



# Improving Findability with Taxonomy, Facets, Picklists, Controlled Vocabularies and Mindmapping

For the Google Doodle Archive

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## Introduction

The Google Doodle Archive currently lacks structures to narrow down the finding of previous doodles beyond a catch-all search. The purpose of this exercise is to develop knowledge organization systems to improve findability of previous Google Doodles on the archive website.

## Deliverables

- Facets
- Pick Lists
- Synonym Rings
- Semantic Network Map
- A Sample Taxonomy of the “Subject” Facet
- Instructions for Use / Application

## Project Scope

This report provides an overview of strategies and classification of the Google Doodle archive with examples for use but is not exhaustive of every possibility or example.

## Google Doodle Facets

The five facets chosen here are proposed as an organizational system to find facets using differentiating data about the doodles.

Facet	Description
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Creator	Name of artist / illustrator / producer of Doodle. Examples: Shannon Wright, Betsy Bauer.
Scope of Reach	Geographic area(s) doodle was shown in. Examples: South Carolina, Germany, Indonesia and China.
Occasion / Event	A doodle dedicated to a holiday or event. Examples: Winter Olympics, Lunar New Year.
Media	Types of media used in a doodle. Examples: video, interactive, audio, animation.
Date	The date the doodle was featured. Examples: 2017, 2016.
Color	A prominent color featured in a doodle's design. Examples: Blue, red, silver.

## Synonym Rings & Pick Lists

### 1. Creator

- Contest Winner
- Google Team
- Organization
- Professional Artist
- Other

#### Synonym Rings:

##### Google Team

Googler, Google Doodler, Doodler, Google Employee, Google Employees

##### Organization

Nonprofit, company, institution, group, agency, association, society, firm, outfit, organized body, business, system, unit, grouping.

### 2. Place

- Africa
- Antarctica

- Asia
- Caribbean
- Central America
- Europe
- Oceania
- North America
- South America
- Other

### **Synonym Rings:**

#### **Oceania**

Polynesia, Micronesia, Melanesia, Australasia, Malay Archipelago, Australia, New Zealand, Pacific Islands, Oceanic, Oceanica.

#### **North America**

New World, Canada, Mexico, United States, Western Hemisphere, America, USA, North American, northern hemisphere, occident.

## **3. Subject**

- Animals
- Art
- Business
- Culture
- Design
- Education
- Law
- Literature
- Mathematics
- Music
- Philosophy
- Politics
- Pop Culture
- Religion
- Science
- Social Justice
- Sports
- Other

## Synonym Rings:

### Sports

Athletics, amusement, game, competition, pastime, diversion, recreational activity, entertainment, athletic event, match, matchup, championship, rivalry, bracket

### Social Justice

Activism, civil rights, equality, equity, fair shake, impartiality, fairness in society, social equity, social fairness, equal rights, justice.

## 4. Date

A year should be assigned to each doodle (via tagging / metadata – Doodles are added to the archive likely on later dates than featured on Google) based on when it was shown. It's possible a doodle can be shown more than once, so a Doodle may need to be under multiple years if reused.

- 2018
- 2017
- 2016
- 2015
- 2014
- 2013
- 2012
- 2011
- 2010
- 2009
- 2008
- 2007
- 2006
- 2005
- 2004
- 2003
- 2002
- 2001
- 2000
- 1999
- 1998

(Google Doodles first started in 1998 – as this is an archive, a list of years felt to be an appropriate way to search).

### **Synonym Rings:**

#### **2018**

Two thousand eighteen, Twenty eighteen, this year, MMXVIII

#### **2000**

Y2K, MM, year two thousand, 21<sup>st</sup> century, the new millennium, turn of the century

## **5. Color**

- Black
- Blue
- Gray
- Green
- Orange
- Purple
- Red
- White
- Yellow

### **Synonym Rings:**

#### **Blue**

Azul, aquamarine, cyan, Prussian blue, midnight blue, powder blue, sapphire, navy, azure, sky blue, peacock blue, indigo, royal blue, baby blue, steel blue, cobalt, teal, turquoise, beryl, cerulean

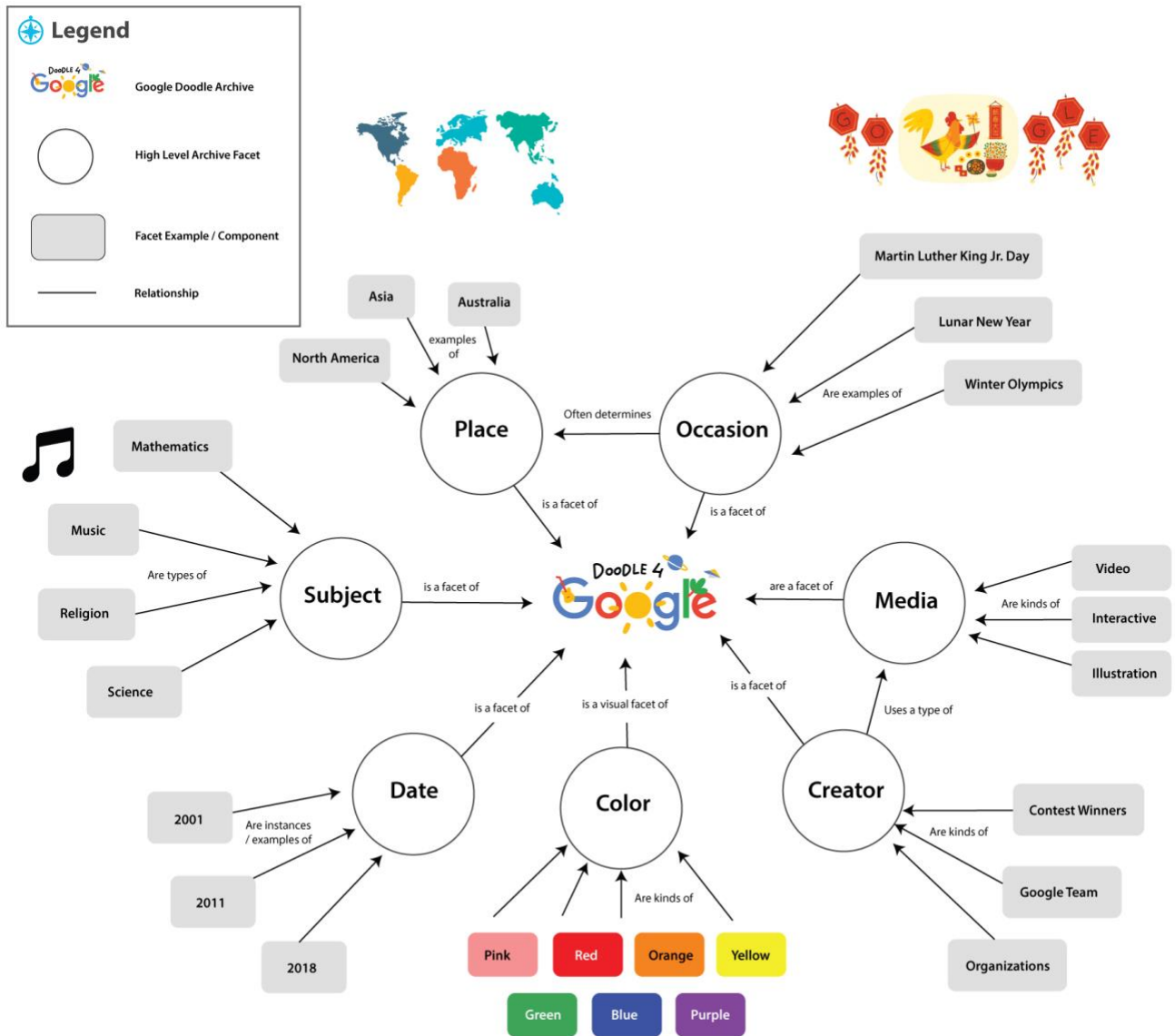
#### **Orange**

Apricot, carrot, cantaloupe, peach, coral, red-yellow, salmon, tangerine, titian, citrus.

## Semantic Network

A visual semantic network explains the relationships of the facets and possible components the Google doodles.





## A Sample Taxonomy of “Subject”

A taxonomy is a classification structure designed to provide order and show similarities. The following taxonomy breaks down the concept of “subject” and how it could be used to classify doodles from the Google Archive.

This taxonomy is not exhaustive of all the of the possible topics for purposes of this assignment; realistically, some subcategories deeper in the taxonomy could also become too nuanced to have frequent doodles that pertain to them, lessening their usefulness as a category.

Two categories in particular are shown in greater detail and are bolded – science and social justice.

## **. Subject**

.. Animals

.. Art

.. Business

.. Culture

.. Design

.. Education

.. History

.. Law

.. Literature

.. Mathematics

.. Music

.. Philosophy

.. Politics

.. Pop Culture

.. Religion

.. **Science**

... Astronomy

... Biology

.... Marine Biology (oceanography)

.... Microbiology

... Chemistry

... Botany

... Computer Science

... Ecology

... Geology

... Medicine

.... Bacteriology

- .... Oncology
- .... Pharmacology
- .... Virology
- ... Neuroscience
- ... Physics
- ... Zoology
- ... Other (science topics that don't fit under more common disciplines)

## **.. Social Justice**

- ... Activism
- ... Economic (Labor, safety, Unions)
- ... Gender Equality (Sexism, Women's rights)
- ... Legal
  - .... Death Penalty
  - .... Right to Fair Trial
  - .... Right to Vote
  - .... Other (legal issues)
- ... LGBT
  - .... Homophobia (bullying, hate crimes)

- .... Gay Marriage
- .... Pride
- .... Transgender Issues
- .... Other (LGBT topics)
- ... Poverty
- ... Philanthropy (humanitarian aid, charitable giving)
- ... Racial Equality (Racism)
- ... Other (kinds of social justice)
- .. Sports
- .. Other Topics

## Test Examples



Dr. Esther Park's 142<sup>nd</sup> Birthday  
<https://www.google.com/doodles/dr-esther-parks-142nd-birthday>

. Subject  
 .. Science  
 ... Medicine

. Subject  
 .. Social Justice  
 ... Gender Equality

Outside of subjects, this could also be found under:

	<ul style="list-style-type: none"> <li>.Place</li> <li>.. Asia</li> <li>... South Korea</li> </ul>
 <p style="text-align: center;"> <b>Google</b>      Celebrating George Peabody  <a href="https://www.google.com/doodles/celebrating-george-peabody">https://www.google.com/doodles/celebrating-george-peabody</a> </p>	<ul style="list-style-type: none"> <li>. Subject</li> <li>.. Social Justice</li> <li>... Philanthropy</li>   <li>.Place</li> <li>.. North America</li> <li>... United States</li> </ul>

## Instructions for Use

The goal of this taxonomy is to classify Google Doodles on the archive website. This taxonomy works from general to more specific categories. Begin with the common category and try to get as detailed as possible. Avoid forcing the topic into a subcategory that is not relevant.

The number of dots before the item show how many layers deep into the hierarchy the item is. The doodles would likely need to be maintained by a team in order for the data to be correct, so the dots prevent users from losing their place. It could also function as a breadcrumb or search feature:

- . Top level
- .. Subcategory
- ... Child of subcategory
- .... Child of the child (above)

## Conclusion

The Google Doodle Archive had amassed thousands of works, without filtering capabilities to easily find specific doodles.

Facets, pick lists, controlled vocabularies via synonym rings, a semantic network and a sample taxonomy were developed to better structure the archive. However, not all taxonomy options were completely built out for the purposes of this report.

Through this process, I learned a lot about the complexities and considerations of creating a system that can effectively cover content use cases and structures.

As a next step, a business and development team should evaluate the scope of work and create a plan to implement the knowledge organization system. It may be easiest to start with one of the facets in particular based on existing metadata and work up to the others. Old content may need to be manually tagged, or a tool may be chosen to do automatic tagging.