**Program Design Planning**

For this program, as part of applying encapsulation, we declared our attributes variables as private, and divided the program into three major classes Puzzle, Director and Terminal. Each class will have individual methods that performs specific actions in the overall game. Below is a diagram showing how our program will be designed. We assigned each member of the team a specific class to build, we would review or codes via our commits and through communications in Slack.

**Class: Puzzle**

**-\_**words: list

-\_puzzle\_word: random word from words

**Object: print\_puzzle\_word:**

**Responsibility:**

-To create the puzzle/random word

**Behavior:**

-print the puzzle/random word

**State:**

-print\_puzzle\_word

**Class: Director**

**-\_**guess: string

-\_is\_guess= boolean

-compare\_guess(): none

**Object: Director:**

**Responsibility:**

-To direct the game

**Behavior:**

-get\_puzzle\_word

--get user’s guess

-evaluate if guess is in puzzle word

-draw\_parachute

**State:**

-print\_puzzle\_word

**-**guess

**-**is\_guess

-print\_parachute

**Class: Parachute**

**-\_**parachute: string

-update\_parachute none

**Object: Parachute**

**Responsibility:**

-To display the parachute to the terminal

-If the users guess is wrong the parachute gets broken one character at a time

**Behavior:**

--A jump parachute

**State:**

**-**string