TODO For Meeting on Nov 24

User requirements: It is hard searching for someone trying to bug a camera because smart phones may perform a little better than just cameras (lighter, photo editing capabilities (photos taken with smartphones can be edited directly on the device, whereas images captured by some cameras require post-processing before use.), more powerful usages in the same price, etc.), so targeting at someone who only just want to search for cameras is a little bit difficult. But through long time of explaining and communicating, I can ask somebody for help. We can assume that they are the consumers who are searching for cameras (I convinced them to take on the role of my volunteers, pretending to be consumers to test my graduation project.).  
 Further narrow down the project idea: specific in cameras, if time is permitted, then we can explore more, centralized by cameras and something related to it (like adding more leaves in a main tree).  
 Prototype will be finished as soon as possible and then submitted into my GitHub account’s personal folder.

LLMs: I succeed in making a Copilot in my Windows 11 system.

Google’s knowledge graph:   
 Link: [How Google's Knowledge Graph works - Knowledge Panel Help](https://support.google.com/knowledgepanel/answer/9787176?hl=en)  
 Knowledge graph is greatly powerful if we use it correctly. Facts in knowledge graph come from a variety of sources that compile information. Google’s developers also receive factual information directly from content owners in various ways, including from those who suggest changes to knowledge panels they’ve claimed. Camera related knowledge is also inside.  
 How does Google correct or remove Knowledge Graph information?

Google processes billions of searches per day. Automation is the only way to handle this many searches. This means the best way to improve results is to improve our automated systems, our search algorithms (designing a well-structured knowledge for cameras is important, facts and algorithms are also really important, so users’ feedback should be paid much attention to.)  
 Link: [Google Knowledge Graph Search API  |  Google for Developers](https://developers.google.com/knowledge-graph?hl=zh-cn)

Google Knowledge Graph Search API:  
 Introduction: The Knowledge Graph Search API lets you find entities in the [Google Knowledge Graph](https://googleblog.blogspot.com/2012/05/introducing-knowledge-graph-things-not.html). The API uses standard [schema.org](http://schema.org/) types and is compliant with the [JSON-LD](http://json-ld.org/) specification.  
 Typical use cases:  
 Getting a ranked list of the most notable entities that match certain criteria/ Predictively completing entities in a search box/ Annotating/organizing content using the Knowledge Graph entities. (For cameras, it should also be OK)  
 For detailed information about the API methods and parameters: [API Reference](https://developers.google.com/knowledge-graph/reference/rest/v1).  
 Sample request

The following example shows one kind of request you can send to the API. (But check the [Prerequisites](https://developers.google.com/knowledge-graph/prereqs) section first. You'll also need to insert your own API key.)



The sample search above returns a JSON-LD result like the following:

{  
  "@context": {  
    "@vocab": "http://schema.org/",  
    "goog": "http://schema.googleapis.com/",  
    "resultScore": "goog:resultScore",  
    "detailedDescription": "goog:detailedDescription",  
    "EntitySearchResult": "goog:EntitySearchResult",  
    "kg": "http://g.co/kg"  
  },  
  "@type": "ItemList",  
  "itemListElement": [  
    {  
      "@type": "EntitySearchResult",  
      "result": {  
        "@id": "kg:/m/0dl567",  
        "name": "Taylor Swift",  
        "@type": [  
          "Thing",  
          "Person"  
        ],  
        "description": "Singer-songwriter",  
        "image": {  
          "contentUrl": "https://t1.gstatic.com/images?q=tbn:ANd9GcQmVDAhjhWnN2OWys2ZMO3PGAhupp5tN2LwF\_BJmiHgi19hf8Ku",  
          "url": "https://en.wikipedia.org/wiki/Taylor\_Swift",  
          "license": "http://creativecommons.org/licenses/by-sa/2.0"  
        },  
        "detailedDescription": {  
          "articleBody": "Taylor Alison Swift is an American singer-songwriter and actress. Raised in Wyomissing, Pennsylvania, she moved to Nashville, Tennessee, at the age of 14 to pursue a career in country music. ",  
          "url": "http://en.wikipedia.org/wiki/Taylor\_Swift",  
          "license": "https://en.wikipedia.org/wiki/Wikipedia:Text\_of\_Creative\_Commons\_Attribution-ShareAlike\_3.0\_Unported\_License"  
        },  
        "url": "http://taylorswift.com/"  
      },  
      "resultScore": 4850  
    }  
  ]  
}

图示

描述已自动生成

Example process of using a google knowledge graph:

* 1. Step up PR and link building game (Let’s deal with the most challenging aspect first.) ...
* 2. Use schema markup on site. Schema.org is the officially recommended markup for structured data. ...
* 3. Sign up for Google My Business ...
* 4. Create a wikidata.org entry ...
* 5. Get a Wikipedia page ...
* 6. Be consistent ...