

# Package: learnrhash (via r-universe)

November 21, 2024

**Type** Package

**Title** Tools for hashing learnr sessions

**Version** 0.2.0

**Description** This package provides tools for the hashing of learnr sessions. The resulting hashes are presented as base64 encoded strings which can easily be copied into a web form, LMS submission tool, etc.

**License** MIT + file LICENSE

**Encoding** UTF-8

**LazyData** true

**Imports** learnr (> 0.10.1), shiny, base64enc, dplyr, tidyr, purrr, clipr, rlang, tibble, magrittr

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.1.2

**Suggests** testthat

**Depends** R (>= 3.5.0)

**Config/pak/sysreqs** make libicu-dev libx11-dev zlib1g-dev

**Repository** <https://inqs909.r-universe.dev>

**RemoteUrl** <https://github.com/rundel/learnrhash>

**RemoteRef** HEAD

**RemoteSha** be00e49fd90386c7d322eb1e6749a98a67d2554e

## Contents

decode_obj	2
encode_obj	2
extract	3
learnr_elements	3

<b>Index</b>	<b>5</b>
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decode_obj	<i>Decode hashed text into an R object</i>
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**Description**

Decode hashed text into an R object

**Usage**

```
decode_obj(txt, compress = c("bzip2", "gzip", "xz", "none"))
```

**Arguments**

txt	Hashed text.
compress	Compression method.

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encode_obj	<i>Encode an R object into hashed text</i>
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**Description**

Encode an R object into hashed text

**Usage**

```
encode_obj(obj, compress = c("bzip2", "gzip", "xz", "none"))
```

**Arguments**

obj	R object
compress	Compression method.

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extract	<i>Extract hash contents</i>
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### Description

The following are helper functions for extracting data from hashed learnr solutions.

- `extract_hash` - extracts the contents of the hashes into label, type, answer, correct, and timestamp columns
- `extract_questions` - extracts the contents of the hashes for answered questions.
- `extract_exercises` - extracts the contents of the hashes for answered exercises.

### Usage

```
extract_hash(df, hash = "hash")
```

```
extract_exercises(df, hash = "hash")
```

```
extract_questions(df, hash = "hash")
```

### Arguments

<code>df</code>	Data Frame. A data frame containing hash in a character column.
<code>hash</code>	Character. The name of the column containing the hashes

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<code>learnr_elements</code>	<i>Learnr addon elements</i>
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### Description

The following are addon element for learnr tutorials that enable the encoding and decoding of hashed learnr solutions.

Note that when including these functions in a learnr Rmd document it is necessary that the logic functions, `*_logic()`, be included in an R chunk where `context="server"` as they interact with the underlying Shiny functionality. Conversely, any of the ui functions, `*_ui()`, must *not* be included in an R chunk with a context. Both types of functions have been written to provide useful feedback if they detect they are in the wrong R chunk type.

**Usage**

```
decoder_logic()

decoder_ui()

encoder_logic(strip_output = FALSE)

default_ui(url = "http://google.com")

iframe_ui(src = "http://google.com", ...)

encoder_ui(ui_before = default_ui(), ui_after = NULL)
```

**Arguments**

<code>strip_output</code>	Exercises save their output as html, for exercises that result in plots these can result in very large hashes. The option allows this information to be removed to keep hash sizes more manageable.
<code>url</code>	Link url to use.
<code>src</code>	Source of the iframe.
<code>...</code>	Other iframe attributes, e.g. height and width
<code>ui_before</code>	Shiny ui elements to include before the hash ui
<code>ui_after</code>	Shiny ui elements to include after the hash ui,

**Details**

For either of the ui parameters you can wrap multiple shiny elements together with `shiny::div`.

# Index

`decode_obj`, 2  
`decoder_logic (learnr_elements)`, 3  
`decoder_ui (learnr_elements)`, 3  
`default_ui (learnr_elements)`, 3

`encode_obj`, 2  
`encoder_logic (learnr_elements)`, 3  
`encoder_ui (learnr_elements)`, 3  
`extract`, 3  
`extract_exercises (extract)`, 3  
`extract_hash (extract)`, 3  
`extract_questions (extract)`, 3

`iframe_ui (learnr_elements)`, 3

`learnr_elements`, 3