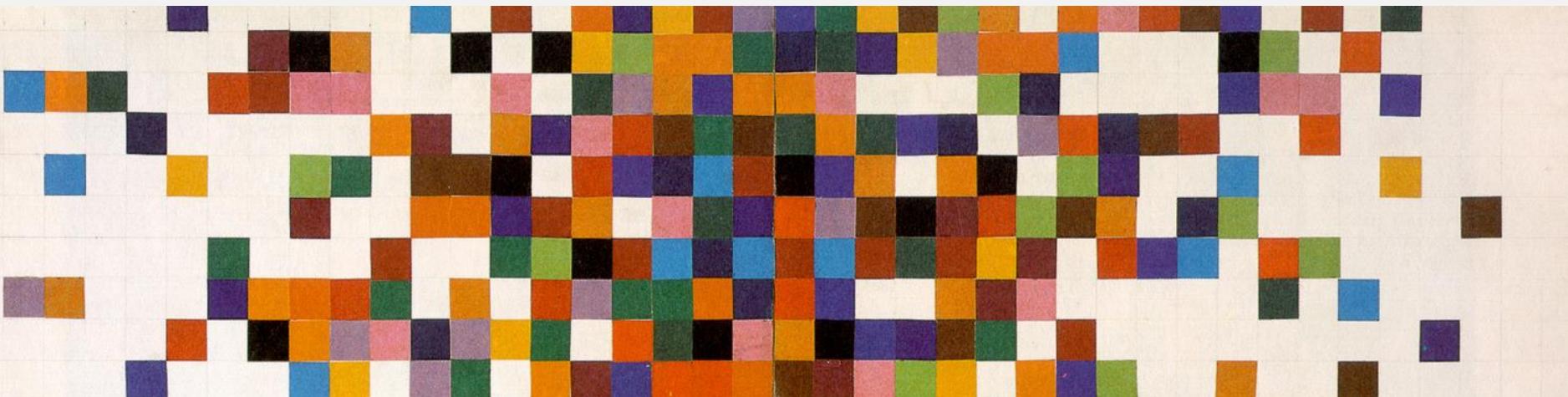


Power of Art

# Hackathon



March 11-13, 2016

# WELCOME

Ariel Schwartz

The Kathy and Ted Fernberger Associate Director of Interactive Technologies

Bill Weinstein

The John H. McFadden and Lisa D. Kabnick Director of Information and Interpretive Technologies

Friday, March 11, 2016

# Challenge

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- Create easy to use tools that guide visitors and help them to see art from a personal perspective.
- Encourage sharing and social interactions.
- Create an entertaining and playful visitor experience.



# Judging Criteria

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## INNOVATION:

- Is the project original and compelling?
- Does it make creative use of technology and the collection?

## FEASIBILITY:

- Does the project have a defined mission and outline how to meet its overall goals?
- Does the project reflect design excellence and technical quality?
- Is the project scalable and sustainable?

## ENGAGEMENT:

- Does the project engage and motivate?
- Does it create new ways for visitors to interact with each other in the galleries and with the collection?
- Does the project thoughtfully approach the social experience of art?



# What You're Getting

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## Digital resources

- Collection data and images
- iBeacon data
- Data dictionaries

## Analog resources

- Demonstrations
- Staff Here for You
- Other Resources



# Rules

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- Be respectful of each other, visitors and the art.
- Photography/Privacy.
- Museum's Code of Conduct.
- We reserve the right to ask you to leave if needed.
- Please go up to any staff member to report an issue or to ask a question.



# General Schedule

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## FRIDAY

6:30 – 9pm Friday Night Orientation

By 9pm finalize teams

## SATURDAY

9am – 9pm Development in the Museum

- Mini workshops throughout the day
- Food and snacks

## SUNDAY

By 10am submit final projects to hackathon.io

10am – 12pm Judging Sessions

2 – 4pm Presentations & Awards Event

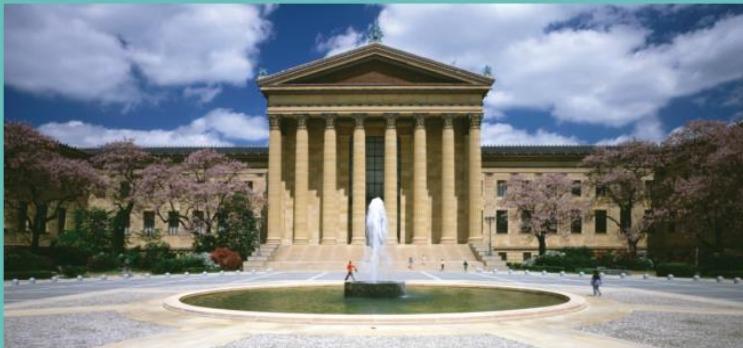


A is for Art Museum

?



A is for Art Museum



Here is a building filled with art. What will you find inside?



A is for  
Art Museum

Philadelphia  
Museum of  
Art



D is for Dancer



This ballerina wears a fluffy tutu and a silk ribbon in her hair. What other parts of her costume do you see?



Pretend you are  
Edgar Degas, the

D is for Dancer: screen shot and family activity





- 2 min. average per object
- 90 min. average per session
- 30% completed all 26 letters
- Over 50,000 galleries and corridors visited

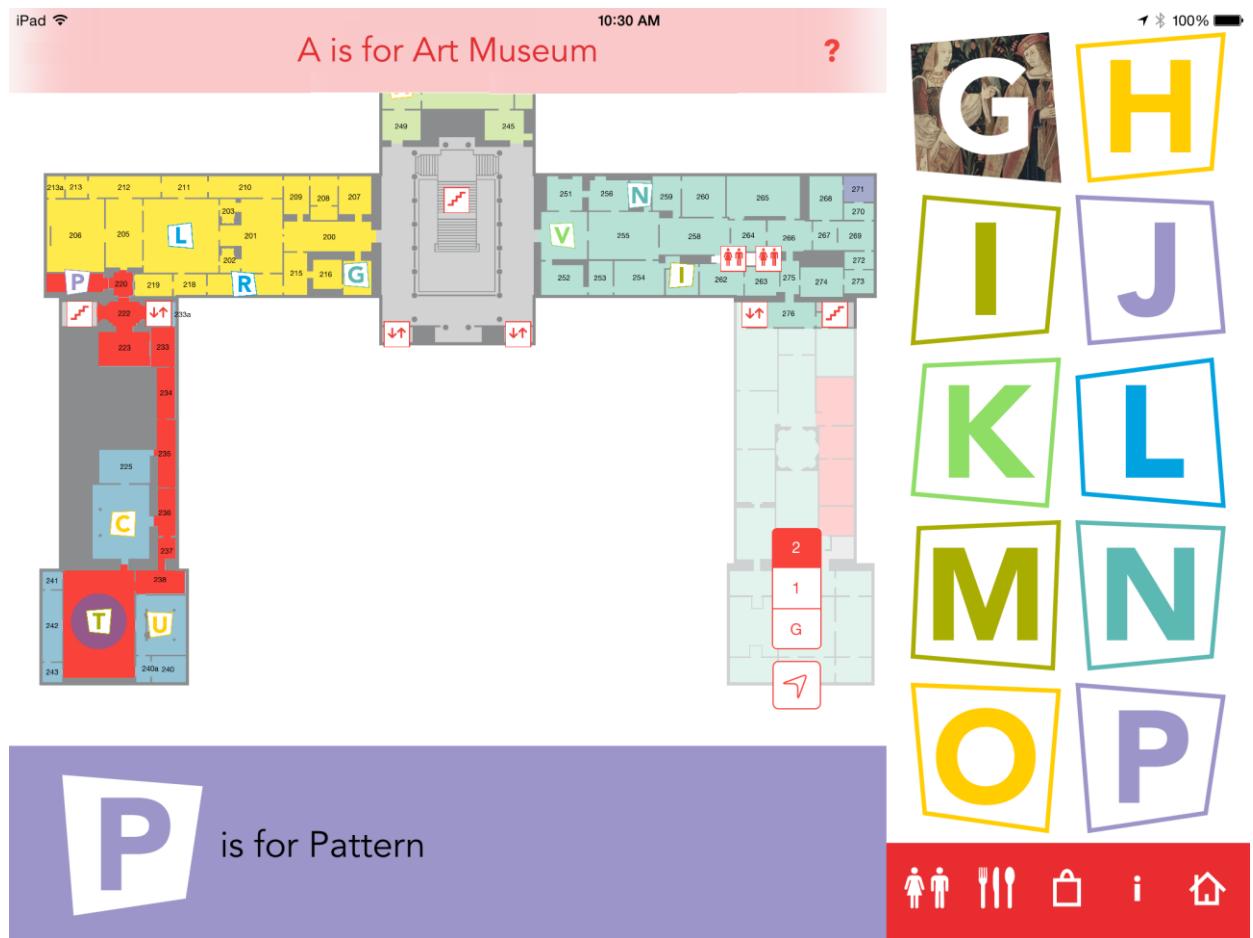


Installing iBeacons in a gallery.

- 280 active iBeacons
- Wayfinding to all Restrooms, Shopping and Restaurants



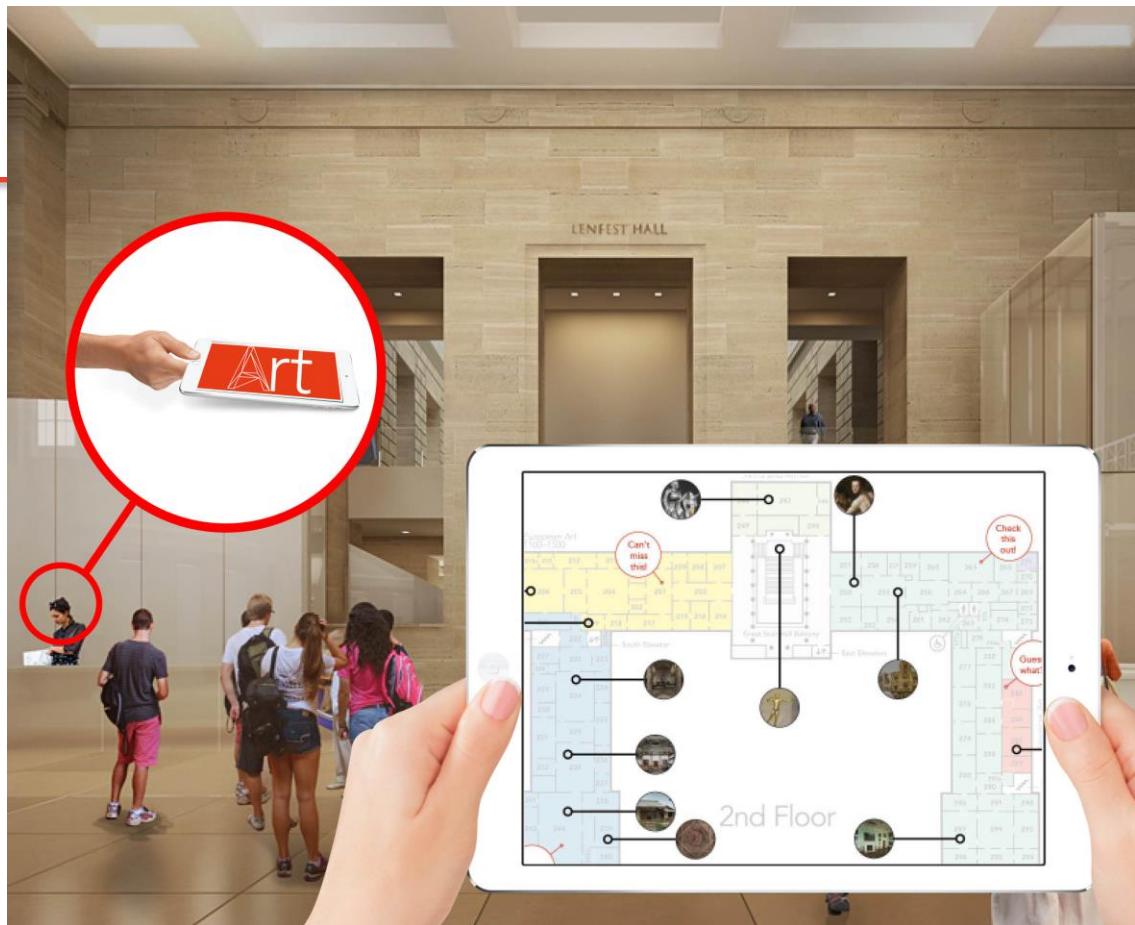
# WAYFINDING



# “APOLLO” MOBILE PLATFORM

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- Supports Engagement
- Activates the Collections
- Acts as a Knowledgeable Guide

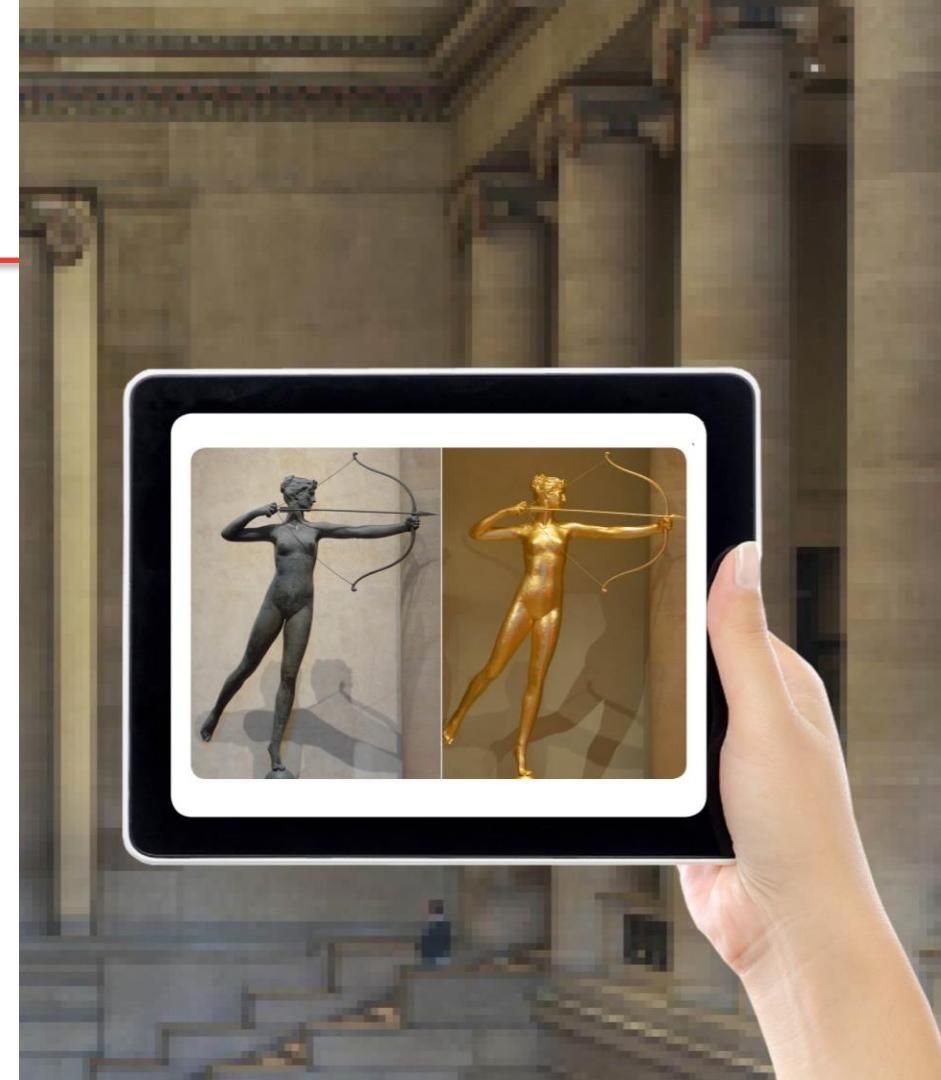


# "APOLLO" MOBILE PLATFORM

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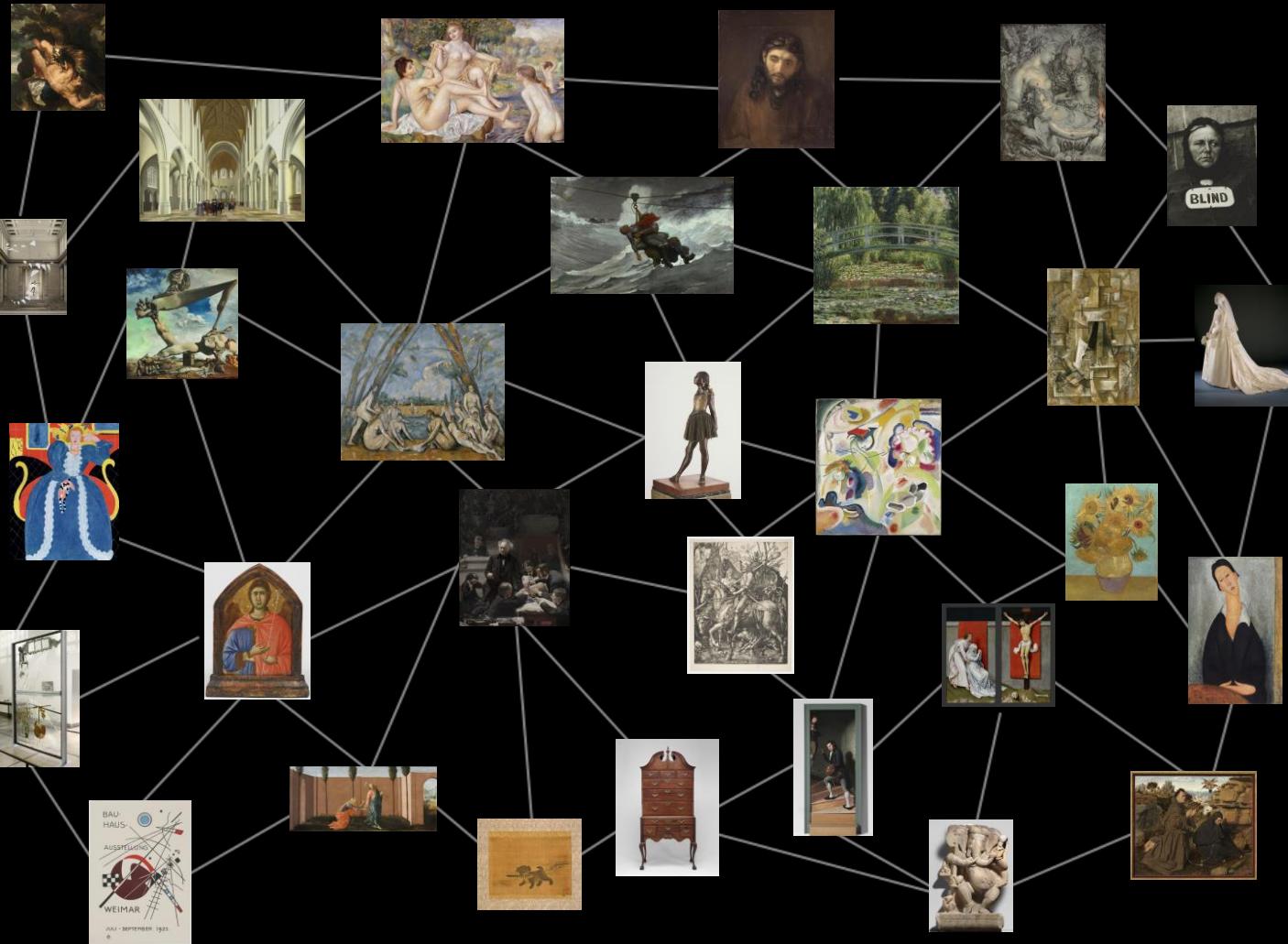
SEE OBJECTS IN NEW WAYS

- X-Ray and Underpainting
- Conservation
- Comparisons
- Close Looking



# HIGHLIGHTS THEME









# Collection Data and Images

Jessica Milby

Assistant Director for Collection Information

@jessica.milby on Slack



# Collection Data

Hackathon collection data includes information for:

5,305 Museum collection objects

...that are on view in the galleries

...and in the public domain.\*

\*Works for which exclusive intellectual property rights have expired, been forfeited, or are inapplicable.

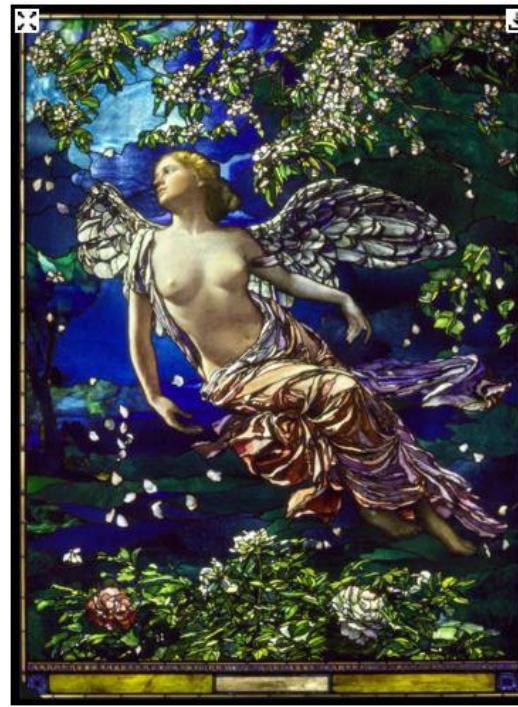


# Collection Data

Data is available in an Excel spreadsheet and a JSON file. Both files contain the same objects and information.

We're providing a data dictionary explaining the collection information.

Each object's URL is included in the data.



Spring

Designed by John La Farge, American, 1833 - 1910. Assembled by Thomas Wright, American (born England), 1858 - 1918. Painted by Juliette Hanson, American, active 1881 - c. 1920.

Geography:

Made in United States, North and Central America

Date:  
1901-1902

Medium:  
Opalescent glass, painted glass, lead

Dimensions:  
8 feet 4 inches × 69 1/2 inches (254 × 176.5 cm)

Curatorial Department:  
American Art

\* Gallery 111, American Art, first floor

Accession Number:  
1977-33-1

Credit Line:  
Gift of Charles S. Payson, 1977

Social Tags [?]

angel [x] ann clapham [x] faerie [x] fairy [x] female nude [x]  
freedom [x] glass [x] john la farge [x] juliette hanson [x]  
lead [x] opalescent glass [x] painted glass [x] seasons [x]  
spring [x] stained [x] thomas wright [x] wings [x] woman [x]

[Add Your Own Tags]

Label:

John La Farge was one of the first American artists to respond to Japanese art. Inspired by the flowing contours, asymmetrical compositions, and color harmonies of the East, he fused these elements with Western artistic motifs, reminiscent of renaissance painting. La Farge, who invented modern opalescent glass, called this window a "picture work in glass."

Explore the Collections



This Artist/Maker  
Classification  
Curatorial Department

Country of Origin



# Collection Images

All 5,305 primary object images are available at 1500 pixels, 72 ppi, on thumb drives.

Image file names are included in the data.

The 5,305 primary images as well as secondary images are available as individual downloads from the PMA online collection object pages at 1500 pixels, 72 ppi.



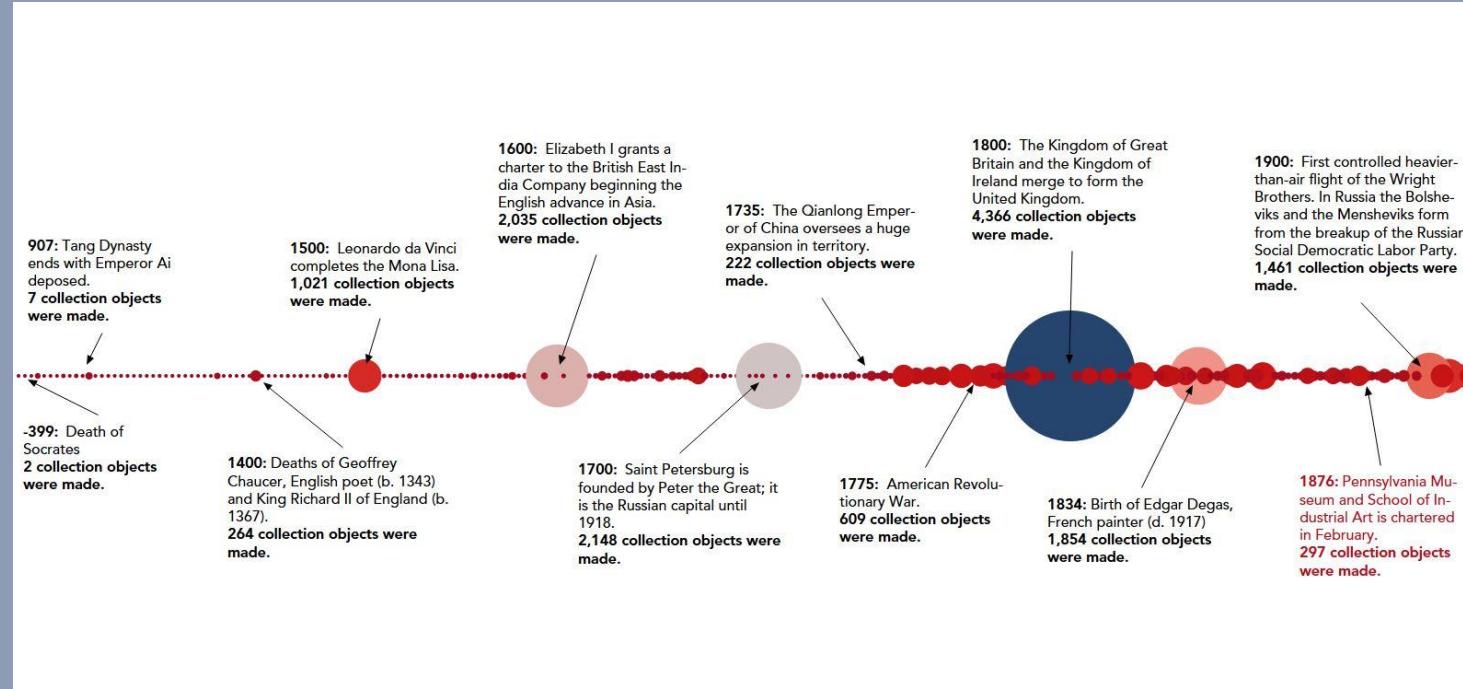
Philadelphia  
Museum of  
**Art**

# Example



FIELD NAME	DATA
ObjectID	44007
ObjectNumber	1930-1-188
Image Filename	1930-1-188v1-pma.jpg
Artist Name 1	Workshop of Iacobus Fiamengo, Flemish, recorded in Naples, Italy, between 1594 - 1602
Artist Name 2	Scenes based on engravings made by Dirk Volkertsz. Coornhert, Netherlandish, 1522 - 1590
Artist Name 3	After designs by Maarten van Heemskerck, Netherlandish (active Haarlem and Rome), 1498 - 1574
Artist Name 4	
Artist Name 5	
Artist Name 6	
Artist Name 7	
Title of Work 1	Writing Cabinet
Title of Work 2	
Title of Work 3	
Title of Work 4	
Date	c. 1600
Date Search Begin	1595
Date Search End	1605
Medium	Ebony with ivory inlay
Materials	ebony, ivory
Techniques	inlay (process)
Supports	
Dimensions	24 7/8 x 35 3/4 x 16 3/4 inches (63.2 x 90.8 x 42.5 cm)
Gallery Location	Gallery 250, European Art 1500-1850, second floor
Geography	Italy
Latitude	42.8330
Longitude	12.8330
Credit Line	Purchased with Museum funds from the Edmond Foulc Collection, 1930
PMA URL	<a href="http://www.philamuseum.org/collections/permanent/44007.html">http://www.philamuseum.org/collections/permanent/44007.html</a>

# What can we do with all this?



Have fun with art and data and make something cooler than this!

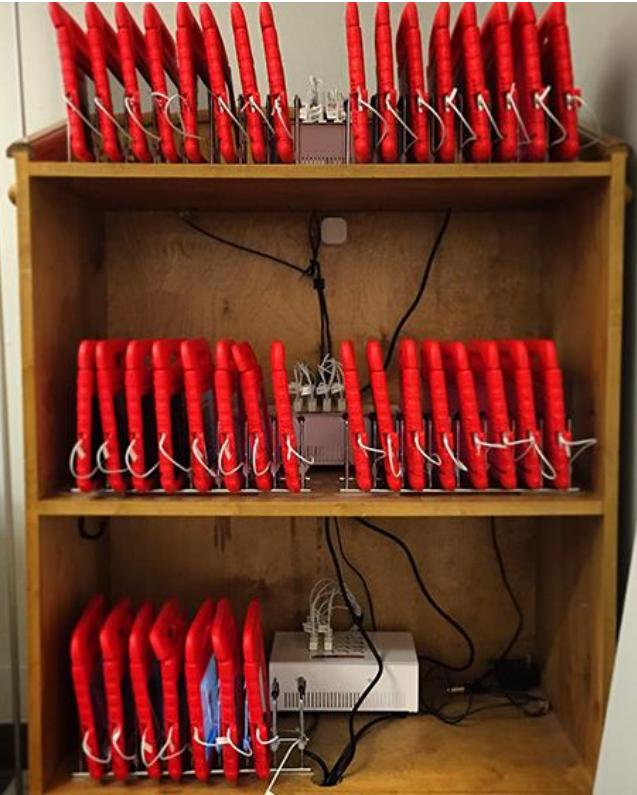
# iBeacons

Peter Alt  
Interactive Developer

@peter on Slack  
@pewalt on Twitter



# Indoor wayfinding & mobile platform



A is for Art Museum

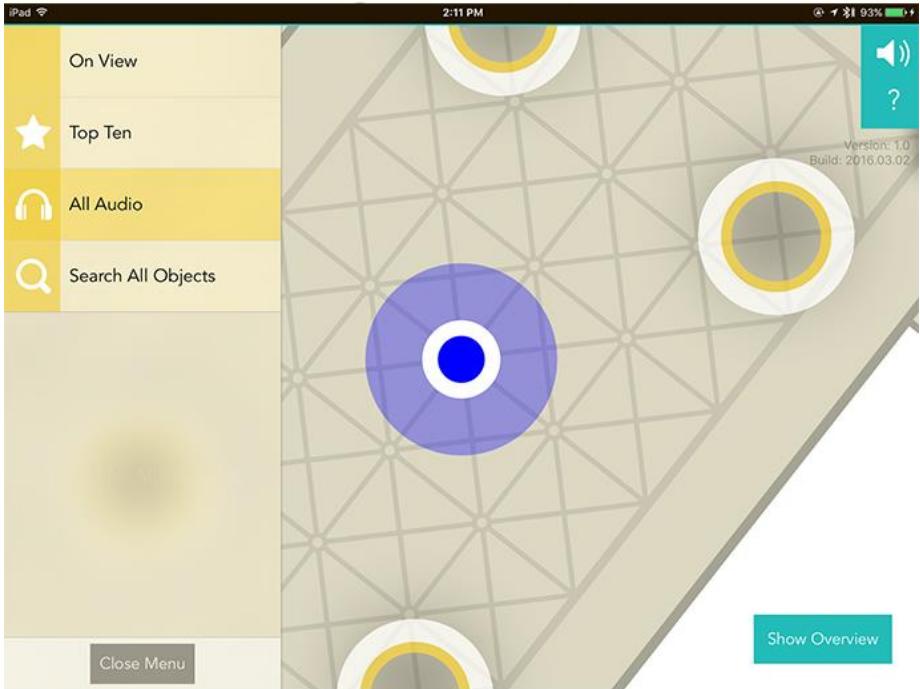


2:29 PM

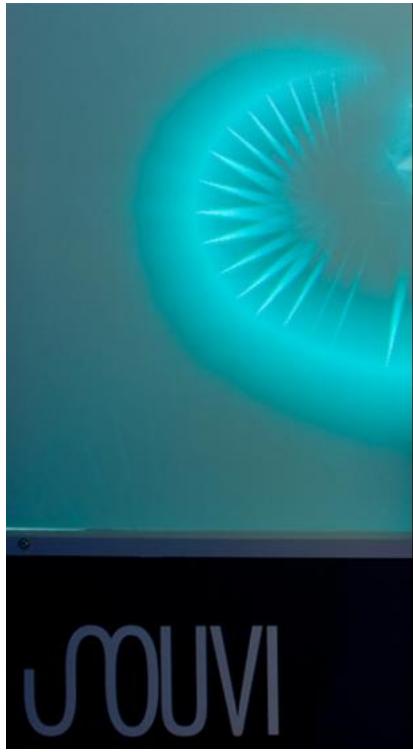
A is for Art Museum  
VERSION: 0.9.6 BUILD:2015.06.17

A is for Art Museum

- Test corridor for actual user testing in the space
- Heads up experience
- Remembers choice of stairs or elevator preference
- Visitors walked through more than 58,000 galleries with this app
- Average session 84 minutes



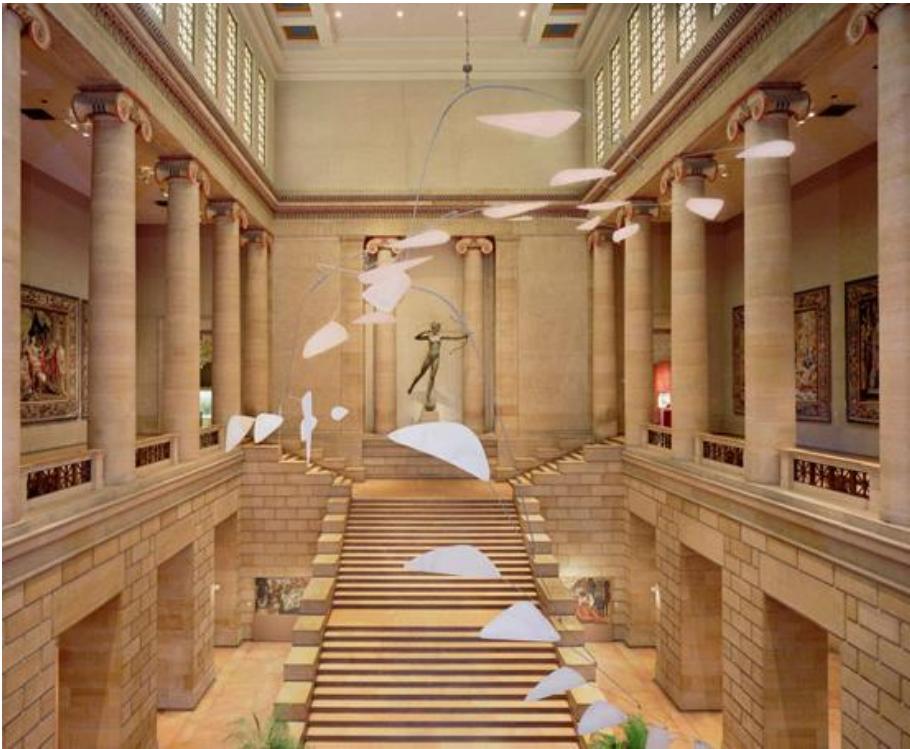
- Replacing existing Audio Guides
- Integration of Content Management System for the mobile platform
- Experience different to wayfinding in Main Building



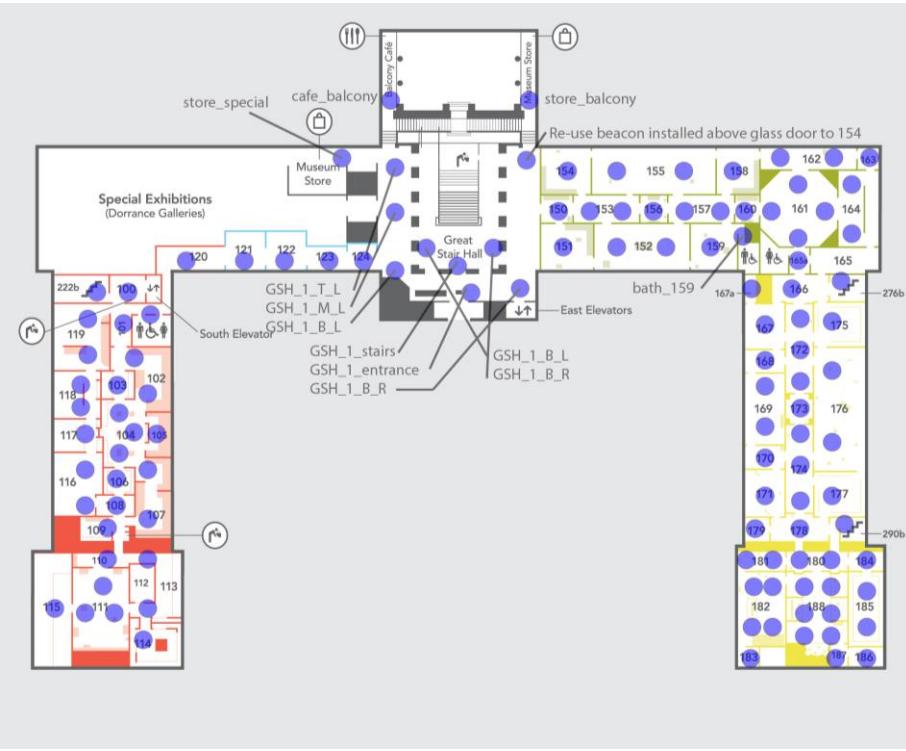
Just a little background



Indoor wayfinding is a team effort

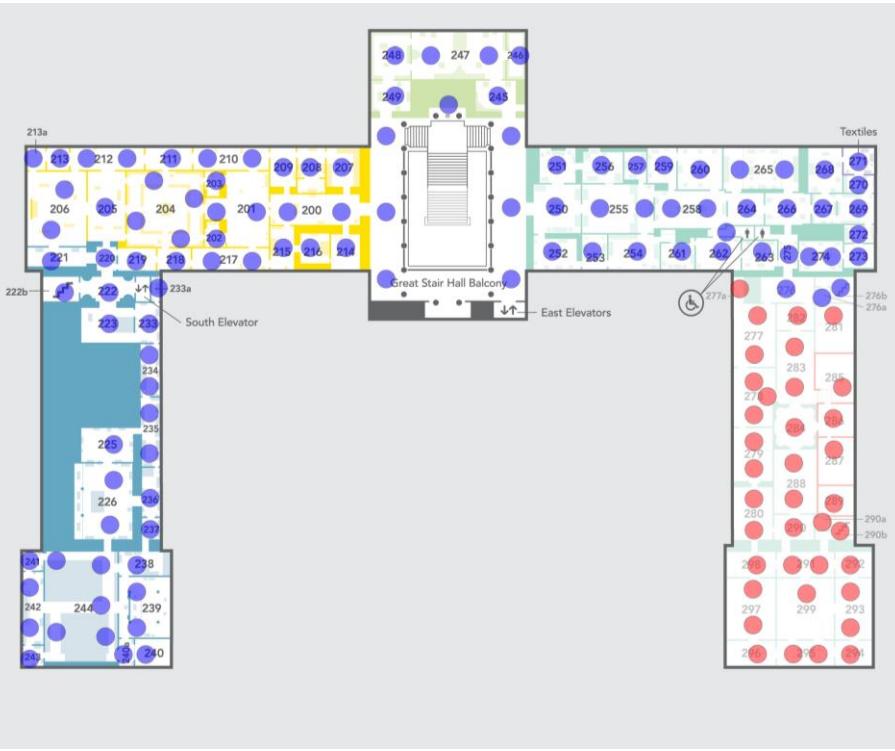


- Three public floors
- 260+ galleries
- 280+ active iBeacons (350 total)
- 8,000 objects on display
- 240,000+ objects in collection



iBeacon Map – First Floor

- GSH is a huge open space with lots of signal cross-talk
- Special Exhibits not covered
- Modern & Contemporary has very high beacon density
- Balcony Store & Café only reachable by stairs (!)



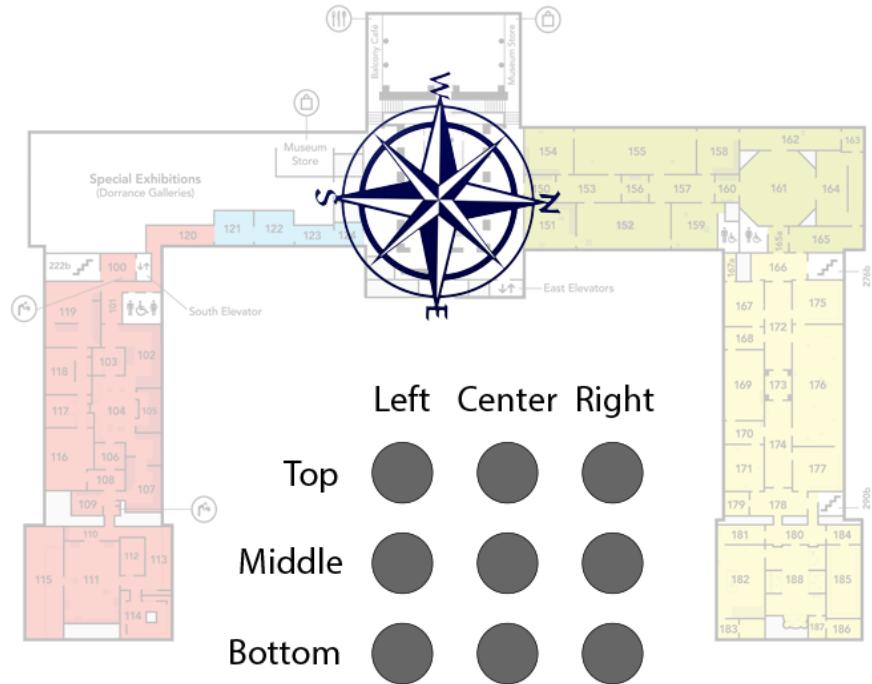
iBeacon Map – Second Floor

- Again, GSH is a huge open space with lots of beacon cross-talk
- European Art 1500-1850 not covered (yet)
- SAA galleries under construction



iBeacon Map – Ground Floor

- Inconsistent naming schema
- No public access past Gallery 50
- Both east elevators operational



- Naming chosen from a “at desk” perspective
  - Left => South, Right => North
  - 184 Top Left => 184\_T\_L

# General iBeacon naming convention

- Bath\_[Room], Elevator\_[Room]
- [Room]\_Stairs BUT 222b, 276b, 290b \_[Floor]
- Special cases:
  - GSH, LFH, HBG
  - Shop\_Main, Shop\_Special, Shop, Balcony
  - Cafeteria, Granite\_Hill, Cafe\_Balcony
  - Entrance\_West, Entrance\_East, Coat
  - Ground Floor in general



iBeacon Map – Ground Floor

- Inconsistent naming schema
- No public access past Gallery 50
- Both east elevators operational

```
{  
  "beacons": [  
    {  
      "alias": "LFH_R",  
      "major": 46453,  
      "minor": 61315  
    },  
    {  
      "alias": "GSH_1_T_R",  
      "major": 54733,  
      "minor": 24192  
    },  
    {  
      "alias": "GSH_1_M_R",  
      "major": 53827,  
      "minor": 19489  
    },  
    {  
      "alias": "LFH_G_stairs",  
      "major": 5503,  
      "minor": 59926  
    },  
    {  
      "alias": "174_B",  
      "major": 19991,  
      "minor": 6934  
    },  
    {  
      "alias": "290b_1",  
      "major": 61211,  
      "minor": 30460  
    },  
    {  
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      "major": 49483,  
      "minor": 60425  
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      "minor": 62094  
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    {  
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      "minor": 58704  
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    {  
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      "major": 27039,  
      "minor": 31683  
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    {  
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      "major": 55858,  
      "minor": 13117  
    },  
    {  
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      "minor": 55231  
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    {  
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      "major": 19991,  
      "minor": 6934  
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      "major": 61211,  
      "minor": 30460  
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    {  
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      "minor": 13117  
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    {  
      "alias": "188_B_R",  
      "major": 27781,  
      "minor": 55231  
    }  
  ]  
}
```

iBeacon JSON

iBeacon JSON data

```

},
{
  "name": "project",
  "floor": "ground",
  "title": "Art Splash Studio",
  "type": "info"
},
{
  "name": "hallway_48",
  "floor": "ground",
  "title": "none"
},
{
  "name": "seminar",
  "floor": "ground",
  "title": "Seminar Room"
},
{
  "name": "hallway_staff",
  "floor": "ground",
  "title": "none"
},
{
  "name": "HBG",
  "floor": "ground",
  "title": "Honickman and Berman Galleries"
},
{
  "name": "MRAI"
},
{
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{
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{
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},
{
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  "floor": "second"
},
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},
{
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  "floor": "first",
  "type": "store",
  "enabled": true,
  "title": "Museum Store Balcony"
},
{
  "name": "shop_main",
  "floor": "ground",
  "type": "store",
  "enabled": true,
  "title": "Museum Store Main Store"
},
{
  "name": "granite_hill",
  "floor": "ground",
  "type": "food",
  "enabled": true,
  "title": "Granite Hill Restaurant"
}

```

Locations JSON

Location JSON data

# pmaToolkit

- iOS Framework (>= iOS 8.0)
- Simply register for NSNotifications
- Available as CocoaPod
- Example included for location tracking

# Digital Resources

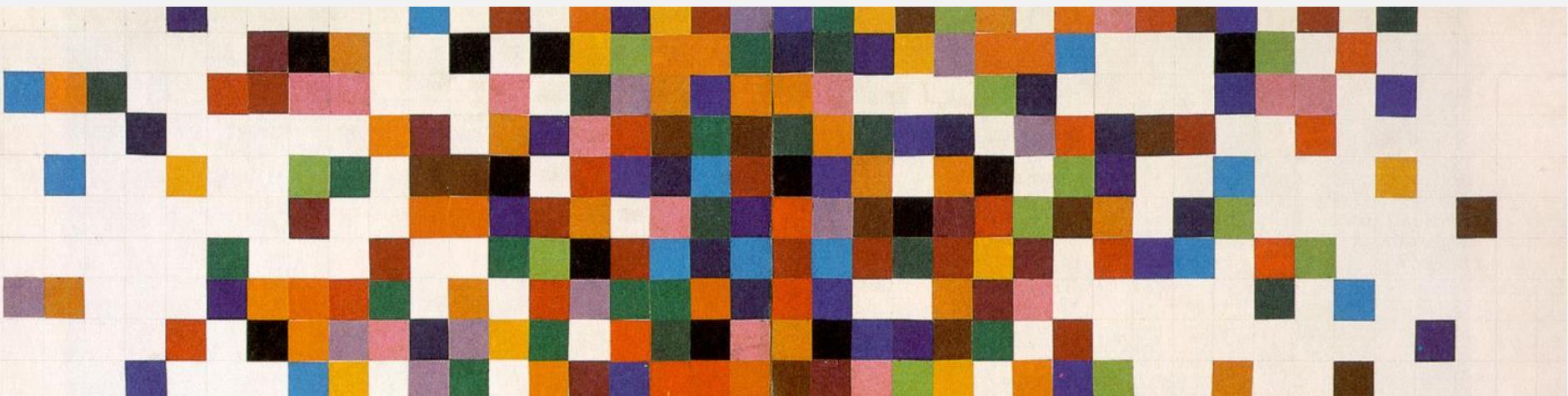
- Collection data in Excel
- Collection data in JSON
- Collection data dictionary PDF
- Collection images
- iBeacon data in JSON
- iBeacon/locations data dictionary PDF
- pmaToolkit

All resources available on thumb drives and at <https://github.com/philamuseum>.  
GitHub media includes only thumbnail images.

Philadelphia  
Museum of  
**Art**

Power of Art

# Hackathon



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