#### Character

- # int health
- # int damage
- # int strength
- # int defense
- # int speed
- # int level
- # int coins
- # int maxHealth
- # String attackState
- # String name
- # String type
- # String test
- # String attackMiss
- ~ String[] classTypes
- # String[] attackTypes
- # double attackRating
- + Character(String)
- + Character(int, int, double, int, String, int)
- + int getName()
- + int getHealth()
- + int getMaxHealth()
- + int getCoins()
- + int getDefense()
- + int getLevel()
- + int getSpeed()
- + double getAttackRating()
- + int getStrength()
- + String getType()
- + void setName(String)
- + String getAttackState()
- + void getAttackType()
- + String toString
- + void setAttackType(String)
- + void lowerHP(int)
- + void lowerHP(int, String)
- + boolean isAlive()
- + void calcNewDamage(Character, Character)

- + void giveCoins(int)
- + void increaseLevel(int, int)
- + void resetHealth()
- + void attack(Character)

#### Protagonist extends Character

- ~ int[] artifacts
- + Protagonist()
- + Protagonist(String)
- + Protagonist(int, int, double, int, String, int)
- + void update(int)
- + void artifactChange(int)

#### Monster extends Character

- + Monster()
- + Monster(String)
- + String getType()
- + void lowerHP(int)
- + void lowerHP(String, int)
- + int attack(Character)

# Classes Wizard, Tank, Archer, Swordsman extends Protagonist

- + constr()
- + constr(String)
- + constr(int, int, double, int, String, int)
- + String about()
- + int attack(Character)

# Classes Bandit, Ogre extends Monster + constr() + constr(String) + String getType()

# + String about()+ int attack(Character)

## Worg extends Monster

- + constr()
- + constr(String)
- + String getType()
- + void lowerHP(int, String)
- + String about()
- + int attack(Character)

# Classes Guard, Boss extends Monster

- + constr()
- + String getType()
- + int attack(Character)

# Classes Arcane, Necromancer extends Wizard

- + constr()
- + constr(String)
- + constr(int, int, double, int, String, int)
- + String about()
- + int attack(Character)

#### Classes Barbarian, Paladin extends Swordsman

- + constr()
- + constr(String)
- + constr(int, int, double, int, String, int)
- + String about()
- + int attack(Character)

#### Classes Fortress, Tonk extends Tank

- + constr()
- + constr(String)
- + constr(int, int, double, int, String, int)
- + String about()
- + int attack(Character)

# Classes Gunner, Sniper extends Archer

- + constr()
- + constr(String)
- + constr(int, int, double, int, String, int)
- + String about()
- + int attack(Character)

#### Nerd

- + Nerd()
- + String getType()
- + int attack(Character)

## Dialogue

- + void dealDamage()
- + void bothDie()
- + void beastDies()
- + void listOptions()

#### Shop

- ~ InputStreamReader isr
- ~ BufferedReader in
- ~ String f
- String[] artifacts
- ~ int[] price
- ~ int[] boost
- ~ boolean[] bought
- + int find(String)
- + void buyItem(String, Protagonist)
- + void purchase(Protagonist)
- + void listOptions(Protagonist)

#### **Constants**

#### BColor

- String ANSI\_CODE
- BColor(String)
- + String toString()

#### FColor

- String ANSI\_CODE
- FColor(String)
- + String toString()

#### Floor

- String filename
- Object[][] entities
- Floor(String, Object[][])
- + String getFilename()
- + Object[][] getEntities()

#### Tile

- BColor backgroundColor
- FColor textColor
- char display
- char key
- Tile(BColor, FColor, char, char)
- Tile()
- + char getKey()
- + BColor getBackground()
- + Tile keyToTile(char)
- + String toString

# **Map Entities**

#### Location

- + int row
- + int col
- + Location(int, int)
- + Boolean equals(Location)

#### TileMap

- + Tile[][] map
- + ArrayList<MapEntity> entities
- + TileMap()
- + boolean load(String)
- + void load(ArrayList<MapEntity>)
- + void add(MapEntity)
- + void remove(MapEntity)
- + boolean inBounds(int, int)
- + MapEntity entityOn(int, int)
- + Tile getTile()
- + void clearScreen()
- + void render()
- + void render(boolean)

# MapEntity

- ~ TileMap map
- ~ Location location
- ~ FColor color
- ~ char display
- + MapEntity(TileMap, Location, FColor, char)
- + Location getLocation()
- + String render()

# Enemy extends MapEntity

- Monster content
- + Enemy(TileMap, Location, FColor, char)
- + String render()

## Player extends MapEntity

- + Player(TileMap, Location)
- + void move(Location)
- + void move(int, int)

# ShopOwner extends MapEntity

- Shop content
- + ShopOwner(TileMap, Location)
- + String render()

# **Everything Else**

#### ClipControl implements Runnable

- ~ File path
- ~ Sequence sequence
- ~ Sequencer sequencer
- + ClipControl()
- + void setSong(int)
- + void load()
- + void run()

# InputThing

- ~ Scanner scanner
- String receiveInput()

#### Battle implements InputThing

- ~ enum Monsters
- + void load()
- + void perform(Protagonist)
- + void main(String[])

# ClassPrestiges implements InputThing

- ~ enum basicClasses
- ~ String[] basicClasses
- ~ String classPick
- String name
- + ClassPrestiges()
- + pickAClass(Driver)

#### Menu

- boolean sound
- boolean startGame
- String display
- LEVEL level
- String input
- + Menu()
- + void loadMenu()
- + void loadSettings()
- + void loadInstructions()
- + void update()
- + void load()

#### Screen

- + int MAX WIDTH NORMAL
- + int MAX\_HEIGHT\_NORMAL

#### MenuDialogue

- + String MENU\_OPTION\_ONE
- + String MENU\_OPTION\_TWO
- + String MENU\_OPTION\_THREE
- + String SETTINGS\_ONE
- + String SETTINGS\_TWO
- + String INSTRUCTIONS

#### Driver

- ~ Protagonist protag
- + TileMap loadMap(Floor)
- + void check(Player, TileMap, Thread)
- + void main(String[])