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Programming in java – semester 2 game project

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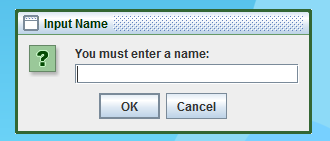
# Additional Features

## Feature 1 – High Score table

The first of my features is a high score system. In order to facilitate this, I made a high score object that stores player score and a list of previous scores.

Scores are stored in a hash map, in a file “data/scores.txt”, with the key being a unique player name, and the value being their score. When a high score object is instantiated, it tries to read the scores from the file. If for some reason the scores cannot be read, the scores will be reset. Once scores are read, they are then sorted into descending order, and inserted into a linked hash map.

As the game time increases, the score will decrease, in order to reward players who are quick to complete the game. The score will also be effected by the player dying, completing a level, taking damage and damaging an enemy.

When the game is over, either by the player running out of lives or completing the game, an internal prompt will show up, asking the player to input their name (see below).

The name that the player inputs will be checked to make sure that it is not already in the high scores map, and that it is not completely made from spaces.

When the user submits a valid name and clicks ok, the players name and score is added to the score map, then serialized back to the scores file. The scores are then sorted and the top twenty scores are added to a JTable component. The scores are shown to the user, with the user’s scores being highlighted.

If the player chooses not to input a name and clicks cancel, the scores will be shown anyway, but the players score will not be in the list.

After the player sees their score, they will be asked if they would like to restart the game, or would rather quit. If they choose to restart, their score will be reset and the game will go back to the first level.

## Feature 2 – GUI