

# Write an API for a bowling game

You have the freedom to define the architecture of the API and how its endpoints will look like.

## Main Requirements

The API should be written using Ruby or Elixir, the framework definition is your call. In addition, it should provide the following actions:

- Start a new bowling game.
- Input the number of pins knocked down by each ball.
- Output the current game score (which consists of the score for each frame and total score).

Imagine that this API will be used by a bowling house. On the screen the user starts the game. Then after each throw, the machine counts how many pins were dropped and calls the API, sending this information. In the meantime, the screen is constantly (for example: every 2 seconds) querying the API for the game score and displays it. Be tolerant to application restarts.

## Logic details

- Bowling is played by throwing a ball down a narrow alley towards ten wooden pins. The objective is to knock down as many pins as possible per throw.
- The game is played in ten frames. At the beginning of each frame, all ten pins are set up. The player then gets two tries to knock them all down.
- If the player knocks all the pins down on the first try, it is called a "strike" and the frame ends.
- If the player fails to knock down all the pins with his first ball but succeeds with the second ball, it is called a "spare".
- After the second ball of the frame, the frame ends even if there are pins still standing.
- A strike frame is scored by adding ten plus the number of pins knocked down by the next two balls, to the score of the previous frame.
- A spare frame is scored by adding ten plus the number of pins knocked down by the next ball, to the score of the previous frame.
- Otherwise, a frame is scored by adding the number of pins knocked down by the two balls in the frame to the score of the previous frame.
- If a strike is thrown in the tenth frame, then the player may throw two more balls to complete the score of the strike.
- Likewise, if a spare is thrown in the tenth frame, the player may throw one more ball to complete the score of the spare.
- Therefore, the tenth frame may have three balls instead of two.

For more information, please see [https://en.wikipedia.org/wiki/Ten-pin\\_bowling](https://en.wikipedia.org/wiki/Ten-pin_bowling)