Week 9 team Meeting

## Class Diagram:

[PlantUML Link](https://www.plantuml.com/plantuml/png/tPLHY-8m4CVV-odog6Y_W8W8dXm7fyZryJYEiPshuTAa9DCAw_hTjscDcyQju3uj-lYRVoR_-JkXIqEWgIf45AK2Z64xhN8D1Jj5hFd5x6-kG9WP-yaDpRyh40jN84KWTefBQifSKiidR0DSZa3d3JIakSn__ndFMAruTX4a1tNSeAn6VRpI28HRFDfBWjelJ9NErZLA2YhMbZrW0fv0ZHt_nmLAA736ajPES5v1TbztZYBO6zAG4kiYilhtVEmPDwfZ6PfKyvAuac6fz09hsSbrFpTssjdzZbCMzcgXrsKSTWdZig9RpG-pKaKfaD1Azag93zmW9GHKjU6wCK9HWfg3u2zuJ_GDpLMM0S7jRfpT0YRSskfdpAzcBrRTl-oqdmjjCAd1U8Op6GxYeUdNX5g2yCQVEFPCOwuEcFuNt53_VowroZMQpho313f7wg6zafNPXIzfuhTzEAifyowQCdV5buzoYpaGhz5V6Hy-mSwqeyrVuzXxy1xqteT7_LtmkHzD5BdFNHmlM4UMA3FxFNm3)

A diagram of a computer

Description automatically generated with medium confidence

## Program Specifications:

* What does the Program do?
  + The program allows the user to set goals and earn points when they accomplish those goals. They can also save and load.
* What User inputs does the program have?
  + The user can input a goal
  + How many times they want to do it, or for how long.
  + Input how many points they will earn per goal.
  + Navigate the menu
  + Inputting a file name
* What outputs does the Program produce?
  + Display the menu
  + Display questions about the goals
  + DIsplay a list of the goals
  + Display saved goals
* How does the program end?
  + When you user inputs “Quit” into the menu

## Determine The Classes

* Goals
  + Provide the basic structure for each goal
* SimpleGoal
  + Simply mark it as complete and earn points for it
* EternalGoal
  + Never marked as complete, but still earn points each time you do it. Ongoing goal.
* ChecklistGoal
  + A goal that you accomplish x amount of times before it is marked as complete.
* Program
  + Set what the goals are
  + Set the amount of points per goal
  + Display the user’s score
  + Record accomplished goals
  + Show a list of the goals
  + Save and load the goals

## Define the Class Behaviors

* Goals
  + SetGoal()
  + SaveGoal()
  + LoadGoal()
  + ListGoals()
  + IsComplete()
  + RecordEvent()
* SimpleGoal
  + SetGoal()
  + IsComplete()
  + RecordEvent()
* EternalGoal
  + SetGoal()
  + IsComplete()
  + RecordEvent()
* ChecklistGoal
  + SetGoal()
  + IsComplete()
  + RecordEvent()

## Define Class Attributes

* Goals
  + \_goals : List<string>
  + \_points : int
  + \_name : string
  + \_description : string
* SimpleGoal
  + \_isComplete : bool
* EternalGoal
* ChecklistGoal
  + \_progress : int
  + \_isComplete: bool
  + \_bonusPoints : int

## Define Constructors

* Goals
  + Goal(String name, String description, Int points)
* SimpleGoal
  + SimpleGoal(String name, String description, Int points, Bool isComplete)
* EternalGoal
  + EternalGoal(String name, String description, Int points)
* ChecklistGoal
  + ChecklistGoal(String name, String description, Int points, Int progress)
  + ChecklistGoal(String name, String description, Int points, Bool isComplete)

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