- # Business Use Case: Genre Font Selector API

Agenda

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2. Purpose & Requirements
3. Semantic Descriptors Representations.
4. State Diagram
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What about fonts?

"It's not ***what*** you say, it's ***how*** you say it!"

Fonts give a unique and various way to visual expression of print. From defining a BIG CONCEPT to addressing

- multiple
- facts
- of
- supporting
- statements.

The size, color, style of the font plays an important role in defining printed material and bring an expected notion of the genre.

For instance, a comic strip font will have some **whimsy** while a professional document will appear more formal.

Genre Font Selector API

Purpose:

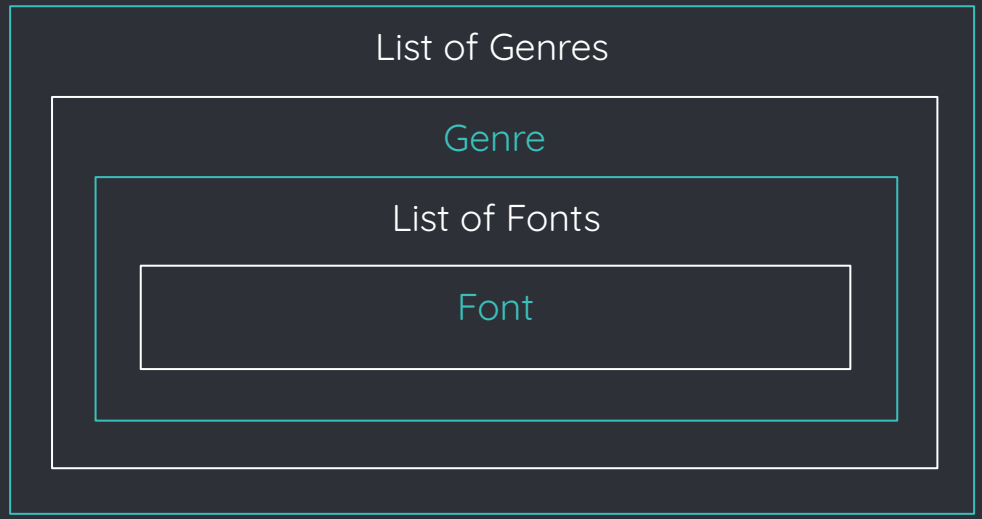
- Provide top recommended fonts by genre.

Requirements:

- Ability to select desired genre.
- Ability to search top font lists that match by genre.
- Fonts result set displayed in font style including download option of selected font.

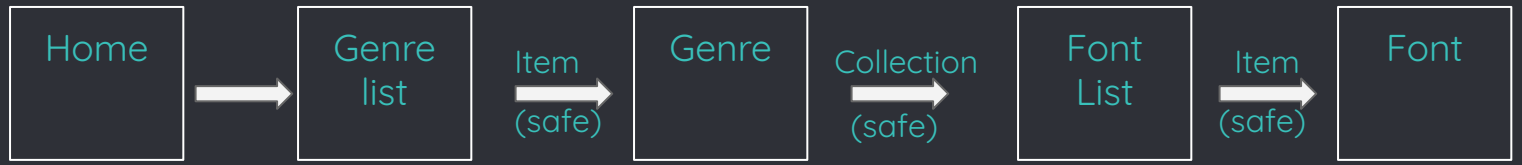
Semantic Descriptors & Representations

What the client gets from the API.



The bits of data that are sent back and forth.

State Diagram

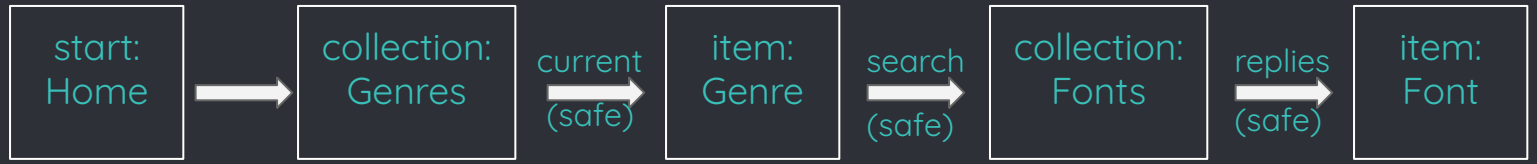


Each box represents one kind of representation such as a document that groups together the semantic descriptors.

Arrows connect representations and represent state transitions triggered by HTTP requests.

This is a read-only API so all state transitions are safe.

Reconcile Names - Do our schematics or link relations already exist?



IANA - Link Relations

start: Refers to the first resource in a collection of resources.[HTML 4.01 Specification]

collection: The target IRI points to a resource which represents the collection resource for the context IRI. [RFC6573]

current: Refers to a resource containing the most recent item(s) in a collection of resources.[RFC5005]

item: The target IRI points to a resource that is a member of the collection represented by the context IRI. [RFC6573]

search: Refers to a resource that can be used to search through the link's context and related resources. [OpenSearch]

replies: Identifies a resource that is a reply to the context of the link. [RFC4685]

Media Type

Media Type ⟶ JSON

Why is JSON the chosen media type?

JSON is compatible with both the application and protocol schematics.

JSON is easy to read and efficient.

It is both human-readable and machine-readable.

It is compatible with the IANA relationships.

JSON is supported on most browsers.

JSON is widely used for client and web applications.

Profile

A new profile is not necessarily needed since all schematics and link relations are existing.
However, in order to not have to link to multiple individual API profiles, a new profile was created to include all of them together thus needing to only link to one profile.

```
<alps>
 <descriptor id=" start" type="semantic" href="http:/alps.io/iana/relations.xml#start " />
 <descriptor id=" collection" type="semantic" href="http:/alps.io/iana/relations.xml#collection "
   <descriptor id=" current" type="semantic" href="http:/alps.io/iana/relations.xml#current " />
   <descriptor id=" item" type="semantic" href="http:/alps.io/iana/relations.xml#item " />
</descriptor>

<descriptor id=" search" type="semantic" href="http:/alps.io/iana/relations.xml#search " >
  <descriptor id=" collection" type="semantic"
href="http:/alps.io/iana/relations.xml#collection "/>
  <descriptor id=" replies" type="semantic" href="http:/alps.io/iana/relations.xml#replies " />
  <descriptor id=" item" type="semantic" href="http:/alps.io/iana/relations.xml#item " />
</descriptor>
</alps>
```

Implementation

1. An HTTP server will be developed that implements the state diagram.
2. HTTP requests will trigger the appropriate state transition and will receive a representation in the response.
3. Each representation will use the JSON media type.
4. Each representation will link to the new profile.
5. The payload will have values of the schematic descriptors.
6. Hypermedia controls how clients how to trigger state transitions.

Publication

Users can find and use the API once the billboard URL to the home page is published.

The profile will be published in the ALPS registry at alps.io.

No new media types need to be published since an existing one (JSON) was used.

No publishing is required for link relations and schematics since existing ones were used.

ROI

Why automate font selection?

Fonts sell your ideas, your company, yourself!

The font used is a contributor to success and ROI is based on the genre using just the right font to capture the maximum audience.

Looking for a new job? The "Calibri" font grabs attention best for resumes.

Needing to sell a new business proposal? The "EB Garamond" or "Times New Roman" fonts are best suited for traditional business documents.

Want to sell a new comic book series? Use the "Comic Sans MS" font.

The Genre Font Selector API will save time researching the best fonts and will deliver the optimum product to get the attention of consumers.

Resources

IANA, Link Relations, as referenced at
http://www.iana.org/assignments/link-relations/link-relations.xhtml

RESTFul Web APIs, Leonard Richardson & Mike Amundsen, 2013

Monster.com, “The best fonts for your resume ranked”, as referenced at
https://www.monster.com/career-advice/article/best-font-for-resume

WebFX, “Comic Sans: The Font Everyone Loves to Hate”, as referenced at
https://www.webfx.com/blog/web-design/comic-sans-the-font-everyone-loves-to-hate/

Chron, “The Best Fonts for Business Letters”, as referenced at
https://work.chron.com/fonts-business-letters-8930.html