Text-Based RPG UML Table

<<Interface>>
Character

+ name: String
+ health: int
+ attackMultiplier: double
+ potionMultiplier: double
+ luck: int

+ attack(): void
+ useItem(Item, item): void
+ solvePuzzle(Puzzle puzzle): boolean
- initializeInventory(): void

Warrior

Inherits Character

+ attack(): void
+ useItem(Item, item): void
+ solvePuzzle(Puzzle puzzle): boolean

Rogue

Inherits Character

+ attack(): void
+ useItem(Item, item): void
+ solvePuzzle(Puzzle puzzle): boolean

Mage

Inherits Character

+ attack(): void
+ useItem(Item, item): void
+ solvePuzzle(Puzzle puzzle): boolean

Item

- itemName: String
- effect: String

+ use(Character): void

Potion

Inherits Item

- healthBoost: int
- attackBoost: int
- luckBoost: int

+ use(Character): void

<<Interface>>
Puzzle

+ start(): void
+ solve(): boolean

Timed Anagram Puzzle

Inherits Puzzle

- originalWord: String
- scrambledWord: String
- timeLimitInSeconds: Int

+ solve(): boolean
+ shuffle(String originalWord): string

Encounter

- type: String
- difficulty: int

+ initiate(): void
+ resolve(): boolean

Dice Utility

+ rollDice(): int

Game Engine

- currentPlayer: Character
- currentEncounter: Encounter

+ startGame(): void
+ endGame(): void
+ nextEncounter(): void

Enemy

- name: String
- health: int
- attackMultiplier: double

+ recieveDamage(): void
+ attack(): int

Timer

- wait(): int