ETERNAL QUEST PROGRAM: DESIGN

Program FileHandler No attributes No attributes -static Main(string[] args):void +public Save(): void +public Load(): void Goal -private bool _isCompleted -private string _name -private string _description -private int _points -private int _totalPoints -private int _type -private List<Goal> _goals +public Goal(string name, string description, int points, bool isCompleted) [I will use getters and setters for all member variables instead of protected.] +public CreateNewGoal(): void +public RefreshPoints(int points): void +public DisplayGoals(): void +public RecordEvent(): void +public abstract SetIsCompleted: void +public abstract DisplayGoal(int option): void +public abstract GetStringRep(): string

SimpleGoal

No attributes

+public SimpleGoal(string name, string description, int points, bool IsCompleted): base (name, description, points, isCompleted)

+public override SetIsCompleted(): void+public override DisplayGoal(int option): void+public override GetStringRepresentation():string

EthernalGoal

No attributes

+public EternalGoal(string name, string description, int points,): base (name,description,points,false)

+public override SetIsCompleted(): void+public override DisplayGoal(int option): void+public override GetStringRepresentation(): string

CheckListGoal

-private int _bonusPoints-private int _timeForBonus;-private int _timesDone

+public CheckListGoal(string name, string dscription, int points, int bonusPoints, int timeForBonus, int timesDone, bool isCompleted): base (name, dscription, points, isCompleted)

+public override SetIsCompleted(): void
+public override DisplayGoal(int option): void
+public override GetStringRepresentation():
string

DESCRIPTION

The user menu and user interactions will be handled by the Program class. The file loading and saving will be handled by the FileHandler class. The Goal class will serve as the super class and manage the properties shared by all other classes.

Each class has its own set of attributes and methods. Once the desired derived class is used, those attributes and methods will be utilized. For instance, if the user chooses the SimpleGoal, everything from the Goal class as well as the methods and attributes of the class itself will be inherited.