**GPX\_2\_HTML**

**Version and Licence**

* Version 02/2024  
  Written by Hans Strassguetl - [https://gravelmaps.de](https://gravelmaps.de/)  
  Licenced under <https://creativecommons.org/licenses/by-sa/4.0/>
* Icons used are licensed under  
  Map Icons Collection  
  Creative Commons 3.0 BY-SA  
  Author: Nicolas Mollet  
  [https://mapicons.mapsmarker.com](https://mapicons.mapsmarker.com/)

**About**

This program is used to convert GPX files exported from Garmin Basecamp in one go into a html website translating Garmin icons.

**Use:**

**Planning:**

* Planning is done in Garmin Basecamp.
* Waypoints and Tracks may include a description
* Export data via Basecamp File -> Export function.

**Conversion**

GPX\_2\_hTML has no user interface. Start it that way:

python gpx\_2\_html.py “your.gpx”

As a result, you have a converted HTML with the same name in the same directory as the GPX. If there are any errors, you will be informed.

You may need to install Python and / or some missing libraries.

**Translation Table**

GPX\_2\_HTML uses a translation table to convert Garmin GPX points into HTML icons. You can change the translation according to your needs.  
The translation table is a JSON structure. Make sure you maintain it in a valid format. Before editing its recommended to make a backup first.

**Structure example**

{

"points": {

"Default" : "pin-export.png",

"Gas Station" : "gas-station.png",

"Information" : "information.png",

"TracBack Point": "footprint.png",

"Toll Booth" : "tollstation.png",

"Ferry" : "cruiseship.png",

}

}

**Routes**

Since routes do not have reasonable track values, they are not observed.

**Tracks (Lines)**

The assignment is done via the Garmin colour for the tracks. If a colour is missing, its set to DarkMagenta as default. You can easily change that in the code.

**Waypoints**

Waypoints will be shown as icons. Based on how KML works, the icons need to come from somewhere in the web. All icons used are addressed to my server <http://motorradtouren.de/pics> so they can be pulled from there.  
If you want to change that, change the code. It’s easy to find.  
If you want to change icons in the translation table, here you can find the icons stored on http://motorradtouren.de/pics  🡪 <https://mapicons.mapsmarker.com/wp-content/uploads/zip/mapiconscollection-markers.zip>

**Defaults:**

In the translation table there is a default value for the **points**. This is needed to assign valid values to your HTML while using undescribed waypoints in the GPX. Make sure the default is always set!  
See example above.

**Credits**

* Icons used are licensed under  
  Map Icons Collection  
  Creative Commons 3.0 BY-SA  
  Author: Nicolas Mollet  
  [https://mapicons.mapsmarker.com](https://mapicons.mapsmarker.com/)

**Data privacy**

* I’m using Python Folium which itself uses Leaflet. Map tiles need to be pulled from different suppliers. None of my tests show any cookies.
* By design XML structures as GPX reach out for external servers. For example, interpreting the Garmin GPX, you will find certain html addresses in the GPX's header that support interpreting the structure.
* Using icons makes the Browser reaching out to my server via <http://motorradtouren.de/pics>  
  No access data is collected or stored for this service by this program or on the server motorradtouren.de.

## ColorTable: Name to Hex

This is not necessarily the list of colours used by me - but you may give it a try!  
This is a good site to check your colours: <https://www.color-hex.com/>

aliceblue = 'fffff8f0'

antiquewhite = 'ffd7ebfa'

aqua = 'ff00ffff'

aquamarine = 'ffd4ff7f'

azure = 'fffffff0'

beige = 'ffdcf5f5'

bisque = 'ffc4e4ff'

black = 'ff000000'

blanchedalmond = 'ffcdebff'

blue = 'ffff0000'

blueviolet = 'ffe22b8a'

brown = 'ff2a2aa5'

burlywood = 'ff87b8de'

cadetblue = 'ffa09e5f'

chartreuse = 'ff00ff7f'

chocolate = 'ff1e69d2'

coral = 'ff507fff'

cornflowerblue = 'ffed9564'

cornsilk = 'ffdcf8ff'

crimson = 'ff3c14dc'

cyan = 'ff00ffff'

darkblue = 'ff8b0000'

darkcyan = 'ff8b8b00'

darkgoldenrod = 'ff0b86b8'

darkgray = 'ffa9a9a9'

darkgrey = 'ffa9a9a9'

darkgreen = 'ff006400'

darkkhaki = 'ff6bb7bd'

darkmagenta = 'ff8b008b'

darkolivegreen = 'ff2f6b55'

darkorange = 'ff008cff'

darkorchid = 'ffcc3299'

darkred = 'ff00008b'

darksalmon = 'ff7a96e9'

darkseagreen = 'ff8fbc8f'

darkslateblue = 'ff8b3d48'

darkslategray = 'ff4f4f2f'

darkslategrey = 'ff4f4f2f'

darkturquoise = 'ffd1ce00'

darkviolet = 'ffd30094'

deeppink = 'ff9314ff'

deepskyblue = 'ffffbf00'

dimgray = 'ff696969'

dimgrey = 'ff696969'

dodgerblue = 'ffff901e'

firebrick = 'ff2222b2'

floralwhite = 'fff0faff'

forestgreen = 'ff228b22'

fuchsia = 'ffff00ff'

gainsboro = 'ffdcdcdc'

ghostwhite = 'fffff8f8'

gold = 'ff00d7ff'

goldenrod = 'ff20a5da'

gray = 'ff808080'

grey = 'ff808080'

green = 'ff008000'

greenyellow = 'ff2fffad'

honeydew = 'fff0fff0'

hotpink = 'ffb469ff'

indianred = 'ff5c5ccd'

indigo = 'ff82004b'

ivory = 'fff0ffff'

khaki = 'ff8ce6f0'

lavender = 'fffae6e6'

lavenderblush = 'fff5f0ff'

lawngreen = 'ff00fc7c'

lemonchiffon = 'ffcdfaff'

lightblue = 'ffe6d8ad'

lightcoral = 'ff8080f0'

lightcyan = 'ffffffe0'

lightgoldenrodyellow = 'ffd2fafa'

lightgray = 'ffd3d3d3'

lightgrey = 'ffd3d3d3'

lightgreen = 'ff90ee90'

lightpink = 'ffc1b6ff'

lightsalmon = 'ff7aa0ff'

lightseagreen = 'ffaab220'

lightskyblue = 'ffface87'

lightslategray = 'ff998877'

lightslategrey = 'ff998877'

lightsteelblue = 'ffdec4b0'

lightyellow = 'ffe0ffff'

lime = 'ff00ff00'

limegreen = 'ff32cd32'

linen = 'ffe6f0fa'

magenta = 'ffff00ff'

maroon = 'ff000080'

mediumaquamarine = 'ffaacd66'

mediumblue = 'ffcd0000'

mediumorchid = 'ffd355ba'

mediumpurple = 'ffd87093'

mediumseagreen = 'ff71b33c'

mediumslateblue = 'ffee687b'

mediumspringgreen = 'ff9afa00'

mediumturquoise = 'ffccd148'

mediumvioletred = 'ff8515c7'

midnightblue = 'ff701919'

mintcream = 'fffafff5'

mistyrose = 'ffe1e4ff'

moccasin = 'ffb5e4ff'

navajowhite = 'ffaddeff'

navy = 'ff800000'

oldlace = 'ffe6f5fd'

olive = 'ff008080'

olivedrab = 'ff238e6b'

orange = 'ff00a5ff'

orangered = 'ff0045ff'

orchid = 'ffd670da'

palegoldenrod = 'ffaae8ee'

palegreen = 'ff98fb98'

paleturquoise = 'ffeeeeaf'

palevioletred = 'ff9370d8'

papayawhip = 'ffd5efff'

peachpuff = 'ffb9daff'

peru = 'ff3f85cd'

pink = 'ffcbc0ff'

plum = 'ffdda0dd'

powderblue = 'ffe6e0b0'

purple = 'ff800080'

red = 'ff0000ff'

rosybrown = 'ff8f8fbc'

royalblue = 'ffe16941'

saddlebrown = 'ff13458b'

salmon = 'ff7280fa'

sandybrown = 'ff60a4f4'

seagreen = 'ff578b2e'

seashell = 'ffeef5ff'

sienna = 'ff2d52a0'

silver = 'ffc0c0c0'

skyblue = 'ffebce87'

slateblue = 'ffcd5a6a'

slategray = 'ff908070'

slategrey = 'ff908070'

snow = 'fffafaff'

springgreen = 'ff7fff00'

steelblue = 'ffb48246'

tan = 'ff8cb4d2'

teal = 'ff808000'

thistle = 'ffd8bfd8'

tomato = 'ff4763ff'

turquoise = 'ffd0e040'

violet = 'ffee82ee'

wheat = 'ffb3def5'

white = 'ffffffff'

whitesmoke = 'fff5f5f5'

yellow = 'ff00ffff'

yellowgreen = 'ff32cd9a'

# 

# Garmin Waypoints

This are the waypoints I’m aware so far:

Airport

Alert

Amusement Park

Anchor

Animal Tracks

ATV

Ball Park

Bank

Bar

Beach

Bell

Big Game

Bike Trail

Binoculars

Blind

Block, Blue

Block, Green

Block, Red

Blood Trail

Boat Ramp

Bowling

Bridge

Building

Buoy, White

Campground

Camp Fire

Canoe

Car

Car Rental

Car Repair

Cemetery

Church

Circle with X

Circle, Blue

Circle, Green

Circle, Red

City (Large)

City (Medium)

City (Small)

Civil

Contact, Afro

Contact, Alien

Contact, Ball Cap

Contact, Big Ears

Contact, Biker

Contact, Bug

Contact, Cat

Contact, Dog

Contact, Dreadlocks

Contact, Female1

Contact, Female2

Contact, Female3

Contact, Goatee

Contact, Kung-Fu

Contact, Pig

Contact, Pirate

Contact, Ranger

Contact, Smiley

Contact, Spike

Contact, Sumo

Contact, Female3

Controlled Area

Convenience Store

Cover

Covey

Crossing

Dam

Danger Area

Department Store

Diver Down Flag

Drinking Water

Fast Food

Fishing Area

Fishing Hot Spot Facility

Fitness Center

Flag, Blue

Flag, Green

Flag, Red

Food Source

Forest

Furbearer

Gas Station

Glider Area

Golf Course

Horse Trail

Hunting

Kayak

Letter A, Red

Letter B, Red

Letter C, Red

Letter D, Red

Lighthouse

Marina

Man Overboard

Medical Facility

Mine

Movie Theater

Museum

Navaid, Amber

Navaid, Black

Navaid, Blue

Navaid, Green

Navaid, Orange

Navaid, Red

Navaid, Violet

Navaid, White

Number 1, Blue

Number, Blue

Number, Blue

Number 4, Blue

Oil Field

Parachute Area

Park

Parking Area

Pharmacy

Picnic Area

Pin, Blue

Pin, Green

Pin, Red

Pin, Yellow

Pizza

Police Station

Post Office

Private Field

Radio Beacon

Residence

Restaurant

Restricted Area

Restroom

RV Park

Scales

Scenic Area

School

Shelter

Shipwreck

Shopping Center

Short Tower

Shower

Ski Resort

Skiing Area

Skull and Crossbones

Small Game

Snowmobile

Square, Yellow

Stadium

Stop Sign

Street Intersection

Summit

Swimming Area

Tall Tower

Telephone

Toll Booth

Trail Head

Tree

Tree Stand

Treed Quarry

Triangle, Blue

Triangle, Green

Triangle, Red

Triangle, Yellow

Truck

Truck Stop

Tunnel

Ultralight Area

Upland Game

Waterfowl

Water Source

Wind Turbine

Wrecker

XSki   
Zoo