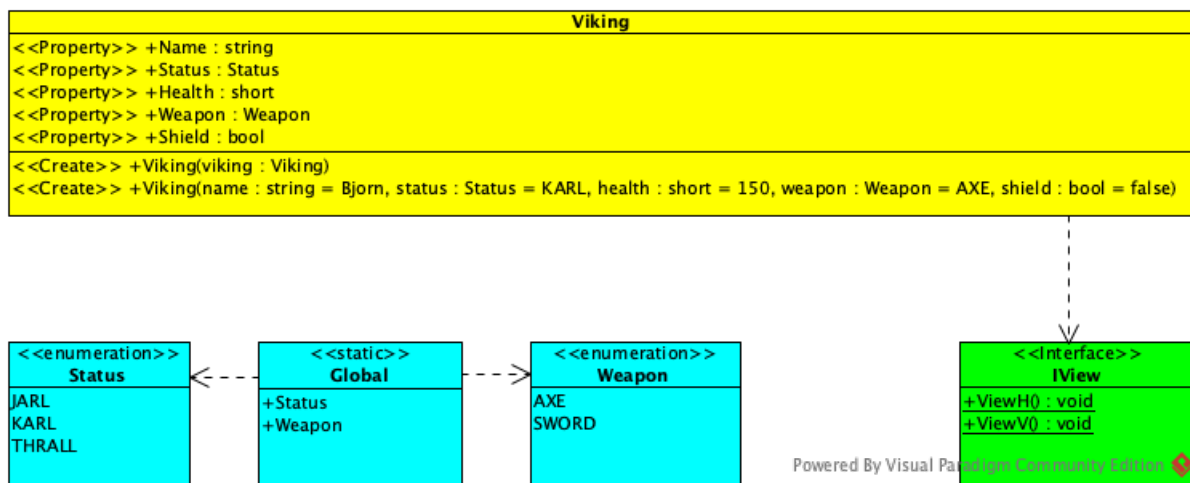


CSc 346
Assignment #2
Gamradt
Due: 02-26-24 (Late: 03-04-24)

Use Visual Studio Code to create a user-defined Abstract Data Type (ADT) using C# classes named **Viking** and **Global** along with an interface named **IView** and an appropriate set of C# files as discussed in class

- Create a new solution and project – Console Application – Target Framework .NET 8.0 LTS
 - You will need to download and install the .NET 8.0 LTS SDK
- The **Viking** class describes the current state of an individual **Viking** class instance
- The **Global** class describes global data type information use by other solution/project components
- The **IView** is an interface that the **Viking** class must implement – satisfy the contract
- The **Viking**, **Global**, and **IView** are part of the **VikingNS** namespace
 - They define the namespace – They do not use it



The **Viking/Global/IView** ADT must define and implement the following data types and operations.

- Do not add to or modify the public interface (exportable components – public components).
- Do not add to or modify any attributes or data types (storage components).

Viking class Exportable Operations:

Viking default/overloaded/parameterized constructor

- One constructor handles all properties
 - Uses default argument values

// See UML diagram

Viking copy constructor – creates an exact copy of an existing **Viking** class instance

Global static class User-Defined Data Types:

Status JARL, KARL, THRALL

Weapon AXE, SWORD

IView interface Undefine Methods:

ViewH display instance properties using a horizontal arrangement // No Default Implementation
ViewV display instance properties using a vertical arrangement // No Default Implementation

ViewH <required format>

Name	Status	Health	Weapon	Shield
Bjorn	Karl	150	Axe	False

// default argument values used

ViewV <required format>

Name:	Ragnar
Race:	Jarl
Health:	250
Weapon:	Sword
Shield:	True

// overridden argument values used

Make sure that you completely document all files

- See **Documentation Requirements** – D2L Handouts Folder

The **Viking/Global/IView** ADT exists entirely within the **VikingNS** namespace

I will write a test program that will replace your Program.cs file. That means, that you **MUST** use:

- the **EXACT** same names for each component in each file
- the **EXACT** same method argument sequence in each file

Solution/Project Name:	LastName2	// I would use Gamradt2
• LastName2		// Solution folder – submit ALL
○ LastName2.sln		// Solution file
○ .gitignore		// Version control
○ LastName2		// Project folder
▪ LastName2.proj		// Project file
▪ Viking.cs	Viking class implementation file	
▪ IView.cs	IView class implementation file	
▪ Global.cs	Global class implementation file	
▪ Program.cs	driver program file – main method	// I will replace yours

Push your assignment solution to your GitHub account, then send me a shared link to the assignment repository

- E.g., CSc346 // CSc346
 - Remember that a 20% reduction is applied for not using GitHub
 - See **Assignment Requirements** – D2L Handouts Folder

List the class number, your lastname, and assignment number as the e-mail message subject:

SUBJECT: csc346 – LastName – a2 // I would use “... Gamradt ...”

Note:

- Make sure to include an appropriate .gitignore dotnet component to the solution