David Summerfield & Cameron Daughety

**API Document –**

This program is a simple dungeon crawler app. The games uses a system of underscores with a C above them to show where in the dungeon your character is at the end of any given turn.

Being Class –

Class designed to make the characters and monsters in the game. This class makes the stats for each type of Being whether they are a hero or a monster.

* Constructors:
  + Being(int hp, int atk, int initiative)
  + Being() - basic constructor
* Accessors:
  + getHP() – returns the HP
  + getAtk() – returns the atk
  + getInitiative() – returns the Initiative
* Mutators:
  + setHP(int dmg) – sets the new value for health
* toString() – Returns the stats in String format

Dungeon Class –

Class designed to make the dungeon and double as our server. It will send output and receive input from the Dungeon class. The program uses the being class to instantiate the hero and monsters.

* Fields
  + int count – player location
  + int mcount – location for monster 1
  + int mcount2 – location of monster 2
* Methods
  + buildDungeon() – method is the brains behind the dungeon working out of a while loop based on the count field. This method sends all of its data to udpClient()
  + String dngTextRoomRoof() – returns the roof string
  + String characterRoomOne() – returns string for character in room 1
  + String characterRoomTwo() – returns string for character in room 2
  + String characterRoomThree() – returns string for character in room 3
  + String characterRoomFour() – returns string for character in room 4
  + String characterRoomFive() – returns string for character in room 5
  + String characterRoomSix() – returns string for character in room 6
  + String characterRoomSeven() – returns string for character in room 7
  + String characterRoomEight() – returns string for character in room 8
  + String dngTextRoomFloor() – returns string for the dungeons floor

testDNG –

Class designed to create the dungeon and all that can happen within.

* Only has a main class to run Dungeon

udpClient-

As the name suggests this is our base client. It will send input and receive output from the Dungeon class. It begins by the user entering a name that they wish to be called throughout the game.

* Fields
  + String input – user input
  + String name – holds the players name
  + int count – to check whether the player should go left or right
  + int mcount – int for when to get monster fight info
  + int mcount2 - int for when to get monster fight info
* Methods
  + main(String[] args) – sends all data to the Dungeon() then receives output from the Dungeon()

dngTester-

Java class that tests the possible outcomes of the dungeon such as winning and losing.

* Fields
  + Count -player location
  + Mcount- monster 1 location
  + Mcount2 – monster 2 location
* Methods
  + Main(String[] args)
  + buildWinDungeon(int count, int[] dng, int mcount, int mcount2) – builds dungeon specifically for a scenario for when you win
  + buildLossDungeon(int count, int[] dng, int mcount, int mcount2) - builds dungeon specifically for a scenario for when you lose
  + dngTextRoomRoof() – string for roof
  + dngCharacterRoom() – string with room holding the character
  + dngTextEmptyRoom() – String for empty room
  + dngTextRoomFloor() -String for floor of the dungeon