



Mark Boyle Terminal App



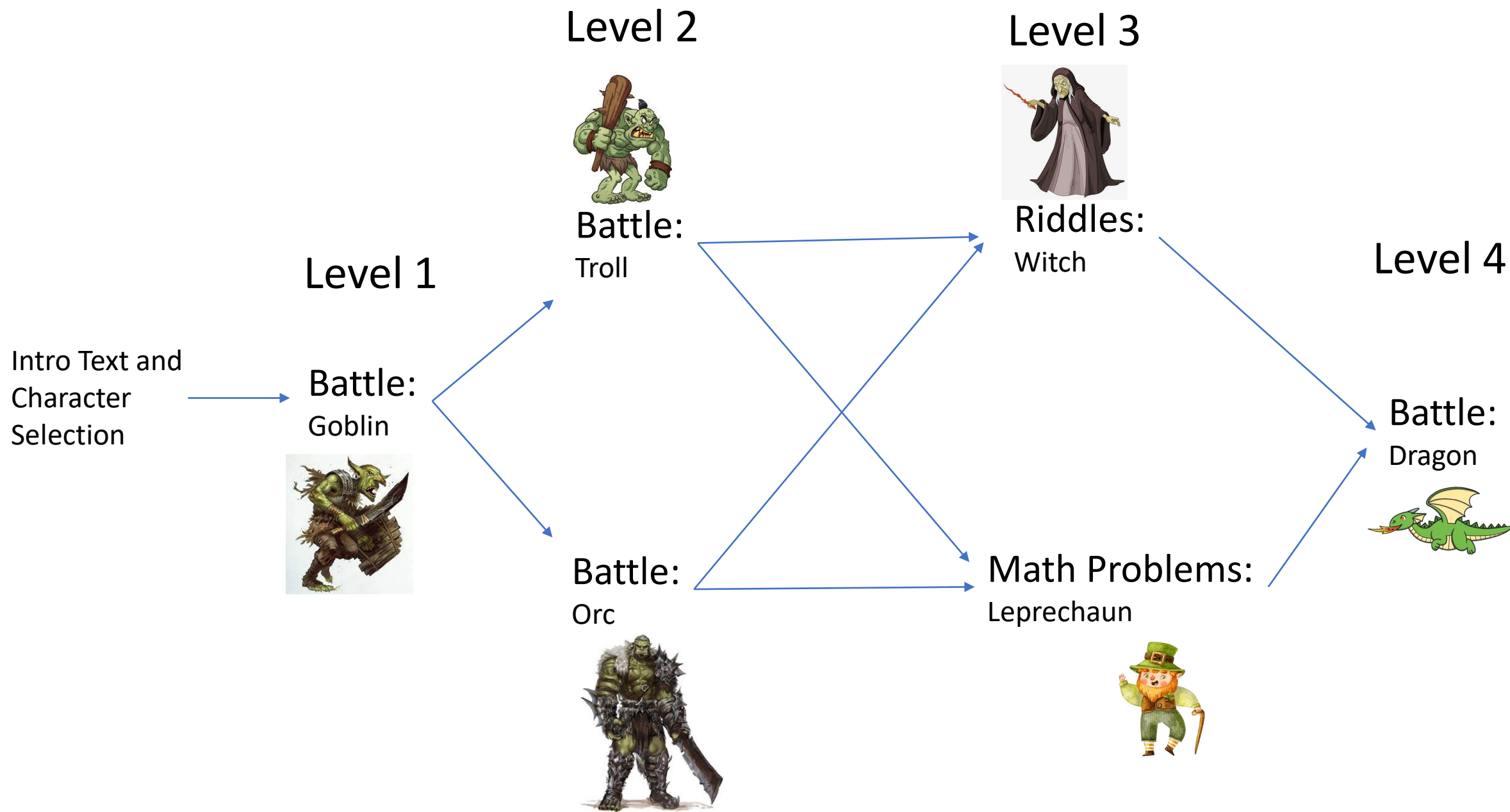
Lands of Aralia



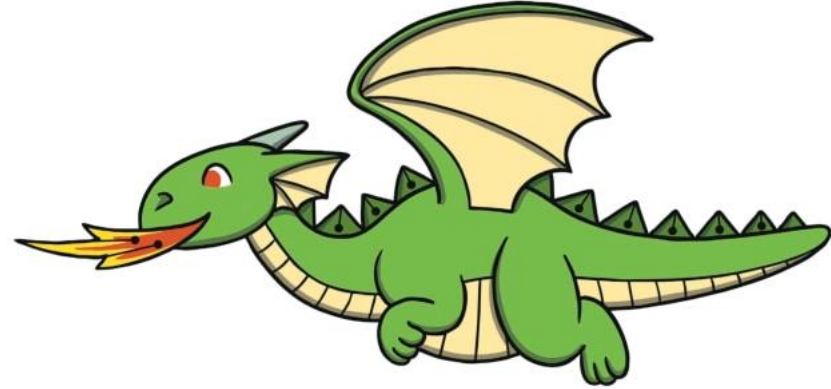
Game



- Inspired by 'Choose your own adventure' and 'Dungeons and Dragons'
- They go on a quest for the Legendary Ruby Gemstone.
- On the quest they have to battle enemies and solve riddles and math problems.



How it works



- A Character class
- An Enemy class
- An object is created for each class with default values
- The user makes a name for the character and chooses the character type (Elf, Dwarf or Warrior)
- When they make the selection, a method is called to update the stats of the character.

Character Selection



```
def select_character(prompt)
  puts ' '
  prompt.select('Please Select Your Character Type:') do |menu|
    menu.choice 'Elf'
    menu.choice 'Dwarf'
    menu.choice 'Warrior'
  end
end
```

```
character_confirmation = 'No'

while character_confirmation == 'No'
  system 'clear'
  character_choice = select_character(prompt)
  case character_choice
  when 'Elf'
    character.update_elf_stats
  when 'Dwarf'
    character.update_dwarf_stats
  when 'Warrior'
    character.update_warrior_stats
  end
  character.display_character_info
  puts ' '
  character_confirmation = prompt.select('Are you happy with this choice?') do |menu|
    menu.choice "Yes"
    menu.choice "No"
  end
end
```

```
def update_elf_stats
  @character_type = 'Elf'
  @sword_skill = 2
  @archery_skill = 5
  @armour_rating = 2
end

def update_dwarf_stats
  @character_type = 'Dwarf'
  @sword_skill = 4
  @archery_skill = 1
  @armour_rating = 4
end
```

- Variables are set at the start

- Level = 1

- Path = 1

- Lives = 3



- This determines which battle/riddle scene loop to go into.
- These variables are updated after each battle or pathway choice.
- Once in the right loop a method is called to update the enemy information.

Battle Scene

```
while level == 2 && lives > 0 && path == 1
  display_troll_intro
  enemy.update_troll_stats
  character.restore_health(level)

  while enemy::enemy health > 0 && character::character health > 0
    input = prompt.select("Choose your action:") do |menu|
      menu.choice "Use Sword"
      menu.choice "Shoot Arrow"
      menu.choice "Search Area"
      if level > 1 then menu.choice "Throw Spear" end
      if level > 2 then menu.choice "Swing Battleaxe" end
    end
    system 'clear'
    puts ' '
    case input
    when "Use Sword"
      enemy::enemy_health = character_attack(enemy::enemy_health, character.generate_sword_damage)
      puts ' '
    when "Shoot Arrow"
      enemy::enemy_health = character_attack(enemy::enemy_health, character.generate_archery_damage)
      puts ' '
    when "Throw Spear"
      enemy::enemy_health = character_attack(enemy::enemy_health, character.generate_spear_damage)
      puts ' '
    when "Swing Battleaxe"
      enemy::enemy_health = character_attack(enemy::enemy_health, character.generate_battleaxe_damage)
      puts ' '
    when "Search Area"
      character.search_area
    end
  end
end
```


If the user decides to attack

```
def generate_sword_damage
  attack_damage = rand(30) + (@sword_skill * 3)
  attack_damage
end

def generate_archery_damage
  attack_damage = rand(30) + (@archery_skill * 3)
  attack_damage
end

def generate_spear_damage
  attack_damage = rand(10..40)
  attack_damage
end

def generate_battleaxe_damage
  attack_damage = rand(15..45)
  attack_damage
end
```



If the user decides to search area

```
def search_area
  search_number = rand(100)
  case search_number
  when (1..10)
    find_extreme_health_potion
  when (11..60)
    find_health_potion
  when (61..85)
    find_improved_armour
  when (86..100)
    puts "Sorry, you didn't find anything."
  end
end

def find_extreme_health_potion
  puts "You found an Extreme Health Potion! Your health goes up by 50."
  @character_health += 50
  puts "Your health is now at #{@character_health}."
  puts ' '
end

def find_health_potion
  puts "You found a Health Potion! Your health goes up by 25."
  @character_health += 25
  puts "Your health is now at #{@character_health}."
  puts ' '
end

def find_improved_armour
  puts "You found some better armour! Your armour rating goes up by 5."
```

Riddle Scene

```
while level == 3 && lives > 0 && path == 1
  system 'clear'
  display_witch_intro
  incorrect_answers = 0
  correct_answers = 0
  riddle_number = [1, 2, 3, 4, 5, 6]
  while incorrect_answers < 3 && correct_answers < 3
    puts ' '
    puts "Next Riddle:\n\n" unless incorrect_answers == 0 && correct_answers == 0

    riddle_selection = riddle_number.sample
    riddle_number.delete(riddle_selection)
    case riddle_selection
    when 1
      puts "What has legs but can't walk?"
      answer = gets.chomp.downcase.split
      puts answer
      puts ' '
      if answer.include?('chair')
        puts 'Correct!'
        correct_answers += 1
      elsif answer.include?('table')
        puts 'Correct!'
        correct_answers += 1
      else
        puts 'Incorrect!'
        incorrect_answers += 1
      end
    end
  end
end
```



User Engagement



- Can choose multiple pathways
- Randomly generated numbers means the game is always different
- Character selection and action selection add a level of strategy
- Choose name of character
- Earning new weapons encouraging user to play to the end

Features



- Combat Style
- Level Up (new weapons become available)
- Limited Lives
- Multiple Pathways
- Character Selection (Different character have different stats)

Challenges

- Keeping code DRY and efficient
- Using numbers that made the game fun to play



Favourite Parts



- Working out the right numbers to use
- Creating story content.



Gems Used

- Tty-prompt
- Artii
- Colorize



Tips/Strategies

- Collect armour early on against the goblin because it'll improve the chances of beating the dragon at the end.

