

# SURVIVING STORY OF THE KARACAOĞLAN

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- The main objective is to have oop design for the related project description.
- I have designed the base level architecture on “Abstract Class” LivingCreature. The subclasses Hero and Enemy inherits from it.
- LivingCreature has two instance variables, attackPower and hp. These are protected variables to avoid violation from user inputs. Subclasses override the setter functions to achieve that. If the negative value is given, default values are defined in the classes.
- I assume that input does not have more than one enemy on the unique position. Therefore, I have used TreeMap data structure which will be cover.
- Reading input and parsing them to meaningful state is explained detailed in the code. Additionally, there is a final class IOUtils to handle file operations with only its methods.
- Deciding how many unique enemies on the map is a key to create such objects. It is the part of parsing action.
- Unique enemies got properties as well as attack power, hp and constructed name.
- I have used TreeMap data structure to keep enemy positions. The map may have several same type of enemies, so that the key of the map is a unique position and the value points the unique object reference. That is, more than one position may point to same object.
- Hero class have killEmAll function to walk through map. Hero.killEmAll begins the story of Karacaoğlan, our hero.
- Results are written to file as expected.

p.s. I would liked to write Project Report in LaTeX with figures, but the time was not enough to do so.