

# Package ‘whatr’

July 29, 2020

**Title** Scrape and Analyze the J! Archive

**Version** 1.0.1

**Description** Scrape the fan-made J! Archive <<https://www.j-archive.com/>>  
for Jeopardy episode contestants, categories, clues, answers, and scores.

**License** GPL-3

**URL** <https://github.com/kiernann/whatr>

**BugReports** <https://github.com/kiernann/whatr/issues>

**Depends** R (>= 3.2)

**Imports** dplyr (>= 1.0.0), ggplot2 (>= 3.3.2), httr (>= 1.4.2),  
magrittr (>= 1.5), methods, purrr (>= 0.3.4), rlang (>= 0.4.7),  
rvest (>= 0.3.6), scales (>= 1.1.1), stringr (>= 1.4.0), tibble  
(>= 3.0.3), tidyr (>= 1.1.0), xml2 (>= 1.3.2)

**Suggests** covr (>= 3.5.0), spelling (>= 2.1), testthat (>= 2.3.2)

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**Author** Kiernan Nicholls [aut, cre]

**Maintainer** Kiernan Nicholls <[kiernann@protonmail.com](mailto:kiernann@protonmail.com)>

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boards	<i>2019 Jeopardy! game boards</i>
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## Description

The categories, clues, and answers in the 2019 season of Jeopardy.

## Usage

boards

## Format

A tibble with 13,261 rows and 8 variables:

**game** The J! Archive game ID.

**round** The round a clue is chosen.

**col** The column position left-to-right.

**row** The row position top-to-bottom.

**n** The order of clue chosen.

**category** Category title, often humorous or with instructions.

**clue** The clue read to the contestants.

**answer** The *correct* answer to a clue.

## Source

<https://www.j-archive.com/>

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entity_clean	<i>Repair the text from J! Archive HTML</i>
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---

**Description**

Repair the text from J! Archive HTML

**Usage**

```
entity_clean(string)
```

**Arguments**

string            Some text, usually from `rvest::html_text()`.

**Value**

Normalize character vectors.

---

episodes	<i>2019 Jeopardy! episodes</i>
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---

**Description**

The episodes in the 2019 season of Jeopardy.

**Usage**

```
episodes
```

**Format**

A tibble with 218 rows and 3 variables:

**game** The non-sequential J! Archive game ID.

**show** The sequential show number of an episode.

**date** The air date of an episode.

**Source**

<https://www.j-archive.com/>

---

players	<i>2019 Jeopardy! contestants</i>
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---

**Description**

The contestants in the 2019 season of Jeopardy.

**Usage**

players

**Format**

A tibble with 672 rows and 6 variables:

**game** The J! Archive game ID.

**show** The sequential episode show number.

**date** The date each episodes initially aired.

**Source**

<https://www.j-archive.com/>

---

scores	<i>2019 Jeopardy! game scores</i>
--------	-----------------------------------

---

**Description**

The score history of the games in the 2019 season of Jeopardy.

**Usage**

scores

**Format**

A tibble with 13,261 rows and 6 variables:

**round** The round a clue is chosen.

**n** The order of clue chosen.

**name** First name of player responding.

**score** Change in score from this clue.

**double** Is the clue a daily double.

**Source**

<https://www.j-archive.com/>

---

 synopses

*2019 Jeopardy! game synopses*


---

**Description**

Synopses of the games in the 2019 season of Jeopardy.

**Usage**

synopses

**Format**

A tibble with 654 rows and 6 variables:

**name** The contestant's given name.

**coryat** Score if all wagering is disregarded.

**final** Final score after Double Jeopardy.

**right** Number of correct answers.

**wrong** Number of incorrect answers.

**Source**

<https://www.j-archive.com/>

---

 whatr\_airdate

*What is the air date?*


---

**Description**

*This* date identifies when an episode was first viewed on television.

**Usage**

whatr\_airdate(game)

**Arguments**

game One of four types of input, all passed to `whatr_html()`:

1. A numeric game ID.
2. Either a 'showgame' or 'showscores' HTML document.
3. A show number character starting with "#".
4. An air date like "yyyy-mm-dd".

**Format**

A tibble with 1 row and 3 variables:

**game** The non-sequential J! Archive game ID.

**show** The sequential show number of an episode.

**date** The air date of an episode.

**Value**

A tidy tibble of clue text.

**Examples**

```
whatr_airdate(game = 6304)
```

---

whatr_answers	<i>What are the answers?</i>
---------------	------------------------------

---

**Description**

*These* must be given by the contestants in the form of a question as a response to the clues given.

**Usage**

```
whatr_answers(game)
```

**Arguments**

game	One of four types of input, all passed to <a href="#">whatr_html()</a> : <ol style="list-style-type: none"> <li>1. A numeric game ID.</li> <li>2. Either a 'showgame' or 'showscores' HTML document.</li> <li>3. A show number character starting with "#".</li> <li>4. An air date like "yyyy-mm-dd".</li> </ol>
------	---

**Format**

A tibble with (up to) 61 rows and 5 variables:

**round** The round a clue is chosen.

**col** The column position left-to-right.

**row** The row position top-to-bottom.

**i** The order of clue chosen.

**answer** The *correct* answer to a clue.

**Value**

A tidy tibble of answer text.

**Examples**

```
whatr_answers(game = 6304)
```

---

whatr_board	<i>What is the board?</i>
-------------	---------------------------

---

**Description**

*This* grid contains all the categories, clues, and answers in a game.

**Usage**

```
whatr_board(game)
```

**Arguments**

game	One of four types of input, all passed to <a href="#">whatr_html()</a> : <ol style="list-style-type: none"> <li>1. A numeric game ID.</li> <li>2. Either a 'showgame' or 'showscores' HTML document.</li> <li>3. A show number character starting with "#".</li> <li>4. An air date like "yyyy-mm-dd".</li> </ol>
------	---

**Format**

A tibble with (usually) 61 rows and 4 variables:

**round** The round a clue is chosen.

**col** The column position left-to-right.

**row** The row position top-to-bottom.

**n** The order of clue chosen.

**category** Category title, often humorous or with instructions.

**clue** The clue read to the contestants.

**answer** The *correct* answer to a clue.

**Value**

A tidy tibble of clue text.

**Examples**

```
whatr_board(game = 6304)
```

---

whatr_categories	<i>What are categories?</i>
------------------	-----------------------------

---

## Description

*These* are collections of five clues related by subject matter.

## Usage

```
whatr_categories(game)
```

## Arguments

game	One of four types of input, all passed to <code>whatr_html()</code> : <ol style="list-style-type: none"><li>1. A numeric game ID.</li><li>2. Either a 'showgame' or 'showscores' HTML document.</li><li>3. A show number character starting with "#".</li><li>4. An air date like "yyyy-mm-dd".</li></ol>
------	---

## Format

A tibble with (up to) 13 rows and 3 variables:

**round** The round a clue is chosen.

**col** The column position left-to-right.

**category** Category title, often humorous or with instructions.

## Value

Tidy tibble of category titles.

## Examples

```
whatr_categories(game = 6304)
```



---

`whatr_clues`*What are the clues?*

---

## Description

Confusingly, *these* are posed to contestants in the form of an answer.

## Usage

```
whatr_clues(game)
```

## Arguments

`game` One of four types of input, all passed to `whatr_html()`:

1. A numeric game ID.
2. Either a 'showgame' or 'showscores' HTML document.
3. A show number character starting with "#".
4. An air date like "yyyy-mm-dd".

## Format

A tibble with (usually) 61 rows and 4 variables:

**round** The round a clue is chosen.

**col** The column position left-to-right.

**row** The row position top-to-bottom.

**i** The order of clue chosen.

**clue** The clue read to the contestants.

## Value

A tidy tibble of clue text.

## Examples

```
whatr_clues(game = 6304)
```

---

whatr_data	<i>What is the board?</i>
------------	---------------------------

---

**Description**

*This* is the name for game mechanic displaying all categories and clues.

**Usage**

```
whatr_data(game)
```

**Arguments**

game	One of four types of input, all passed to <a href="#">whatr_html()</a> : <ol style="list-style-type: none"> <li>1. A numeric game ID.</li> <li>2. Either a 'showgame' or 'showscores' HTML document.</li> <li>3. A show number character starting with "#".</li> <li>4. An air date like "yyyy-mm-dd".</li> </ol>
------	---

**Value**

A list of tibbles.

**Examples**

```
whatr_data(game = 6304)
```

---

whatr_doubles	<i>What are daily doubles?</i>
---------------	--------------------------------

---

**Description**

*These* types of clues have no dollar value. Players wager some of their score before hearing the clue. In the first round, one such clue is present; in the second round, there are two.

**Usage**

```
whatr_doubles(game)
```

**Arguments**

game	One of four types of input, all passed to <a href="#">whatr_html()</a> : <ol style="list-style-type: none"> <li>1. A numeric game ID.</li> <li>2. Either a 'showgame' or 'showscores' HTML document.</li> <li>3. A show number character starting with "#".</li> <li>4. An air date like "yyyy-mm-dd".</li> </ol>
------	---

**Format**

a named list

**round** The round a clue is chosen.

**col** The column position left-to-right.

**row** The row position top-to-bottom.

**i** The order of clue chosen.

**clue** The clue read to the contestants.

**score** The amount won or lost on the wager.

**Value**

a list containing the question indices of the daily doubles in the first and second rounds

**Examples**

```
whatr_doubles(game = 6304)
```

---

whatr\_html

*Return the right J! Archive HTML document*

---

**Description**

To avoid downloading and reading the J! Archive over and over, this function can be used to return an HTML document from one of four types of input:

1. Game ID (6304)
2. Show number ("#8006")
3. Air date ("2019-06-03")
4. HTML document itself

**Usage**

```
whatr_html(x, out = c("showgame", "showscores"))
```

**Arguments**

**x** Any kind of J! Archive game identifier.

**out** One of "showscores" or "showgame" used for `whatr_scores()` or `whatr_clues()`, etc. respectively. Either document can be returned from the input of the other.

**Value**

A J! Archive html\_document.

**Examples**

```

whatr_html(x = 6304, out = "showscores")
whatr_html(x = "2019-06-03", out = "showgame")
whatr_html("#8006", "showgame") %>% whatr_clues()

```

---

 whatr\_order

*What is the order?*


---

**Description**

Scrapes clue order left-to-right, top-to-bottom.

**Usage**

```
whatr_order(game)
```

**Arguments**

game	One of four types of input, all passed to <a href="#">whatr_html()</a> : <ol style="list-style-type: none"> <li>1. A numeric game ID.</li> <li>2. Either a 'showgame' or 'showscores' HTML document.</li> <li>3. A show number character starting with "#".</li> <li>4. An air date like "yyyy-mm-dd".</li> </ol>
------	---

**Format**

A tibble with (usually) 61 rows and 4 variables:

**round** The round a clue is chosen.

**col** The column position left-to-right.

**row** The row position top-to-bottom.

**Value**

A tidy tibble of player info.

A tidy tibble of clue orders.

---

whatr_players	<i>Who are the players?</i>
---------------	-----------------------------

---

## Description

*These* individuals compete to score the most points and win the game.

## Usage

```
whatr_players(game)
```

## Arguments

game	One of four types of input, all passed to <code>whatr_html()</code> : <ol style="list-style-type: none"><li>1. A numeric game ID.</li><li>2. Either a 'showgame' or 'showscores' HTML document.</li><li>3. A show number character starting with "#".</li><li>4. An air date like "yyyy-mm-dd".</li></ol>
------	---

## Format

A tibble with (usually) 3 rows and 4 variables:

**first** The contestant's given name.

**last** The contestant's surname name.

**occupation** A short description of what the contestant does.

**from** The city or institution from where the contestant comes.

## Value

A tidy tibble of player info.

## Examples

```
whatr_players(game = 6304)
```

---

whatr_plot	<i>What is a plot?</i>
------------	------------------------

---

**Description**

*This* type of graphic presents data in a visual manner.

**Usage**

```
whatr_plot(game)
```

**Arguments**

game	One of four types of input, all passed to <a href="#">whatr_html()</a> : <ol style="list-style-type: none"><li>1. A numeric game ID.</li><li>2. Either a 'showgame' or 'showscores' HTML document.</li><li>3. A show number character starting with "#".</li><li>4. An air date like "yyyy-mm-dd".</li></ol>
------	--

**Value**

A ggplot object.

**Examples**

```
whatr_plot(game = 6304)
```

---

whatr_scores	<i>What are player scores?</i>
--------------	--------------------------------

---

**Description**

*This* data describes how players performed over the course of a game.

**Usage**

```
whatr_scores(game)
```

**Arguments**

game	One of four types of input, all passed to <a href="#">whatr_html()</a> : <ol style="list-style-type: none"><li>1. A numeric game ID.</li><li>2. Either a 'showgame' or 'showscores' HTML document.</li><li>3. A show number character starting with "#".</li><li>4. An air date like "yyyy-mm-dd".</li></ol>
------	--

**Format**

A tibble with (up to) 61 rows and 5 variables:

**round** The round a clue is chosen.

**i** The order of clue chosen.

**name** First name of player responding.

**score** Change in score from this clue.

**double** Is the clue a daily double.

**Value**

Tidy tibble of clue scores.

**Examples**

```
whatr_scores(game = 6304)
```

---

whatr_synopsis	<i>What a synopsis?</i>
----------------	-------------------------

---

**Description**

*This* is an overview containing various summary statistics of a game.

**Usage**

```
whatr_synopsis(game)
```

**Arguments**

game	One of four types of input, all passed to <a href="#">whatr_html()</a> : <ol style="list-style-type: none"> <li>1. A numeric game ID.</li> <li>2. Either a 'showgame' or 'showscores' HTML document.</li> <li>3. A show number character starting with "#".</li> <li>4. An air date like "yyyy-mm-dd".</li> </ol>
------	---

**Format**

A tibble with (usually) 3 row and 5 variables:

**name** The contestant's given name.

**coryat** Score if all wagering is disregarded.

**final** Final score after Double Jeopardy.

**right** Number of correct answers.

**wrong** Number of incorrect answers.

**Value**

A tidy tibble of clue text.

**Examples**

```
whatr_synopsis(game = 6304)
```



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