Vehicle	loadCapacityLbs – float