Iliad Viewer

| Description

The Iliad viewer is a web application developed in Angular that aims to ease and support the study of the Genavensis 44 graecus manuscript. The application provides different sections each of them covering a different point of view on the manuscript study. Moreover the Iliad viewer endows its users with an ancient greek language learning platform.

| Data Folder Structure

In this section, the folder the data folder structure is described. The Iliad viewer fetches all the information to be visualized and computed from the *assets* folder.
In order to keep the deployment of the application simple and to avoid special or additional requests to the infrastructure provider (e.g. maintenance of web services or a dockerized application), the application is designed to be client only.

| Manifest file

The file *manifest.json* declares the available texts and metadata for the application.

```
{
 "textsList": [
    { "id": "homeric", "label": "Homeric", "type": "verse", "chants": [1,2,3] },
    { "id": "paraphrase", "label": "Paraphrase", "type": "verse", "chants": [1,2,3] },
    { "id": "french-paraphrase", "label": "French Paraphrase", "type": "prose", "chants":
[1,2,3,4,5] }
 ],
 "manuscriptPages": 802,
  "alignments": [
    { "source": "homeric", "target": "paraphrase", "type": "auto", "chants": [1,2,3] },
    { "source": "paraphrase", "target": "homeric", "type": "auto", "chants": [1,2,3] },
    { "source": "homeric", "target": "paraphrase", "type": "manual", "chants": [1,2,3] },
    { "source": "paraphrase", "target": "homeric", "type": "manual", "chants": [1,2,3] }
  ],
  "scholieAlignments": [
    { "source": "homeric", "target": "scholie", "type": "manual", "chants": [1,2,3] },
    { "source": "scholie", "target": "homeric", "type": "manual", "chants": [1,2,3] }
  ]
}
```

Where:
- *textsList* defines the list of texts available in the application specifying a unique ID, a label, and the number of chants.
- *manuscriptPages* contains the number of total pages in the manuscript
- *alignments* contains the information about the available texts alignment
- *scholieAlignments* contains the information about the alignment of the scholie page

| Texts

Each text that supports the following folder structure and file syntax can be visualized in Iliad Viewer. The following syntax adhere to the principles of completeness and compactness of information due to client-only restriction on the application.

Each text is inside a folder named as the ID of the correspondent text as defined in the manifest file (e.g. *texts/paraphrase* contains the paraphrase).
Given a text, for each chant there exists a folder numbered as the corresponding chant (e.g. *texts/homeric/2/* contains the data of the second chant of the iliad)

Each chant folder contains these json files:
- *words.json* contains the additional information for each word of the chant verses;
- *verses.json* contains the verses of the chant.

Data for each word is defined by a map with the following syntax:

```
{
  <word-id>:[<text-form>, <cleaned-form>, <lemma>, <pos-tag>,
<verse-number>],
  ...
}
```

Where is the id of the word and the map value is the list of textual form, cleaned form, lemma, part of speech tag and verse number the word belongs to.
An example of word entry is:

```
{
  "HOM-1-0":["Μῆνιν","μῆνιν","μῆνις","N+Com:Afs","1"],
  ...
}
```

Verses are defined in each *verses.json* file as a list with the following syntax:

```
[[<verse-type>,<verse-number>,<list-of-ids>]], ...]
```

Where `<verse-type>` can be "v" for "verse", "o" for "omisit", "f" for "fin", "t" for "verse title"; `<verse-number>` is the number of the verse; and is the list of word ids belonging to the verse.

An example of verse is the following:

```
[["v",1,["HOM-1-0","HOM-2-0","HOM-3-0","HOM-4-0","HOM-5-0"]], ...]
```

| Alignments

The available alignments are inside the *alignments* folder. The alignements are divided into two sub-folder, one for the *manual* alignment and the other for the *auto*matically generated alignments.

Inside the manual or auto folder, there is a folder for each text id that has alignments. For example the folder path *alignments/auto/homeric* contains the alignments with the homeric iliad as a source text. Inside the source text folder, there is a folder for each target text available.
An alignment file is a map from each word id to the information of the alignment for such words.
An alignment is defined by its type (sub for substitution, eq for equality, del for deletion, int for insertion) and the list of word ids of the target text to which the source word id corresponds.

An example of alignment entry is the following:

```
{
      "HOM-1-0": {
            "type": "sub",
            "target": ["PARA-2-0"]
      },
      ...
}
```

Alignments are generated also for the scholie page with a folder structure equal to the text alignments. A scholie alignment is a map from word ids of the homeric text to the corresponding word ids in the paraphrase that are derived from the ScholieD data.
Each scholie alignment entry is defined by its kind (h for the words that are in the scholie but not reported in the paraphrase, p for the words that have a correspondence in the paraphrase).

```
{"HOM-1-0":{"kind":"h","source":[],"target":["PARA-2-0"]}, ... }
```

| Manuscript

The *manuscript* folder contains the data related to the manuscript. In particular:
- manifest.json is the IIIF manifest file retrieved from e-codices (https://www.e-codices.unifr.ch/en/list/one/bge/gr0044)
- pagesToVerses.json describes the map between each manuscript page and the verses it contains. An example for the pages 1 and 10 is

```
{
  "1":[[1,[1,9],[1,9]]],
  "10":[[1,[96,108],[95,108]]],
}
```

- annotations.json contains data about annotated information on the manuscript. The annotation feature of the iliad viewer has been currently disabled.

| Localization

The *i18n* contains the language files used for the localization in english and french languages of the application.

| Other data

Other folders and files concur to the visualizations provided by the iliad viewer. The most relevant of them are:
- Logos that contains the official logos shown in the home page
- Scholie-page.json that contains the static data about the scholie D
- voc.json that contains a vocabulary from greek to french