Codebook for MultiLA prepared tracking data

The prepared data will be stored under

`data/prepared/<application_session_id>_tracking_data.rds`

in the TrackingDataScripts project. It contains a dataframe of tracked events with the following variables:

- `user_app_sess_code`: user application session code (session code for an individual anonymous or registered user interacting with a specific application session) -- factor
- `user_app_sess_user_id`: user ID for registered users; no further data on individual users is provided in this dataset -- integer for registered users or NA for anonymous users
- `track_sess_id`: tracking session ID (ID indicating a continuous interaction of a user with the application session on a single device) -- integer
- `track_sess_start`: start of the tracking session (first visit of a user on this device for this application session) -- POSIXct time
- `track_sess_end`: end of the tracking session (user closes the browser window of logs out) -- POSIXct time
- `user_agent`: "user agent"" string from the browser -- character string
- `client_ip`: client IP address (if it could be determined)
- `form_factor`: factor; `"desktop"`, `"tablet"` or `"phone"`
- `initial_win_width`: initial client browser window width; numeric
- `initial_win_height`: initial client browser window height; numeric
- `initial_contentview_width`: initial content view width; numeric
- `initial_contentview_height`: initial content view height; numeric
- `initial_contentscroll_width`: initial content scroll area width; numeric
- `initial_contentscroll_height`: initial content scroll area height; numeric
- `event_time`: time the event took place; POSIXct time with millisecond accuracy
- `type`: event type; factor; one of the following:
  - `chapter`: change to another chapter
  - `click`: mouse click or touch at X = `coord1`, Y = `coord2`
  - `contentscroll`: scroll within the main content panel by `coord1` pixels in horizontal direction (usually 0) and `coord2` pixels in vertical direction

  - `ex_result`: code exercise result after evaluation with details in `value`
  - `ex_submit`: code exercise submission with details in `value`
  - `input`: key input for a text or numerical input field with details in `value`
  - `input_change`: changed input value for a slider with details in `value`
  - `mouse`: mouse movement to X = `coord1`, Y = `coord2`
  - `question_submit`: quiz question submission and result with details in `value`; multiple answers are formatted there as `[answer1, answer2, ... answern]`
  - `scroll`: scroll of the whole website (not the main content panel) by `coord1` pixels in horizontal direction (usually 0) and `coord2` pixels in vertical direction; this should only happen when the browser window is very small; in most cases `contentscroll` is what you need instead;
  - `summary_shown`: dynamic summary panel is presented for the first time
  - `summary_topic_added`: content was added to the dynamic summary panel with the content ID in `value`
  - `visibility_change`: visibility status in `value`; either "hidden" when the browser window with the application is completely occluded, minimized or invisible, else "visible"
- `chapter_index`: content chapter index; integer
- `chapter_id`: content chapter ID label; factor
- `ex_label`: question or exercise label; factor
- `ex_id`: question or exercise ID; character string
- `ex_event`: learnr code exercise event type; character string (`"result"` or `"submitted"`)
- `ex_output`: learnr code exercise R output; character string
- `ex_correct`: learnr code exercise result assessment -- correct or uncorrect; logical
- `xpath`: XPath to HTML element related to the event (if any); character string
- `css`: CSS selector to HTML element related to the event (if any); character string
- `value`: value related to the event; see `type`; character string
- `coord1`: X coordinate for spatial events like mouse moves or clicks; numeric
- `coord2`: Y coordinate for spatial events like mouse moves or clicks; numeric
- `win_width`: current client browser window width at the time when the event occurred; numeric
- `win_height`: current client browser window height at the time when the event occurred; numeric
- `contentview_width`: current content view width at the time when the event occurred; numeric
- `contentview_height`: current content view height at the time when the event occurred; numeric
- `win_scroll_x`: current client browser window scroll X position; numeric
- `win_scroll_y`: current client browser window scroll Y position; numeric

- `content_scroll_x`: current content area scroll X position; numeric
- `content_scroll_y`: current content area scroll Y position; numeric