

Main

- Create a dataframe to record the number of refs collected on each page
 - Structure: [page, mix_num_refs, template_num_refs, text_num_refs, total_num_refs]
 - Name: df_ref_number
- Create a dataframe to load the references
 - Structure: [page, ref_type, ref_extracted, template, ref_no_template, parsed_template]
 - Name: df_refs
- Create a list of <*.JSON> files in the wiki_pages directory
 - Name: json_files_wiki_pages_directory
- Loop over the N elements of json_files_wiki_pages_directory:
 - Open the file "<PATH>" + "<FILE_NAME>" + ".json"
 - Read the "source" key (to get text)
 - Output: source_text
 - Extract references:
 - Input: source_text
 - Output: refs
 - Add refs to df_refs
 - Input: refs
 - Remove duplicated items from df_refs based on "template"
 - Parse templates
 - Input: df_refs
 - Output: df_refs' new columns
 - Add the number of extracted references to df_ref_number
 - Input: df_refs
 - Output: df_ref_number
- Save df_refs
 - Output: wikipedia_references.csv
- Save df_ref_number
 - Output: wikipedia_number_of_references.csv

Extract references:

Input: source_text

- Extract refs from source only between tags
 - Input: source_text
 - Output: ref_list_tags,
 number_ref_tags,
 page_off_tags
- Extract refs from page off tags source only template
 - Input: page_off_tags
 - Output: ref_list_off_tags_only_templates,

Number_refs_off_tags_only_templates,
page_off_tags_templates

- **Extract refs from page off tags and templates (references sections)**

- **Input:** page_off_tags_templates
- **Output:** ref_list_only_ref_sections,
 number_only_ref_sections
- **Join ref lists**
 - **Input:** ref_list_tags,
 ref_list_off_tags_only_templates,
 Ref_list_only_ref_sections
 - **Output:** refs

Output: refs

Extract refs from source only between tags

Input: source_text

- **Get text between tags "<ref...<ref/>"**
 - **Input:** source text
 - **Output:** between_tag_list (List of text between tags)
- **Remove tags + text between tags from the source text**
 - **Input:** source text
 - **Output:** page_off_tags
- **Create a list to save extracted references**
 - **Output:** ref_list
- **Loop over the M elements of the between_tag_list:**
 - **Extract template(s):**
 - **Input:** text_i
 - **Output:** template
 - **if templates:**
 - text_no_template = remove(text_i, pattern=template)
 - **if** len(text_no_template) > len(text_i)*0.2:
 - ref_list.append(('mix', text_i, templates,
 text_no_template))
 - **else:**
 - ref_list.append(('template',text, templates, None))
 - **else:**
 - ref_list.append(('text', text, None, None))

Output: ref_list, len(ref_list), page_off_tags,

Extract refs from cleaned source only template

Input: page_off_tags

- wikicode = mwparserfromhell.parse(page_off_tags)
- **templates** = wikicode.filter_templates()
- Page_off_tags_templates= remove(text_i, pattern=**templates**)
- Ref_list = []
- For temp in **templates**:
 - Ref_list.append(('template', temp, temp, None))

Output: Ref_list, len(ref_list), Page_off_tags_templates

Extract refs from page_off_templates (references sections)

Input: page_off_tags_templates

- end_text_section= ["== Reference", "==Reference", "== reference",
"==reference", "== Citatio", "==Citation", "==citation", "==citation",
"== Source", "==Source", "==source", "==source", "== Bibliography",
"==Bibliography", "==bibliography", "==bibliography", "== Note",
"==Note", "==note", "==note"]
- **text_ref_sections** = page_off_templates.split(end_text_section,
obs=first)
- refs_asterisco = find.all(text_ref_sections, pattern='* letter or
*letter')
- Ref_list = []
- For ref in ref_arter_asterisco:
 - Ref_list.append(('text', ref, None, None))

Output: Ref_list, len(Ref_list)