

Information Architecture

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Information Systems Program

Why is it hard to organize information?

- Problem 1: Ambiguity
- Problem 2: Heterogeneity
- Problem 3: *A lot* of information to deal with
- Problem 4: Differences in perspectives
- Problem 5: Internal politics

Information Architects

1. "The individual who organizes the patterns inherent in data, making the complex clear;"
2. "A person who creates the structure or map of information with allows others to find their own personal path to knowledge;"
3. "An emerging 21st century professional occupation addressing the needs of the age focused upon clarity, human understanding, and the science of organizing information."

Organizational Schemes & Structures

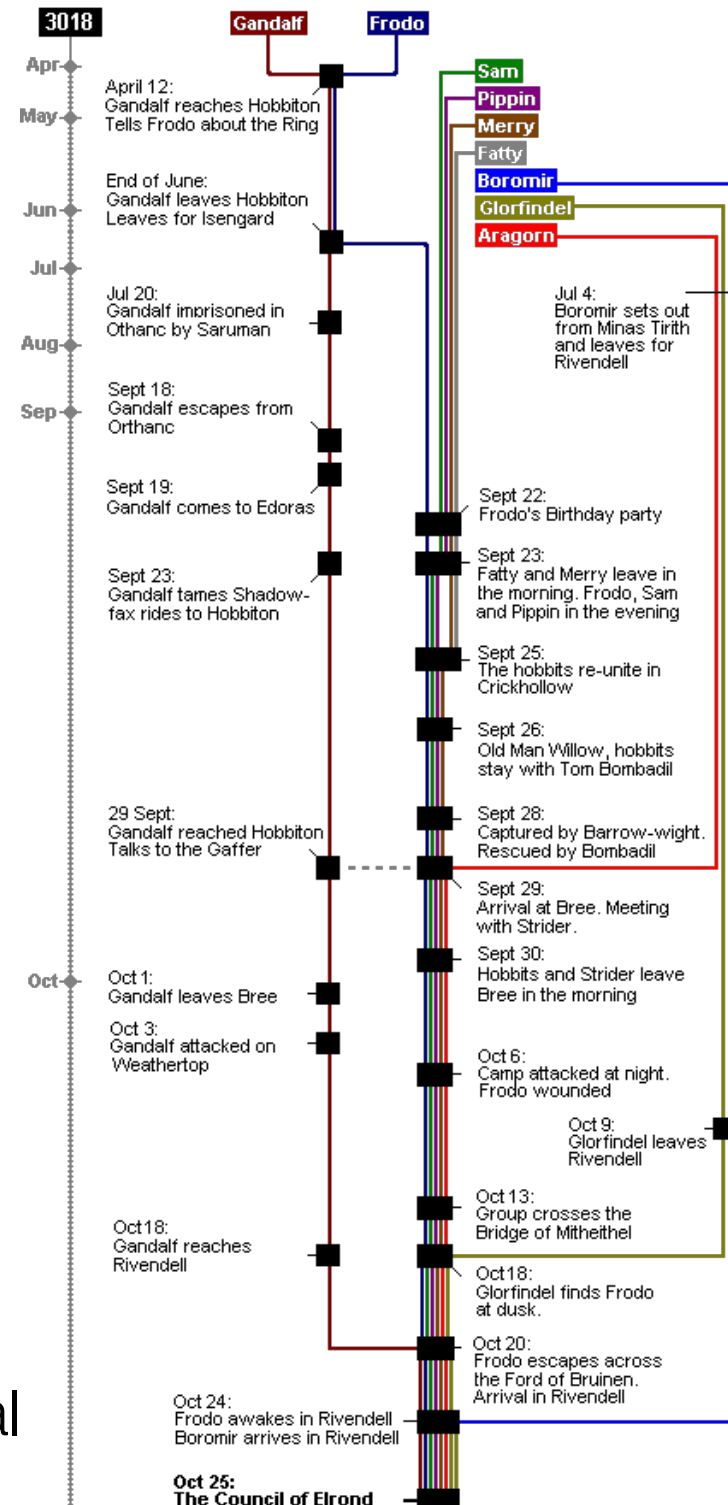
- Organizational scheme defines:
 - the shared characteristics of content items
 - influences the logical grouping of those items
- Organizational structure defines:
 - types of relationships between content items and groups

Exact organizational schemes

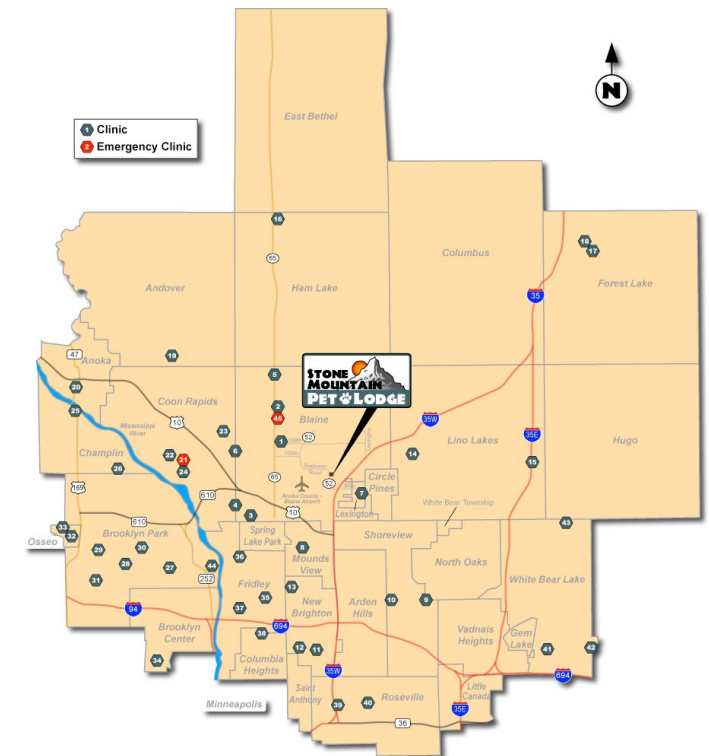


Alphabetical

Chronological



Geographical



Ambiguous organizational schemes

- topical schemes
- task-oriented schemes
- audience-specific schemes
- metaphor-driven schemes
- hybrid schemes

“Which works the best?”

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Jay Kadane

GLOBAL SOCIETY & ECONOMY

Statistical Connections

To Carnegie Mellon University professor Joseph B. (Jay) Kadane, "statistics is an adventure" — taking him from nuclear defense research to racial discrimination testimony to a Congressional briefing on human rights in Argentina.

His latest? Receiving two prestigious awards for his first textbook, "Principles of Uncertainty."

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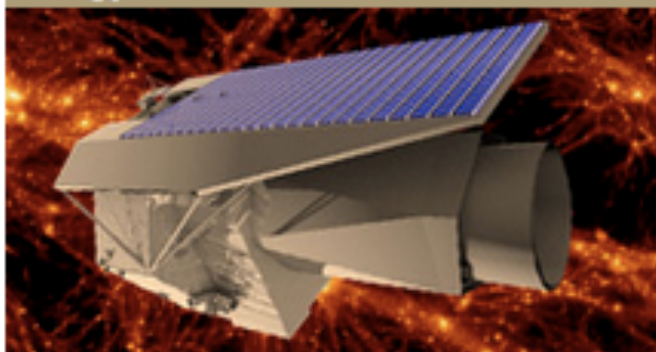
News & Events

[Entrepreneurship: Project Olympus & Don Jones Center Merge](#)
Mar. 14

[School of Art Presents "Basement Miracle" MFA Thesis Exhibition](#)
Mar. 14

[CMU Students Host Computer Security Competition](#)
Mar. 14

Energy & the Environment



Euclid Mission

CMU astrophysicists Shirley Ho and Rachel Mandelbaum are part of a team tasked with chasing down some

Creativity & the Arts



A Classic Pairing


Stage veteran Cherry Jones (A'78) and no stranger to the stage Zachary Quinto (A'99), two prominent alumni

Next Generation Computing







Cookie vs. Creme: A Robotic Twist

When Nabisco's Oreo team needed a robot to "help make the world a better and more efficient place" —

 **CORONAVIRUS UPDATES:** Get the most up-to-date information on Carnegie Mellon's response to the coronavirus.
[More details](#)

Carnegie Mellon University



- Academics
- Admission
- About
- Visit
- Research
- Student Experience
- Athletics 
- Give 
- Alumni 
- Business & Research Partners 
- Faculty & Staff
- Students

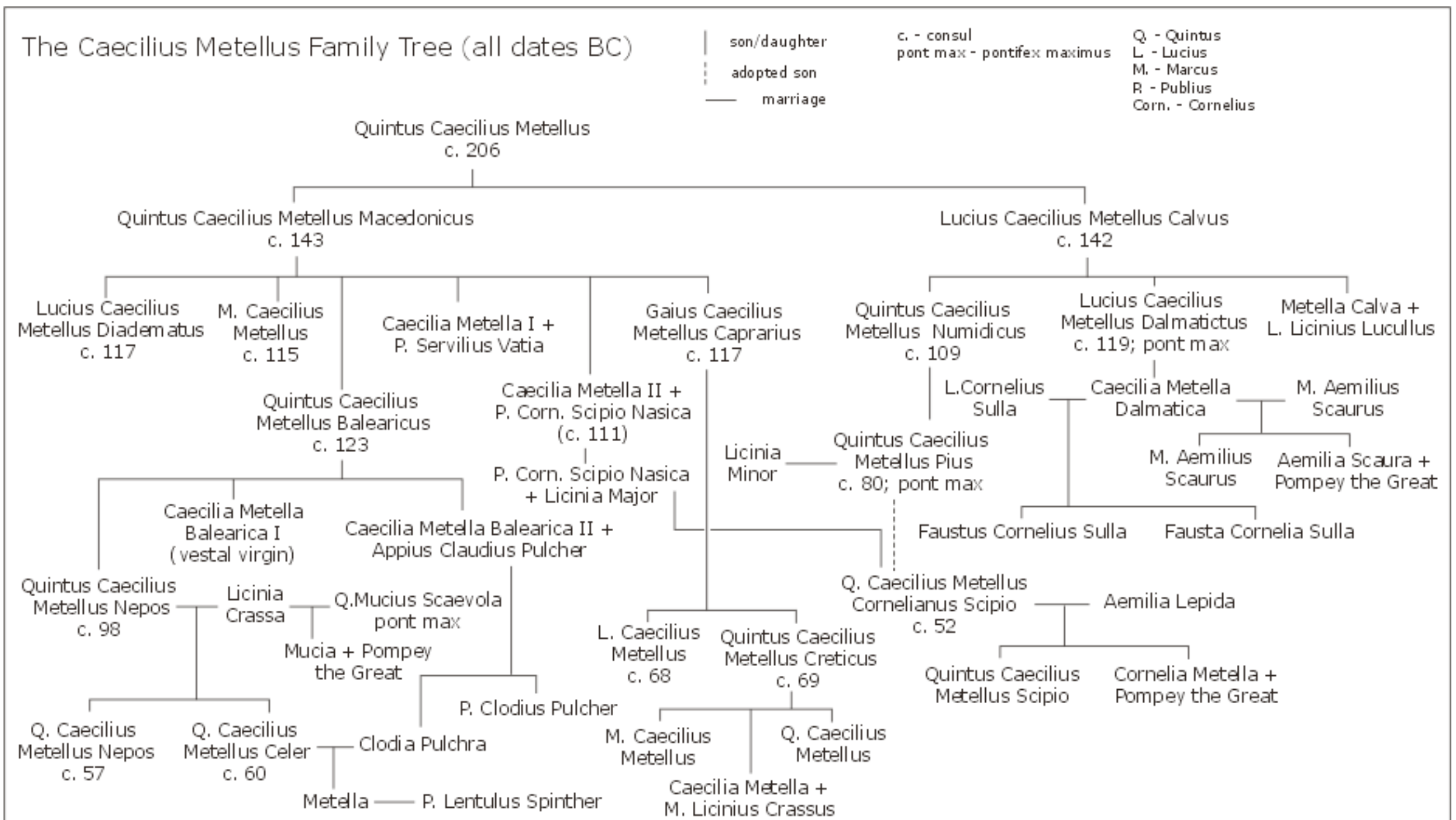
Exercise: Compare/contrast CMU Home page

File at: bit.ly/67272-cmuhome

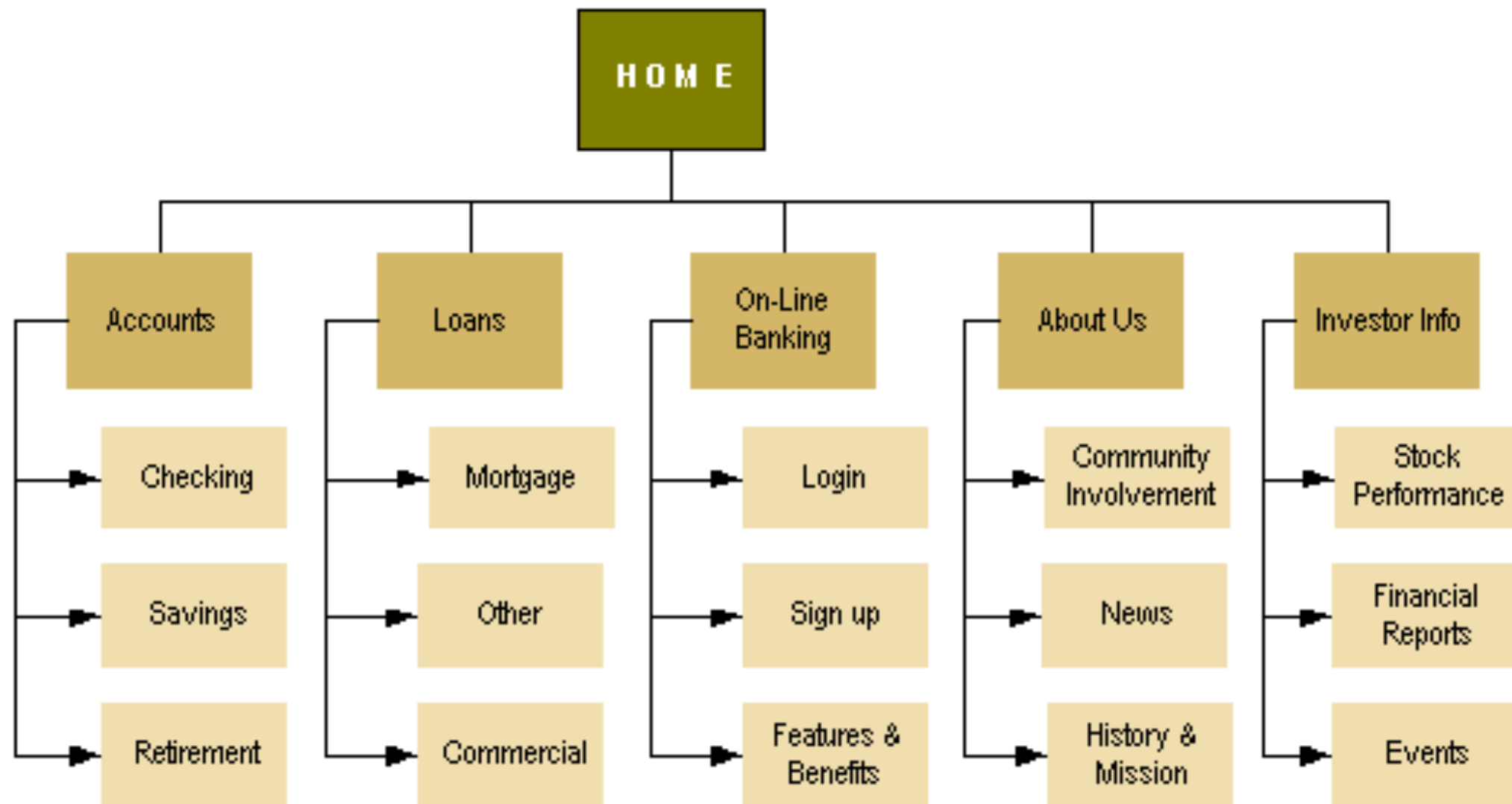
Comic of the Day



Hierarchy everywhere



Site hierarchy



Domain name hierarchy

.com
.net .org
.co.uk
.org.uk
.us .eu
.biz .info
.me.uk .name
et al.

Designing hierarchical structures

- Hierarchical categories are (for the most part) mutually exclusive
 - may place some ambiguous items in 2+ categories
 - too many cross-listings and hierarchy loses value
- Balance between breadth and depth in an information hierarchy
 - breath: remember cognitive limits; use 7 ± 2 rule
 - depth: people get frustrated going past 4 levels; more likely to leave site.
- Plan for and consider changes/growth in the future

Hypertext structures

- 2 components to the hypertext model:
 - chunks of information to be linked
 - the links existing between chunks
- allows for great *flexibility* and *complexity*
- potential for confusion high among users
 - not unusual for users to get lost in highly hypertexted sites
 - hypertextual links are often personal in nature
- best as supplement

United States

From Wikipedia, the free encyclopedia
(Redirected from [United states](#))

For other uses of terms redirecting here, see [US \(disambiguation\)](#), [USA \(disambiguation\)](#), and [United States \(disambiguation\)](#).

The **United States of America** is a [federal constitutional republic](#) comprising [fifty states](#) and one [federal district](#). The country is situated almost entirely in the [western hemisphere](#): its forty-eight [contiguous states](#) and [Washington, D.C.](#), the capital district, lie in central North America between the Pacific and Atlantic Oceans, bordered by [Canada to the north](#) and [Mexico to the south](#); the state of [Alaska](#) is in the northwest of the continent with Canada to its east, and the state of [Hawaii](#) is in the mid-Pacific. The United States also possesses [fourteen territories](#), or [insular areas](#), that are scattered around the Caribbean and Pacific.

At 3.79 million square miles (9.83 million km²)^[1] and with over 300 million people, the United States is the [third or fourth](#) largest country by total area, and third largest by land area and [population](#). The United States is one of the world's most ethnically diverse nations, the product of large-scale [immigration from many countries](#).^[6] Its [national economy](#) is the largest in the world, with a nominal 2006 [gross domestic product](#) (GDP) of more than [US\\$13 trillion](#).^[3]

The nation was founded by [thirteen colonies](#) of [Great Britain](#) located along the [Atlantic seaboard](#). Proclaiming themselves "states," they issued the [Declaration of Independence](#) on [July 4, 1776](#). The rebellious states defeated Britain in the [American Revolutionary War](#), the first successful [colonial war of independence](#).^[7] A [federal convention](#) adopted the current [United States Constitution](#) on [September 17, 1787](#); its ratification the following year made the states part of a single republic. The [Bill of Rights](#), comprising ten [constitutional amendments](#), was ratified in 1791. In the nineteenth century, the United States acquired land from [France](#), [Spain](#), [Mexico](#), and [Russia](#), and annexed the [Republic of Texas](#) and the [Republic of Hawaii](#). The [American Civil War](#) ended [slavery in the United States](#) and prevented a permanent split of the country. The [Spanish-American War](#) and [World War I](#) confirmed its status as a military power. In 1945, the United States emerged from [World War II](#) as the [first country with nuclear weapons](#) and a permanent member of the [United Nations Security Council](#). The sole remaining [superpower](#) in the post–[Cold War](#) era, the United States is perceived by many as the dominant economic, political, cultural, and military force in the world ^[8]

Improving navigation



From this ...

... to this.





Start address e.g., "SFO"

10152 Sudberry Dr, Wexford, PA 1509

End address e.g., "94526"

5000 Forbes Ave, Pittsburgh, Pennsy

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New! Drag & drop the blue line to [customize your route](#)

Directions: **Drive There** - [Take Public Transit](#)

☐ Avoid highways

[Get reverse directions](#)

[From:](#) 10152 Sudberry Dr
Wexford, PA 15090
 [Edit](#)

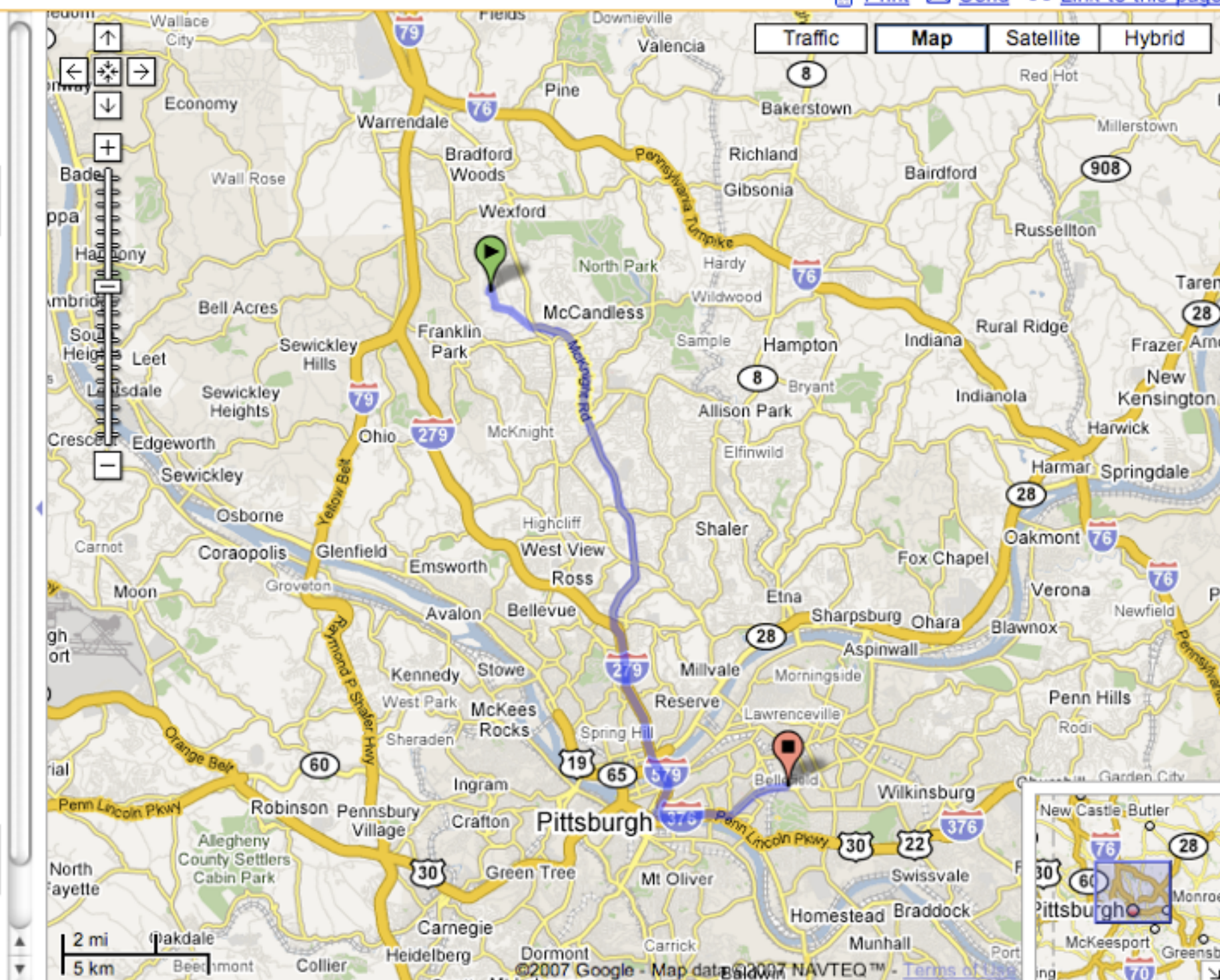
[Drive:](#) 16.4 mi – about 31 mins

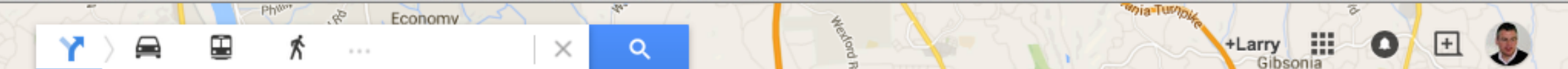
1. Head north on **Sudberry Dr** toward **Meinert Rd** 495 ft
2. Turn right at **Meinert Rd** 0.4 mi
3. Turn left at **Pine Creek Rd** 1.1 mi
4. Continue on **Blazier Dr** 0.4 mi
5. Turn right at **McKnight Rd/US-19-TRUCK** 6.8 mi
6. Merge onto **I-279 S** via the ramp to **Pittsburgh** 2.9 mi
7. Take exit **8A** to merge onto **I-579 S** toward **Veterans Bridge** 1.5 mi
8. Take the ramp to **Oakland/I-376 E/ Monroeville** 0.3 mi
9. Merge onto **Boulevard of the Allies** 1.5 mi
10. Exit onto **Forbes Ave** 1.5 mi

[To:](#) 5000 Forbes Ave
Pittsburgh, PA 15213
 [Edit](#)

[Add destination ...](#)

These directions are for planning purposes only. You may find that construction projects, traffic, or other events may





Exercise: How has Google Maps improved?

File at: bit.ly/67272-gmaps

Labeling systems



- Labeling is a form of representation; used to communicate information efficiently.
- Users have limited attention spans — will not try too hard to decode label meanings.
- Ambiguous labels make bad impressions — web users tend to be unforgiving.
- Self-centered labels may work for internal people, but turn away external users



Sales Reports

 Sales Reports

 Admin Reports



Account Reports

Generate reports about accounts.



Competitor Reports

Generate reports about competitors.



Invoice Reports

Generate reports about invoices.



Miscellaneous Sales Reports

Generate miscellaneous reports.



Order Reports

Generate reports about orders.



Quote Reports

Generate reports about quotes.



Sales Quota Reports

Generate reports about sales quotas.



Activity Reports

Generate reports about activities.



Contact Reports

Generate reports about contacts.



Lead Reports

Generate reports about your leads.



Opportunity Reports

Generate reports about opportunities.



Product Reports

Generate reports about products.



Sales Literature Reports

Generate reports about sales literature.

Quick Create

Contact ▼

Go

Location: | [Sales Reports](#)



Home
My Home page



Workplace
My Work, Calendar



Sales
Sales Automation



R
Me

A couple of good rules

80% of information a user needs is on home page (after login) or 1 click away

Group information with a scheme that users can quickly identify

Don't clutter main pages with information or functionality that is rarely used

Guard against ambiguous or misleading information; user-test your information