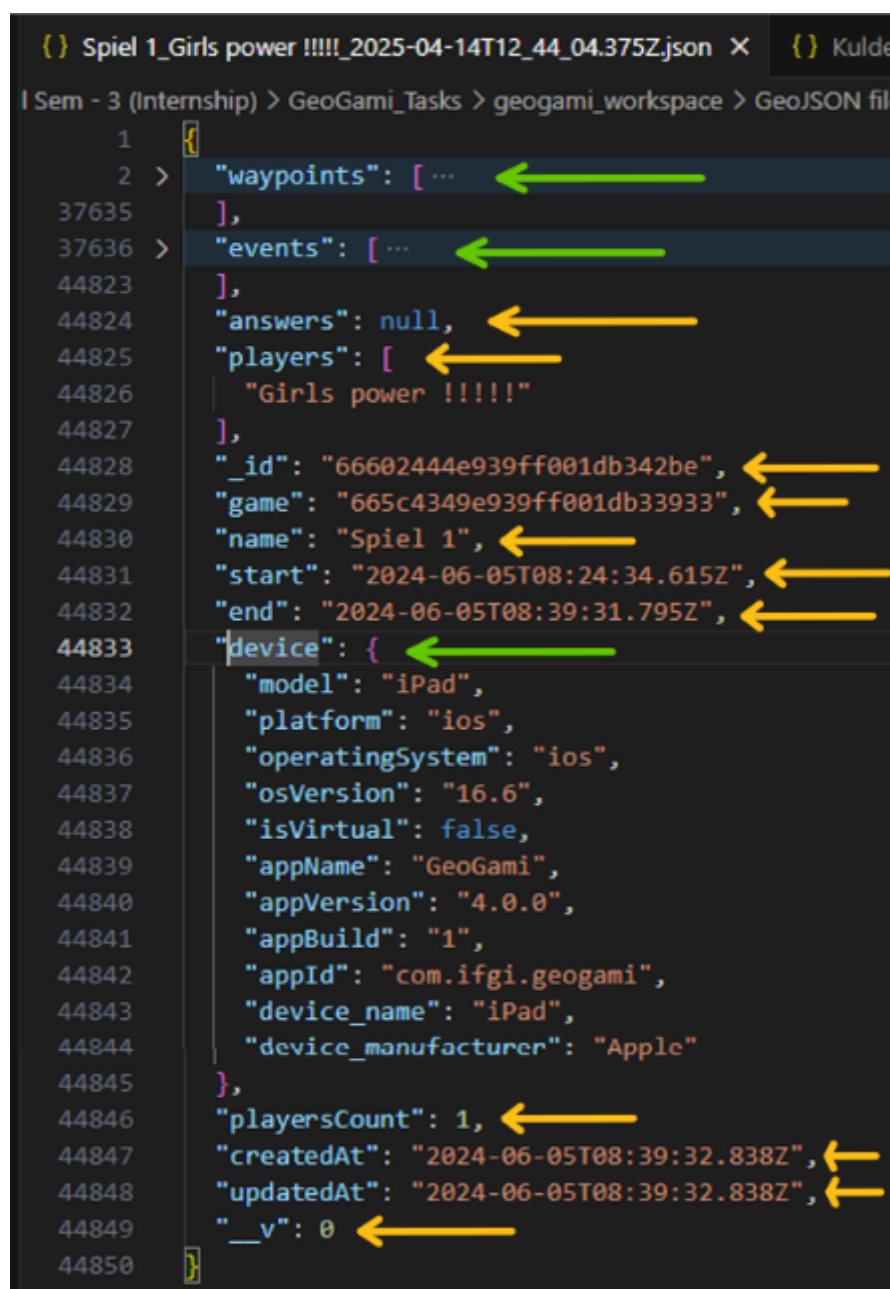# GeoGami JSON Documentation

JSON File chosen for the documentation:
'' Spiel 1_Girls power !!!!!_2025-04-14T12_44_04.375Z ''

Let's first understand the **general overview** of the file. For easier understanding of the GeoGami JSON file, we have divided the file into 2 i.e 'Grouped categories' and 'Other Elements' in this documentation.

There are **3 grouped categories (Green Arrows)** of this JSON file and then there are **some other elements (Yellow Arrows - Total 11)**.

Grouped Categories (Green Arrows): - (These will be explained in detail as we go forward)

> **1- Waypoints : -** This gives the information about the geographic locations (paths) which were followed by the player while playing the game.
> **2- Events : -** It gives details about the logs information and actions performed during the session by the player. NOTE: ''INIT_TASK'' is used to show the change of events/initialization of the next event.
> **3- Device : -** It basically gives the information of the device that was used to play the game.

Some other elements (Yellow Arrows) : - Here, we have

> 1- **Answers**: the answers
> 2- **Players:** name of the players ("Girls power !!!!!"),
> 3- **id:** ID of the Track that was used by the player (**"id"**: 66602444e939ff001db342be),
> 4- **game:** ID of the Game played by the player (**"game"**: 665c4349e939ff001db33933),
> 5- **name:** This is the name of the game ("Spiel 1")
> 6- **Start:** starting time (**"start"**)
> 7- **end:** ending time (**"end"**) of the game,
> 8- **PlayersCount** : Total no. of Players
> 9- **CreatedAt**: Date and Time when the game was created
> 10- **updatedAt** : Date and Time when the game was updated
> 11- **__V:**

NOTE: There is no participant ID, rather you can consider a JSON file (or more clearly, the name of the JSON file) as the participant ID, if you ever feel that participant ID is required somewhere.

Before Understanding about the grouped categories of JSON file in detail, we would like to suggest you to have a look at the type of tasks GeoGami offers:-

Basically, there are 3 main tasks and 9 Subtasks. We have added a picture below for better explanation.

◥ Navigation tasks

Navigation tasks direct the player to new locations.

◥ Navigation-to-flag task

In navigation-to-a-flag tasks, the player sees a flag on the map that marks a destination. His/her job is to go to this place.

◥ Navigation-with-arrow task

Navigation-with-arrow is a navigation with arrow and distance information, which shows the player the direction to the next destination. The map is not visible.

◥ Navigation-via-text task

In a navigation-via-text task, the player receives precise navigation instructions to the next destination.

◥ Navigation-via-photo task

The task type navigation-via-photo navigates the player to the next destination using a photo.

▮ Thematic tasks

Tasktypes.themtasksDescription

▮ Self-location task

With self-location tasks the player has to find his/her current location on the map.

▮ Object location task

The object-location task type includes the assignment of objects on the map to objects in the environment and vice versa.

▮ Direction-determination task

In direction-determination tasks, the player must relate his view-direction with the map alignment.

▮ Free tasks

In free tasks, question and answer types of the task can be combined. In this way, for example, quizzes and thematic tasks can be asked.

ⓘ information

The 'information' module can be used to give the player hints and tips.

Let's dive deeper into all the 3 grouped categories of the JSON file : -

1- Waypoints: This gives the information about the geographic locations (paths) which were followed by the player while playing the game.
- **timestamp:** string, date and time of the point, format "Year-Month-DayTHour:Minutes:Seconds.MillisecondsZ"
- **Position:** Position of the player at particular timestamp
  - **timestamp:** int, date and time of the point
  - **coords**
    - **longitude:** float
    - **altitudeAccuracy:** float
    - **heading:** float, movement direction in degrees

- - - **latitude:** float
    - **altitude:** float (in metres)
    - **accuracy:** float (in metres)
    - **speed:** float, speed at which the player moved at a particular timestamp
  - **mapViewport**
    - **Bounds:** limit of the map
      - **Sw :** South-west
        - **lng:** float
        - **lat:** float
      - **Ne:** North-east
        - **lng:** float
        - **lat:** float
    - **Center:**
      - **lng:** float
      - **lat:** float
    - **zoom:** int, zoom level of the map
    - **bearing:** float, horizontal orientation of the map, in degrees
    - **pitch:** float, vertical camera tilt, in degrees
  - **compassHeading:** float, direction from geographic north in degrees
  - **interaction**
    - **panCount:** int, refers to the action of moving or dragging the map view horizontally or vertically
    - **zoomCount:** int, number of times user changes map zoom level
    - **rotation:** float, total number of card rotation in degrees
  - **taskNo:** int, task performed by the player
  - **taskCategory:** string, category of the Task: "nav", "info" or "theme"

2- Events : It gives information about the logs information and actions performed during the session by the player. NOTE: ''INIT_TASK'' is used to show the change of events/initialization of the next event.

- **Type:** string, event type.
- **Timestamp:** string, date and time of the point, format "Year-Month-DayTHour:Minutes:Seconds.MillisecondsZ"
- **Position:** Position of the player at particular timestamp
  - **timestamp:** int, date and time of the point
  - **Coords:**
    - **longitude:** float
    - **altitudeAccuracy:** float
    - **heading:** float, movement direction in degrees

- - - **latitude:** float
    - **altitude:** float (in metres)
    - **accuracy:** float (in metres)
    - **speed:** float, speed at which the player moved at a particular timestamp
- **mapViewport**
  - **Bounds:** limit of the map
    - **Sw :** South-west corner of visible area
      - **lng:** float
      - **lat:** float
    - **Ne:** North-east corner of visible area
      - **lng:** float
      - **lat:** float
  - **Center:**
    - **lng:** float
    - **lat:** float
  - **zoom:** int, zoom level of the map
  - **bearing:** float, horizontal orientation of the map, in degrees
  - **pitch:** float, vertical camera tilt, in degrees
- **compassHeading:** float, direction from geographic north in degrees, basically shows where the compass was pointing
- **Task:**
  - **Id:** string, id for each tasks
  - **Category:** string, "nav", "info" or "theme"
  - **Type:** string, corresponding at subtasks
  - **Name:** string, unique name of the task
  - **Question:**
    - **Type:** string, for example "TEXT"
    - **Text:** string, instructions for solving the task
  - **Answer:**
    - **Type:** string, type of response required for example "POSITION"
    - **Mode:** string, navigation mode
    - **Position:**
      - **Type:** string, object is a geographical feature
      - **Geometry:**
        - **Type:** string
        - **Coordinates:** list of float
  - **Evaluate:** string, what is tested or evaluated
  - **Settings:**
    - **Feedback:** Boolean, correct answer or not
    - **multipleTries:** Boolean, if the user is entitled to several trials
    - **confirmation:** Boolean, confirmation button
    - **Accuracy:** Int, tolerance around the correct position in meters

- - **showMarker:** boolean, marker display after validation
        - **KeepMarker:** boolean, keeping marker or not after this event
        - **KeepDrawing:** string, `"current"` for the current task
        - **DrawPointOnly:** boolean, whether figures other than points can be displayed, such as lines, polygons...
    - **mapFeatures:**
        - **Zoombar:** string, activation of zoom bar
        - **Pan:** string, to move the map freely
        - **rotation:** string, direction of rotation
        - **Material:** string, map style
        - **Position:** string, position marker display
        - **Direction:** string, direction marker display
        - **Track:** boolean, if the map follows the track
        - **KeepTrack:** string, if the track parameter is enabled, describe how the track is followed
        - **streetSection:** boolean, display detailed street views
        - **reducedInformation:** boolean,
        - **Landmarks:** boolean, information simplification on map
        - **reducedMapSectionDiameter:** int, radius of the area visible to the user
        - **SwitchLayer:** string, if user can change the layer or not
    - **CreatingAt:** string, date and time of the task creation, format "Year-Month-DayTHour:Minutes:Seconds.MillisecondsZ"
    - **UpdatedAt:** string, date and time of the task update, format "Year-Month-DayTHour:Minutes:Seconds.MillisecondsZ"
- **Interaction :**
    - **panCount:** int, refers to the action of moving or dragging the map view horizontally or vertically
    - **zoomCount:** int, number of times user changes map zoom level
    - **rotationCount:** float, total number of card rotation in degrees (or compass spins)

3- Device : - It basically gives the information of the device that was used to play the game.
- **model:** string, for example `"iPad"`
- **platform:** string, for example `"ios"`
- **operatingSystem:** string, for example `"ios"`
- **osVersion:** string, operating system version
- **isVirtual:** boolean, if `True` virtual device, if `False` real device
- **appName:** string, `"GeoGami"`
- **appVersion:** string, version of GeoGami
- **appBuild:** string, application numero

- **appId:** string, `"com.ifgi.geogami"`
- **device_name:** string, device model name, for example `"iPad"`
- **device_manufacturer:** string, for example `"Apple"`