

# New Features

## Survival mode

The game now features a survival mode. The player is in a never ending level which spawns waves of balls once a certain total hitpoints is reached. Total hitpoints are the amount of times the player would need to hit the balls before they disappear. A ball of the smallest size has 1 hitpoint, while a ball of one size bigger has 3.

At first a new wave of balls spawn when the total hitpoints is 0, but as time progresses waves will spawn sooner and sooner. The type of wave that spawns is randomized.

## Multiplayer

There are now two new multiplayer modes: COOP and duel. In the COOP game mode, players share their lives and points. One player can die 10 times or both 5 times. In the duel mode, players try to beat each other. This is basically two singleplayer games which are being played at the same time in the same level. We also added new multiplayer levels.

## Highscores

All the different types of gamemodes also have their own highscores. Added an extra menu layer for this.

## Refactoring

`Level.KeyPressHandler.handle` method was refactored to be more clear and resolve code style issues. Together with this change, `Player.ControlKeys` class was created to handle the key pressing per-player.

## Observer pattern

We have changed `Level.notifyObserver` to be a private method to make sure it is only called from within `Level`.

## Player versus Wall collision

Refactored the code to be more general and extendable.