**ETERNAL QUEST PROGRAM DESIGN**

1. What does the program do?

The program helps a user to set and keep track of different kinds of goals and as well record their progress on those goals. The program motivates the user to keep working on goals through a reward (in the form of points or whatever) system.

1. What user inputs does it have?

* Action (1-6)
* Type of goal to create (option number)
* Filename for saving goals file
* Record of completion of events/goals
* Reward points/bonus points for progress on or completion of goals

1. What outputs does it produce?

* Menu
* Types/list of goals and info on goals

1. How does the program end?

- User enters ‘6’ to quit the program.

**Classes**

Goal

Responsibilities:

* Keeps track of the goal name
* Keeps track of the description
* Keeps track of completion status
* Keeps track of base point/reward

Behaviours:

* Record event
* Get Completion status
* **SimpleGoal**

Responsibilities:

* Keeps track of the completion date

Behaviours:

* Record event
* Get Completion status
* **EternalGoal**

Responsibilities:

* Keeps track of the last recorded date and time
* Keep track of the number of times accomplished so far
* Keeps track of bonus points/reward for specified number of completions
* Keeps track of accomplishment streaks

Behaviours:

* Record event
* Get the number of times accomplished
* **ChecklistGoal**

Responsibilities:

* Keeps track of the number of times to be accomplished
* Keeps track of bonus points/reward
* Keeps track of completion status

Behaviours:

* Record event
* Get Completion status
* **GoalTracker**

Responsibilities:

* Keeps track list of goals created
* Keeps track of total score of the user

Behaviours:

* Add goal to list of created goals
* Display goals
* Get total score
* Save goals
* Load goals
* **Menu**

Responsibilities:

* Keeps track menu options/items

Behaviours:

* Display menu

