ETERNAL QUEST PROGRAM DESIGN SPECIFICATION

FileHandler

No attributes

+public Save(): void

+public Load(): void

Goal

-private bool_isCompleted -private string_name -private string_description -priate int_points -private int_totalPoints -private int_type -private ListKGoal>_goals

+public Goal(string name, string description, int point, bool isCompleted)
(getters and setters will be used instead of protected)
+public CreatedNewGoal(): void
+public RefreshPoints(int points): void
+public DisplayGoals(): void
+public RecordEvent(): void
+public abstract setIsCompleted: void
+public abstract DislayGoal(int option): void
+public abstract GetStringRep(): string

SimpleGoal

No attribute

+public SimpleGoal(string name, string description, int points, boolisCompleted): base(name, description, point, isCompleted)

+public override SetInCompleted: void +public ovorride DisplayGoal(intoption): void

+public override GetStringRepresentation: voic +public override GetStringRepresentation(): string

EternalGoal

No attribute

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

+public override SetIsCompleted();

+public override DisplayGoal(int option); void +public override GetStringRepresentation(); -private int_bonusPoints

-private int_timeForBonus -private int_timesDone

 +public CheckList(string name, string description, int bonusPoints, int timeForBonus, int timeDone, bool Iscompleted)

CheckListGoa

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

Program 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