T1A3

Terminal Application

- Yun Li

1

Application IDEA

First of all, I want to make a game for this assessment.

Because of the limitation of the terminal. Text-based game is one of the choices.

D&D board game especially the dice system make everything uncertain and dramatic. So I use the dice system in this application.

The monster's abilities increase with the round to promote the challenge of the game. The Hall of Fame is used to stimulate users to repeat the challenge of the game.

Store and currency make sure the character's abilities grow.

2

TINY HERO

Text-based game.

Fight with monsters.

Could save and load.

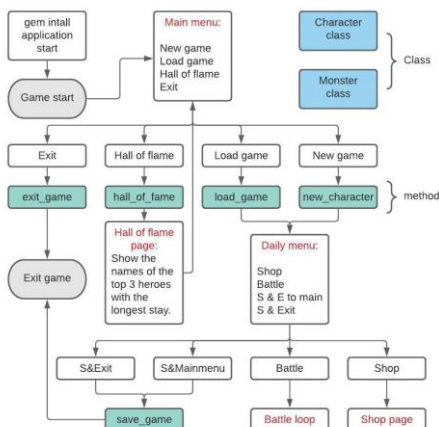With uncertain dice system.

> New character's ability.

> Shop selling random items.

> Uncertain attack damage, missing , half , normal and crit damage.

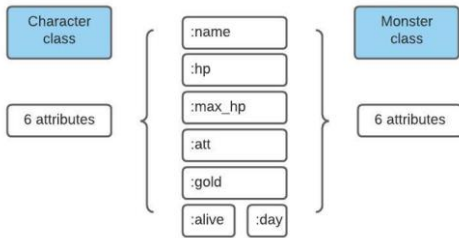Have basic visual performance, by use 'artii' and 'box'

3

Overview

4

Classes


```
Character
class

6 attributes
```

```
:name
:hp
:max_hp
:att
:gold
:alive    :day
```

```
Monster
class

6 attributes
```

```ruby
class Monster
  attr_accessor :name, :att, :hp, :max_hp, :gold, :day

  def initialize(day)
    @day = day.to_i
    case @day
      # Random monster name and att base on the day
    when 1..5
      @name = ["Slima", "Goblin", "Spirit", "Fly"].sample
      @att = roll_dice(25, 30) + @day
      @max_hp = roll_dice(70,100) + @day * 10
      @hp = @max_hp
      @gold = roll_dice(20,50)
    when 6..10
      @name = ["Goblin", "Spirit", "Skeletor", "Troll", "Vampire", "Zombie", "Ghoul"].sample
      @att = roll_dice(30,35) + (@day - 5) * 2
      @max_hp = roll_dice(130,150) + (@day - 5) * 15
      @hp = @max_hp
      @gold = roll_dice(30,60)
    else
      @name =["Werewolf", "Yeti", "Godzilla", "Troll", "Vampire", "Zombie", "Ghoul"].sample
      @att = roll_dice(40,45) + (@day - 10) * 3
      @max_hp = roll_dice(205,225) + (@day - 10) * 20
      @hp = @max_hp
      @gold = roll_dice(40,70)
    end
  end
end
```
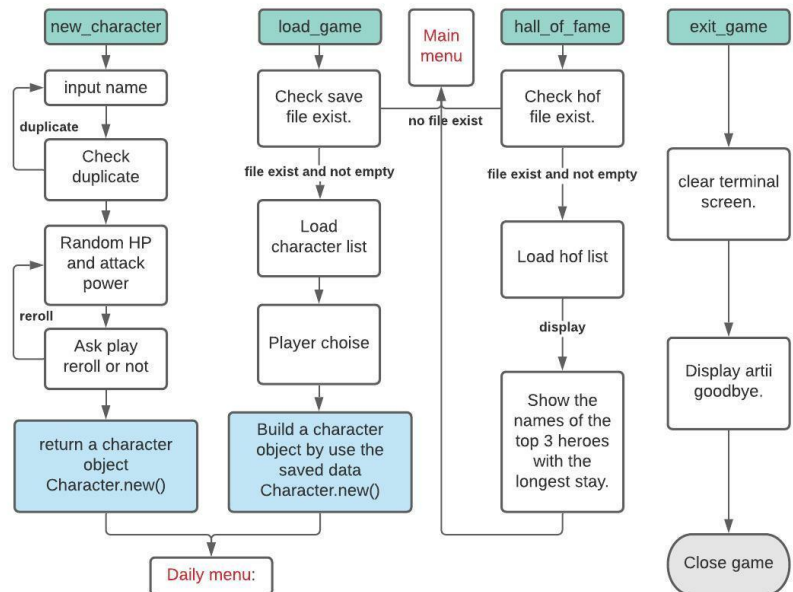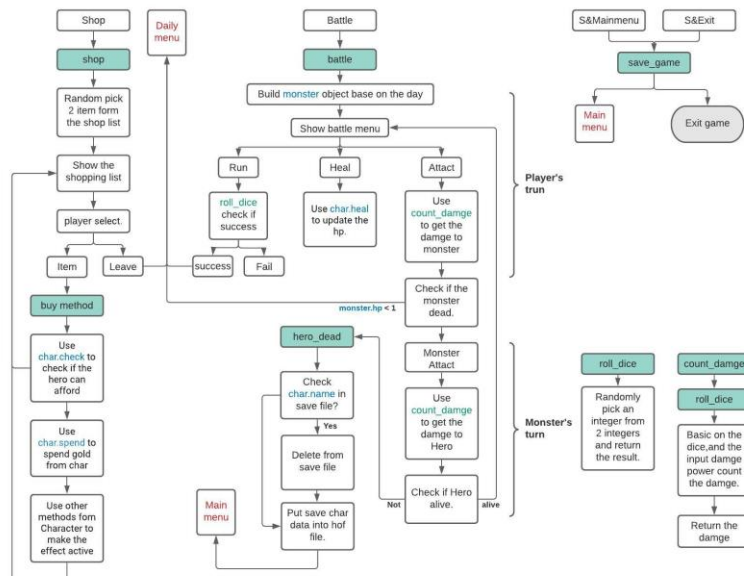
```ruby
class Character
  attr_accessor :name, :att, :hp, :max_hp, :gold, :alive

  def initialize(name, hp, max_hp, att, gold, alive)
    @name = name
    @hp = hp
    @max_hp = max_hp
    @att = att
    @gold = gold
    @alive = alive
  end
end
```

5

MAIN MENU

- New game
- Load game
- Hall of fame
- Exit


```
new_character
  ↓
input name  ← duplicate
  ↓
Check
duplicate
  ↓
Random HP
and attack  ← reroll
power
  ↓
Ask play
reroll or not
  ↓
return a character
object
Character.new()
  ↓
Daily menu:
```

```
load_game
  ↓
Check save
file exist.
  ↓ file exist and not empty
Load
character list
  ↓
Player choise
  ↓
Build a character
object by use the
saved data
Character.new()
  ↓
Daily menu:
```

```
Main
menu
← no file exist
```

```
hall_of_fame
  ↓
Check hof
file exist.
  ↓ file exist and not empty
Load hof list
  ↓ display
Show the
names of the
top 3 heroes
with the
longest stay.
```

```
exit_game
  ↓
clear terminal
screen.
  ↓
Display artii
goodbye.
  ↓
Close game
```

6

3
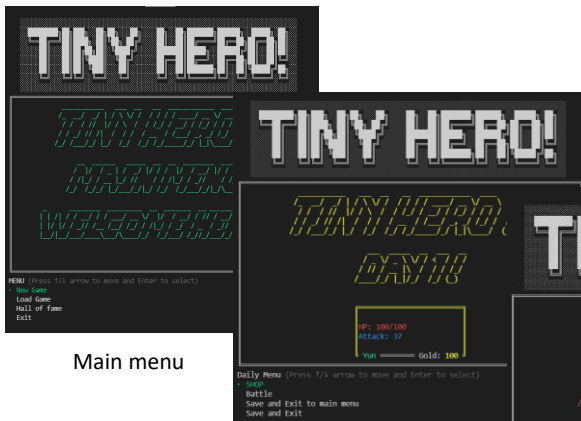
DAILY MENU

- SHOP
- Battle
- Save and Exit to main menu
- Save and exit

7

DISPLAY

Split the terminal screen into two parts.
Top part for display.
Bottom part for select and enter.

Main menu

Daily menu

Battle page

Exit page

8

4

GEM USE

- 'artii' gem for the artistic font.

- 'tty-prompt' gem for data enter and selection.

- 'tty-box' gem for the display box on the screen.

- 'colorize' gem for colour the text.

- 'json' gem for the data save and load.

9

THANK YOU!

10