

# Designing Information Architecture

Lecture 6

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# The value of information organisation

## Gould's Book Arcade



## Exploring libraries



# Why information architecture matters?

- The cost of finding information
- The cost of not finding information
- The value of educating customers about new services
- The cost of construction
  - When redesign is needed because of poor findability
- The cost of maintenance
- The cost of training
- The value of brand

# Information spaces in airports

- Screens show departure times and registration desk numbers
- Information signs
  - Gates numbers
  - Direction labels
  - Informative symbols
- Information centers
- Voice messages



# Characteristics of information spaces

- Frequency of changes
  - Train schedule or stock prices

## Maršrutai

[Papildoma kainų informacija](#)

Vilnius - Kaunas <a href="#">Maršruto žemėlapis</a>						
Traukinio numeris	Išvykimo laikas	Atvykimo laikas	Atstumas, Km	Kelionės trukmė	Pastabos	Kaina, Lt
<a href="#">EJ817</a>	10:25	11:34	104	01:09	Traukinyje visos vietos 2 klasės.	<a href="#">18.00</a>
<a href="#">EJ819</a>	11:25	12:36	104	01:11	Traukinyje visos vietos 2 klasės.	<a href="#">18.00</a>
<a href="#">D393</a>	11:40	13:01	104	01:21	Traukinyje yra 2 ir 3 klasės vietos.	<a href="#">16.30</a>
<a href="#">EJ821</a>	13:50	15:01	104	01:11	Traukinyje visos vietos 2 klasės.	<a href="#">18.00</a>
<a href="#">E875</a>	14:43	16:25	104	01:42	Traukinyje visos vietos 3 klasės.	<a href="#">16.30</a>
<a href="#">EJ823</a>	16:30	17:30	104	01:00	Traukinyje visos vietos 2 klasės.	<a href="#">18.00</a>
<a href="#">E877</a>	16:35	18:16	104	01:41	Traukinyje visos vietos 3 klasės.	<a href="#">16.30</a>

<http://www.litrail.lt/>



## Top Business Stories

[+ More News](#)

- ▶ Novo Nordisk Aims For Bigger Share Of Latin America - Report
- ▶ Vienna Named As Global City With Highest Living Standards
- ▶ Microsoft Partners With AgreeYa For Services On Apple, Android Phones
- ▶ AstraZeneca, Bristol-Myers Squibb Get EU Authorization For Komboglyze
- ▶ UPDATE: Apple iPhone On Australian Flight Sparks Safety Probe

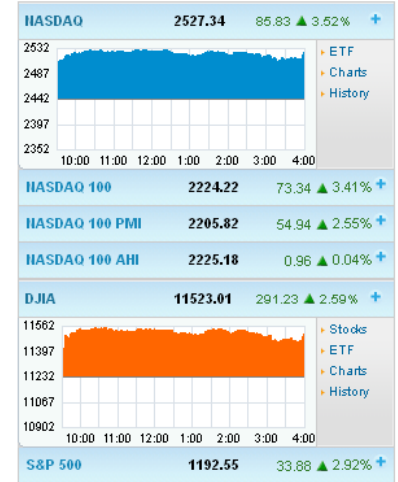
## Market News & Analysis

[+ More News](#)

-  **Hibbett Sporting Goods (HIBB) - Bull of the Day**  
4 hours ago
-  **Ingram Micro, Inc. (IM) - Bear of the Day**  
4 hours ago
- Universal Corp. Momentum

## Market Indices

NASDAQ Vol: 1,581,172,000



<http://www.nasdaq.com/>

# Information architects

- Information architecture is concerned with the design of information spaces.
  - Just as real world architects have to understand client needs and design appropriate structures to enable those needs to be realized, so information architects have to design the structures that will enable information needs to be met.
- These structures are realized in the digital space as apps and websites and in the physical space as objects such as maps, signs or physical structures.
- These structures also include people who both consume information content and generate content that becomes part of the information space.
- At various points in the overall design process, the UX designer has to be an information architect.

# Information content

- Information architecture concerns understanding and designing the information,
  - the content, that is going to be useful for people undertaking some activity or that will otherwise contribute to the user experience.
- For example, what information should be shown in a historical site to provide user with a good experience?
  - The dates of events that happened there?
  - Information about famous people who visited there?
  - Information about the geography and geology?
  - Video of past events, links to websites for further information or an audio guide to provide a tour around the site?
  - Information boards at key locations, maps of the site and guide books, or should they provide all this sort of information on a smartphone app?
  - Should visitors be allowed to take photos or leave audio messages and tag them with a geo-location so that other visitors can see them?
    - This is often called user generated content, UGC.

# Goals of information architecture

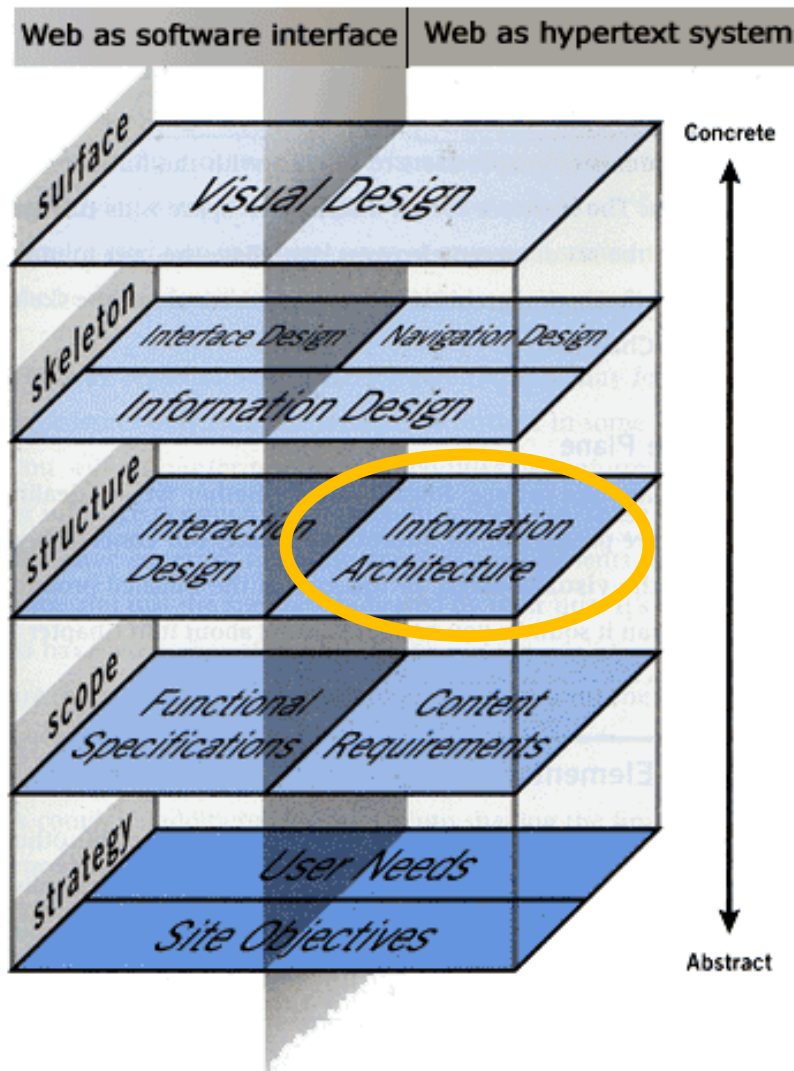
- Structuring
  - Determining the appropriate levels of granularity for the information “atoms” and deciding how to relate them to one another.
- Organizing
  - grouping components into meaningful and distinctive categories
- Labelling
  - Naming those categories and the series of navigation links that lead to them.
- Decision about how content should be grouped can have dramatic consequences site's structure works (or doesn't work) for users, but these nuances are difficult to understand at first glance.
-



# What Isn't Information Architecture?

- Graphic design is NOT information architecture.
- Software development is NOT information architecture.
- Usability testing is NOT information architecture.

# Information architecture in user experience design



- IA is a structural design of the information space to facilitate intuitive access to content (Garrett, 2010)

# Information architecture (IA)

- IA is the structural design of shared information environments.
- Consists of
  - Organization system
    - A way to present information, e.g. content categories
  - Navigation system
    - Help user move through the content
  - Search system
    - Allow user search the content
  - Labelling system
    - Describe categories, options, and links in language that (hopefully) is meaningful to users

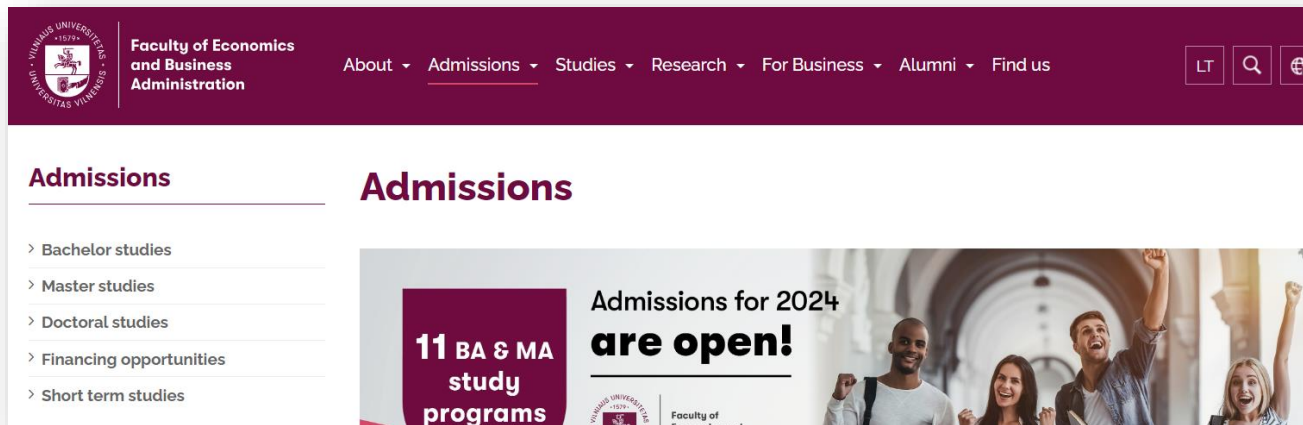
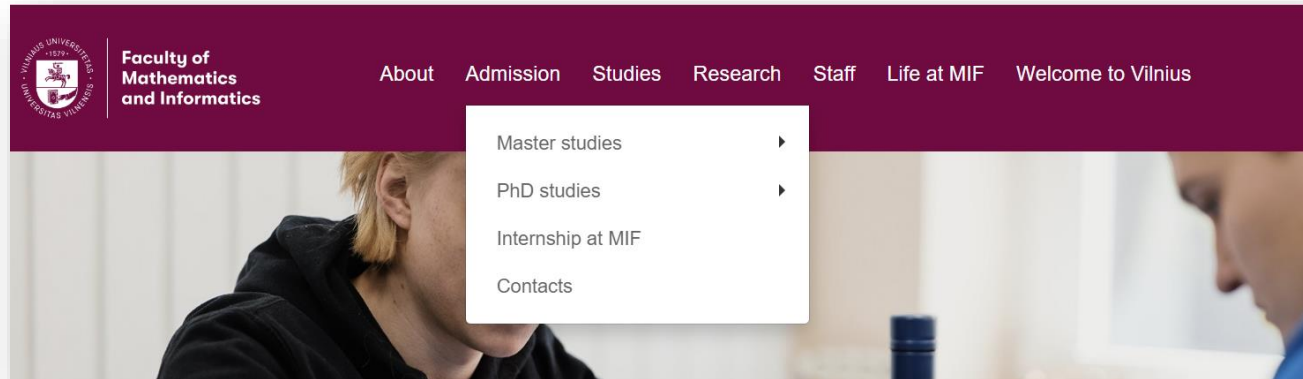
# Information architecture: Ontology

- The information architect is going to provide the structure within which the user experience will unfold.
  - This structure is described in a conceptual model, a representation of the concepts that are used to describe the domain of interest.
  - This process is called developing an ontology, ‘a designed conceptualization of some activity.’
- An information architect
  - goes through the understanding process and analyses some domain (a sphere of activity) and, after much discussion, iteration and evaluation,
  - decides on **the objects of interest (the ontology)** and **the relationships between those objects (the taxonomy)**.
- Finding an appropriate ontology is critical and will affect all the other characteristics of the information space and subsequent UX.

# Coarse- or fine-grained ontology

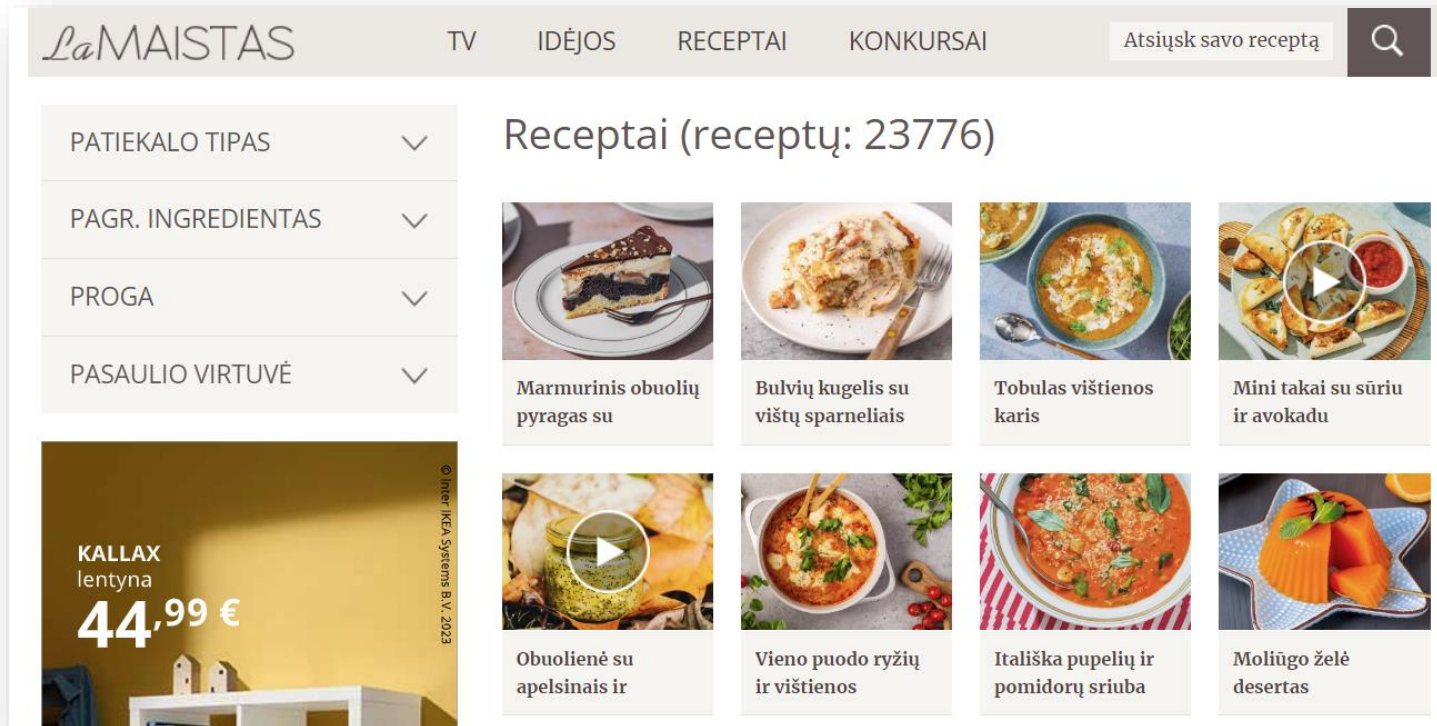
- A coarse-grained ontology Stambiagrūdē ontologija
  - Has only a few types of objects
    - Each of which is 'weakly typed' – has a fairly vague description and hence the objects are quite complex and there are a lot of instances of these types.
  - The object types differ in large ways
- A fine-grained ontology Smulkiagrūdē ontologija
  - Results in a structure which has many strongly typed simple objects with a relatively few instances of each.
  - The object types differ from each other only in some small way.

# Coarse-grained ontology implementation examples



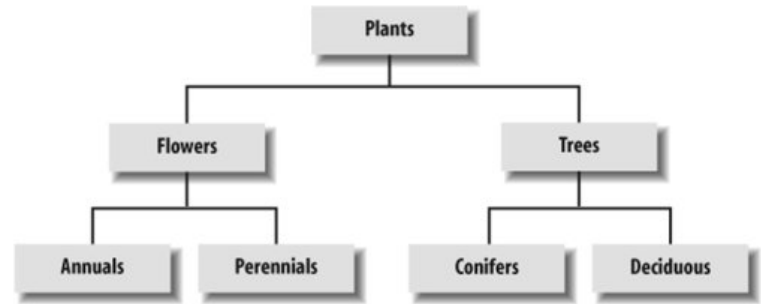
Involves different type information. All categories are mutually exclusive: there is one way to reach the specific information.

# Fine-grained ontology implementation examples



This information space consists of recipes (many one type instances). Specific recipe belongs to various groups according to dish type, ingredients, world cuisine, etc. There are various ways to reach the specific recipe.

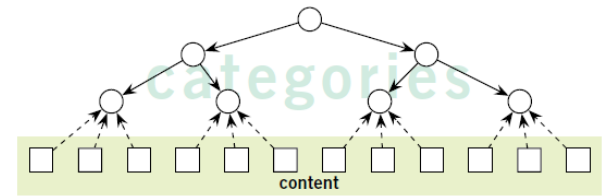
# Top-Down Design Approach



- Applied for **coarse-grained ontologies**
- Divides the information space into **mutually exclusive subdivisions** and **parent-child relationships** of hierarchies.
- Ambiguous organization schemes in particular make it challenging to divide content into mutually exclusive categories.
  - Do tomatoes belong in the fruit, vegetable, or berry category?



# Top-down design of IA



Anticipates users' major information needs in a system and implements deeper coarse-grained ontology:

1. Where am I?
2. I know what I'm looking for; how do I search for it?
3. How do I get around this site?
4. What's important and unique about this organization?
5. What's available on this site?
6. What's happening there?
7. Do they want my opinion about their site?
8. How can I contact a human?
9. What's their address?

1. Where am I?

2. How to search?

3. How do I get around this site?

8. Contact a human

4. What's important and unique about this organization?

*Hinc itur ad astra*

#### NEWS & EVENTS

6. What's happening there?

Novozymes helps researchers behind tools for editing the genetic organisms

#### QUICK LINKS

5. What's available on this site?

- Degree studies
- Exchange studies
- Academic calendar
- Faculties
- VU Lithuania
- Student representation
- VU Endowment
- Contacts

4. What is important and unique?

*Over 500 courses in foreign languages for international students*

9. What's their address?

© 1997-2017 Vilnius University | Institutional code 211950810 | VAT number LT119508113  
3 Universiteto St., LT-01011 Vilnius, Lithuania | Tel. +370 6 590 0111 | Fax +370 6 590 0137 | E-mail: info@vni.lt

7. My opinion

# Challenges of coarse-grained decomposition

- Ambiguity
  - Words can be understood more than one way
    - E.g. The word Pitch has 15 definitions
  - Which concepts place in which categories
- Heterogeneity
  - Web sites provide access to document in multiple formats: news, product descriptions, employee home pages, texts and videos, audios, etc.
- Differences in perspectives
  - The ways people organize and name files and directories on their computers can be maddeningly illogical.
- Internal Politics
  - The choice of organization and labeling systems can have a big impact on how users of the site perceive the company, its departments, and its products.

# IA Structures

- Organizing menus in a meaningful structure results in **faster selection time** and **higher user satisfaction**
- Approaches:
  - **Linear** sequence (e.g. in a wizard or survey)
  - **Hierarchical** structure that is natural and comprehensible (e.g. a store split into departments)
  - **Network** structure when choices may be reachable by more than one path (e.g. websites)

# Example of linear structure

„Kėdainių“ blynai su vištiena (3)

Pagaliau, istorinis momentas – blynai iš mano gimtojo miestelio! Nežinau, kaip taip susiklostė, kad niekada iki šiol nebuvau laidoję gaminusi... [Daugiau...](#)

Data 2023 spalio 13

Šokoladinė aviečių tartaletė (0)

Tiesiog karališkas desertas – sodrus, šokoladinis, pasipuošęs avietėmis, kurių sezonas šiemet buvo ypatingai ilgas ir tik dabar baiginėjasi. Tebūnie tai... [Daugiau...](#)

Data 2023 spalio 7

Varškinės tešlos obuolių pyragėliai (0)

Pristatau dviejų maisto produktų derinį, kuris užima ypatingą vietą visų lietuvių širdyse – tai obuoliai ir varškė. Kas gi nėra... [Daugiau...](#)

Data 2023 rugsėjo 29

Paelija su čorisu orkaitėje (0)

Ispanijos įkvėpta spalvinga NETRADICINĖ paelija, kurią greitai pasigaminsite namie, nereiks jokių specialių keptuvių, pakaks orkaitės. Pirmiausia kubeliais susmulkiname čorisą ir... [Daugiau...](#)

Data 2023 rugsėjo 22

Saldžiųjų pyragėlių su šokoladu ir kava (0)

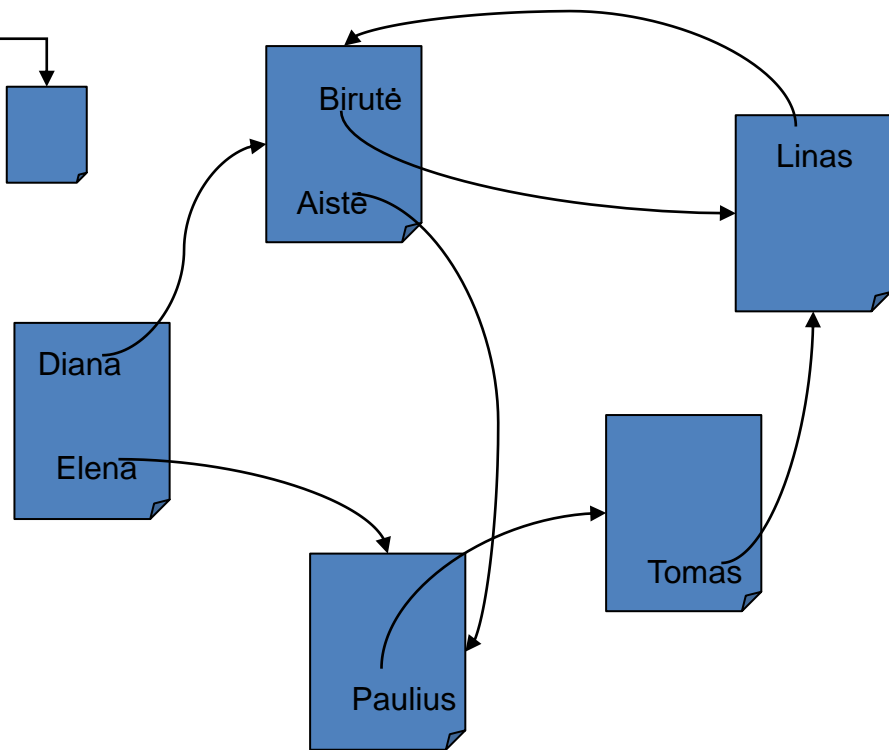
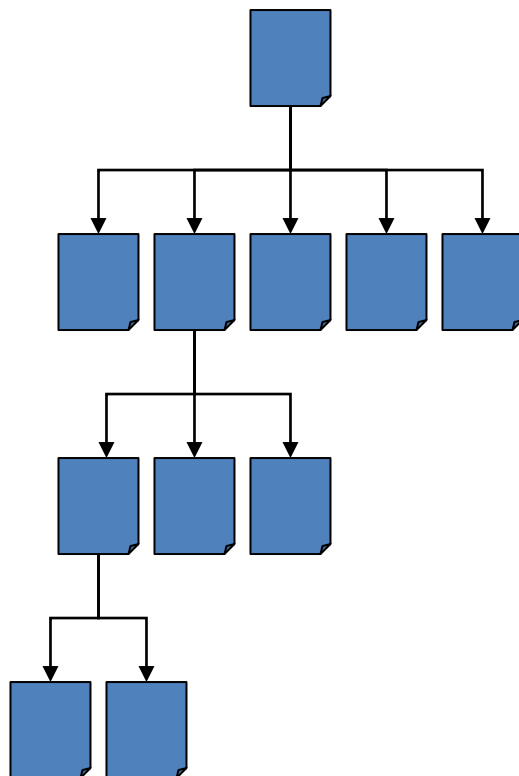
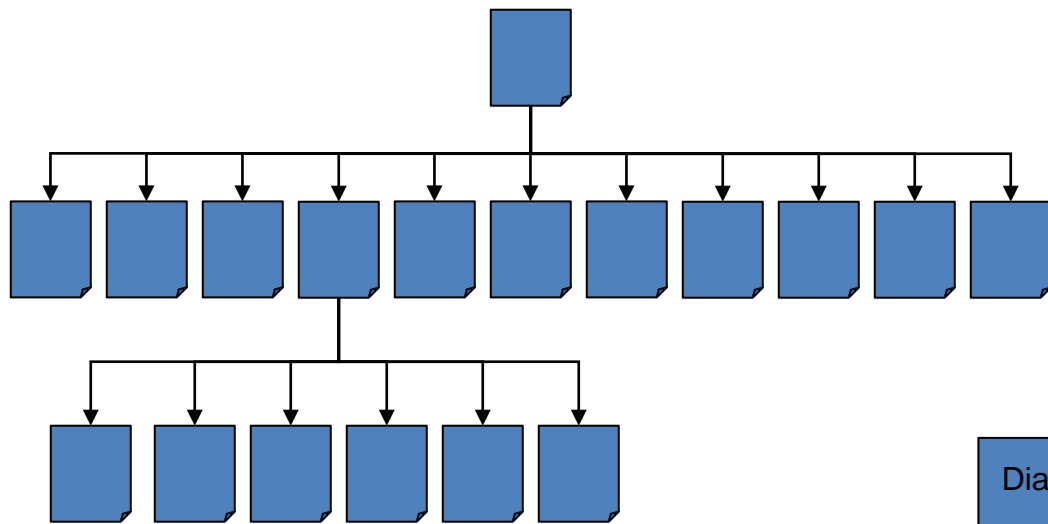
Šie pyragėliai yra tikras šokolado ir kavos mėgėjų mėgėjas. Jie yra labai lengvi, greitai pagaminami ir tinka kaip užkandis ar desertas. [Daugiau...](#)

Data 2023 rugsėjo 15

### KATEGORIJOS

- ▶ Apkepai
- ▶ Bėmėsiams pirmadieniams
- ▶ Blynai, blynėliai
- ▶ Bulvių patiekalai
- ▶ Daržovių patiekalai
- ▶ Gėrimai ir kokteiliai
- ▶ Greitai
- ▶ Grill / Lauke
- ▶ Kažko nevalgantiems
- ▶ Kepta garuose
- ▶ Kruopos
- ▶ KVIEČIU Į SVEČIUS
- ▶ Lietuviški patiekalai
- ▶ Maistas į mokyklą
- ▶ Makaronai, pica
- ▶ Marinatai
- ▶ Mėsa
- ▶ Moliūgai
- ▶ Padažai, užpilai, pagardai
- ▶ Pusryčiai
- ▶ Pyragai, kepiniai
- ▶ Receptai iš bibliotekos
- ▶ Receptai iš TV laidų
- ▶ Saldžiai
- ▶ Salotos, mišrainės
- ▶ Smidrai
- ▶ Sriuba
- ▶ Sūrio mėgėjams
- ▶ Sutramdyta meška
- ▶ Šventės
- ▶ Troškiniai

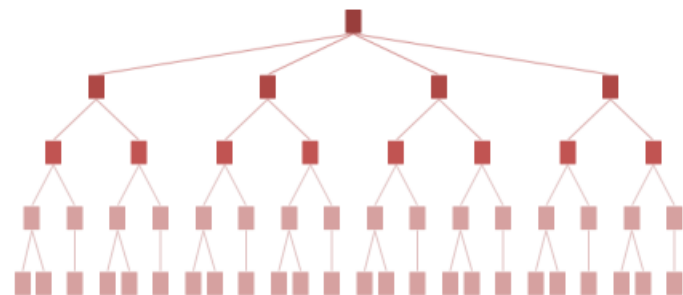
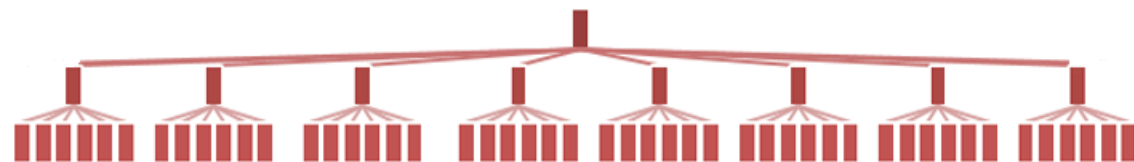
Beatos virtuvė: Long category list is ordered alphabetically.



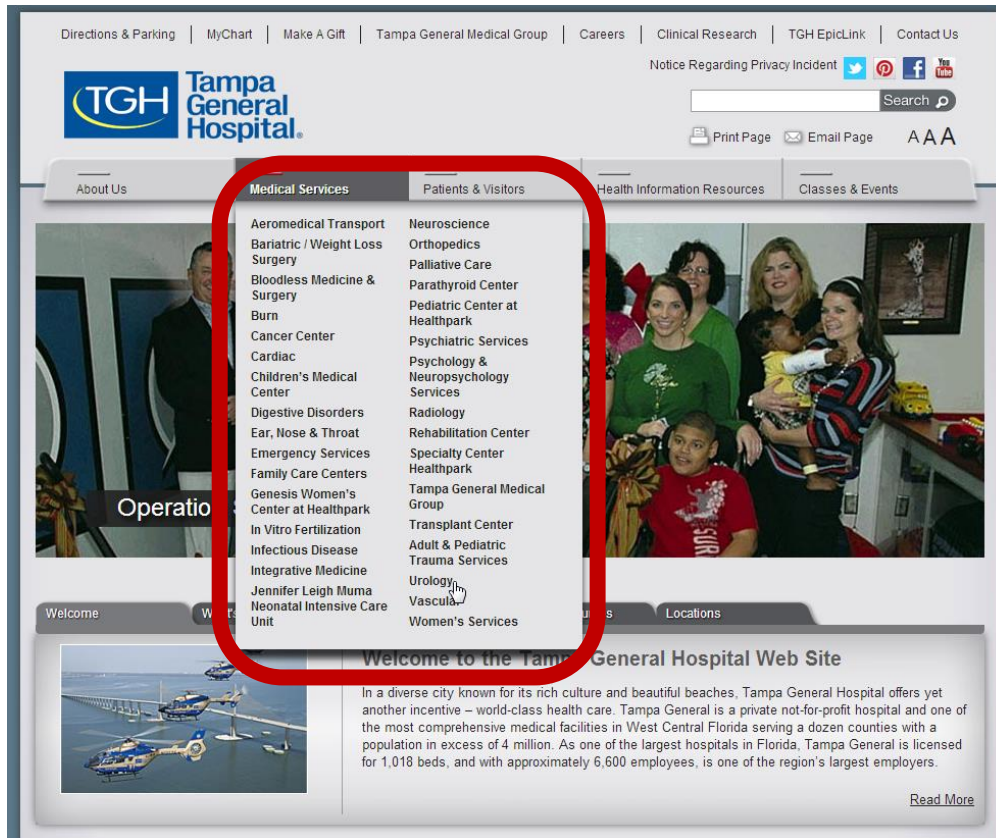


# Flat vs. deep website hierarchies

- Each of 2 structures below represent the same amount of information, and shows a perfectly logical way of organizing the content for a website.
  - Yet the end-user's experience of browsing will be different
    - Deep hierarchies are more difficult to use.
    - Categories that are specific and do not overlap are the easiest to understand.



# Example of a flat structure



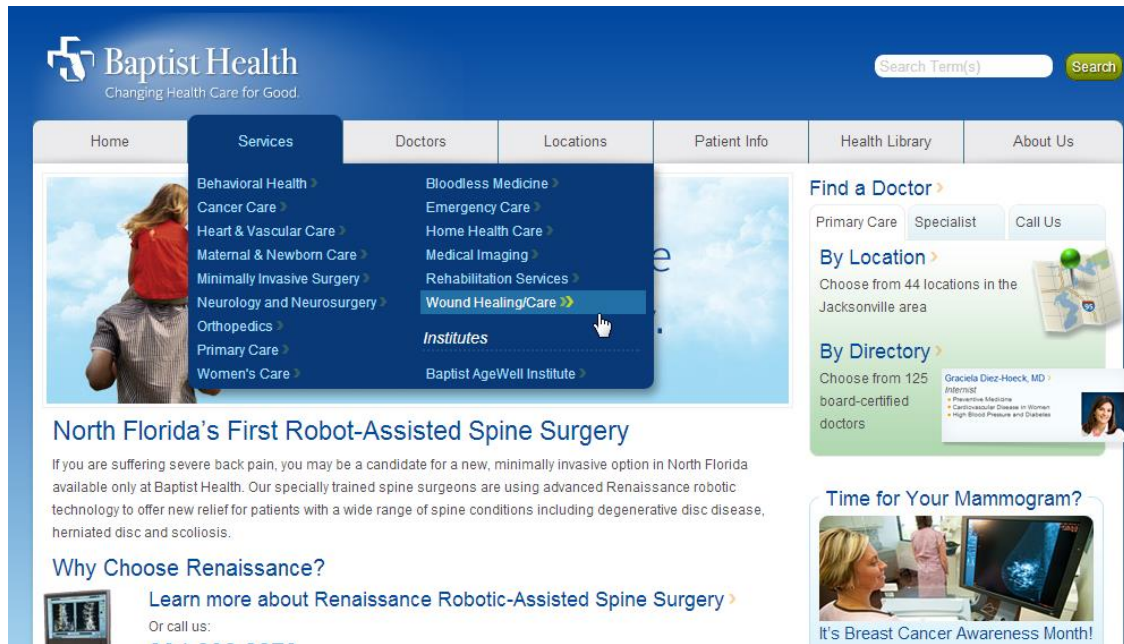
Medical Services category lists 32 separate disease areas and treatment centers

- Easy to discover
- But users may be overwhelmed by so many links, fail to read the whole list closely, and miss the best option



# Moderately deep structure:

## Baptist Health hospital webpage



- Service menu is shorter, much easier to scan
  - But discoverability for specific content is worse
- What to click to get information about prostate cancer?
  - There is no 'Urology'.
  - The answer: Cancer Care should be clicked. Is it intuitive?

# Deep structure:

## *UF Health hospital webpage*



- Shows specific disease information only at lower levels
- *The disease-specific information 3 levels down from the homepage: Home > Patient Care > Medical Care > Specialty Care.*

# Deep hierarchy shortcuts

To avoid the user distraction provide the alternative navigation: shortcuts to lower levels:

- users can browse alphabetically for information about a specific disease, or
- choose one of the Most Viewed Conditions & Services.



# Flat or deep?

- No single right answer
- Flat hierarchies works well for **distinct, recognizable categories**, because people don't have to click through as many levels.
- But there are exceptions:
  1. In situations, there are simply too many categories to show them all at one level.
  2. In other cases, showing specific topics too soon will just confuse the audience,
    - and users will understand your offerings much better if you include some intermediate category pages to establish context.

# Bottom-up Design Approach

- Relevant for fine-grained ontologies
  - domains containing a lot of small one type elements, such as recipes, music, movies, etc.
  - Elements of these ontologies mostly overlap
    - Example: the same recipe can belong to various groups: local cuisine, dinner dishes, vegetarian dish, etc.
- Users want to jump quickly to relevant content in different routes.
  - Where am I?
  - What's here?
  - Where can I go from here?



WE'VE UPDATED OUR TERMS OF SERVICE. By continuing to use this site, you agree to the site's updated [Terms of Service](#).

**1. Where am I?**

allrecipes! [Browse](#) [Find a recipe](#) [Ingredient Search](#) [Create a profile](#)

**2. What's here?**

French Fries and Veggie Fries  
Get recipes for fried or baked French fries, sweet potato fries, and other veggie fries—even polenta or Spam® versions!

Chef John's Classic Rice Pudding  
The perfect old-fashioned comforting dessert!

- Magazine - Just \$7.99
- Dinner Spinner TV
- Shop
- Cooking School
- Articles & Tips
- Blogs
- Newsletters
- Ask the Community

Welcome! Here are recommendations for you.  
Personalized recommendations based on your taste preferences and cooks you're following

**3. Where can I go from here?**

Recipe of the day  
Pan-Roasted Chicken with Asparagus  
★★★★★ 90

Recipe by IronWannaBe  
1 52 0

Dixie  
Atlanta, GA

Allrecipes Magazine  
Handpicked recipes, party ideas, how-to articles and cooking tips—with gorgeous, full-page photos to inspire you. Get a full year for \$7.99.  
Posted by Allrecipes

Venų varikozės triukas  
Nustokite slėpti kojas naudojant paprastą, greitą būdą.  
puikuspatarimas.com

ADVERTISEMENT

Recipe by sandiq  
4 41 0

ADVERTISEMENT

The Best Meatloaf I've Ever Made  
★★★★★ 430  
When I was growing up, my mom never ever made meatloaf and I always wanted to try it. I started experimenting with different recipes and I finally came up with the best meatloaf I have ever made!

# Example of bottom-up implementation

The structure of search facets is formed

The screenshot displays a search interface with the following facets and products:

- Kaina, €**: Price range from 0 to 82584.
- Tipas**: Search for types. Options include:
  - Stalo įrankių rinkiniai (683)
  - Šaukšteliai (224)
  - Stalo įrankių dėklai (71)
  - Šakutės (176)
  - Vaikiški stalo įrankiai (58)
  - Mentelės tortui (42)
  - Salotų įrankių rinkinys (59)
  - Desertinės šakutės (79)
- Prekės ženklas**: Brand filter.
- Įrankių skaičius, vnt.**: Quantity filter from 1 to 113.
- Įvertinimas**: Rating filter with options for 5 stars (211), 4 stars (229), and 3 stars (238).

**Product Listings:**

- Stalo įrankių rinkinys Villeroy & Boch 4 vnt.**: Price 25<sup>90</sup> €, Rating 5/5. Tipas: Stalo įrankių rinkiniai. Įrankių skaičius: 4 vnt.
- Bambukinis stalo įrankių dėklas, Paule**: Price 26<sup>29</sup> €, Rating 4.9/5. Tipas: Stalo įrankių dėklai. Įrankių skaičius: 1 vnt.
- Banquet stalo įrankių rinkinys 24 dalių**: Price 16<sup>99</sup> €, Rating 3.7/5. Tipas: Stalo įrankių rinkiniai. Įrankių skaičius: 24 vnt.
- BerlingerHaus stalo įrankių rinkinys Royal Black Coll...**: Price 62<sup>99</sup> €, Rating 4/5. Tipas: Stalo įrankių rinkiniai. Įrankių skaičius: 24 vnt.
- Ledų šaukštas, 22,5 cm**: Price 4<sup>33</sup> €, Rating 4.3/5. Tipas: Šaukštai ledams. Įrankių skaičius: 1 vnt.
- Axentia šaukšteliai, 12 vnt.**: Price 0<sup>69</sup> €, Rating 5/5. Tipas: Šaukšteliai. Įrankių skaičius: 12 vnt.

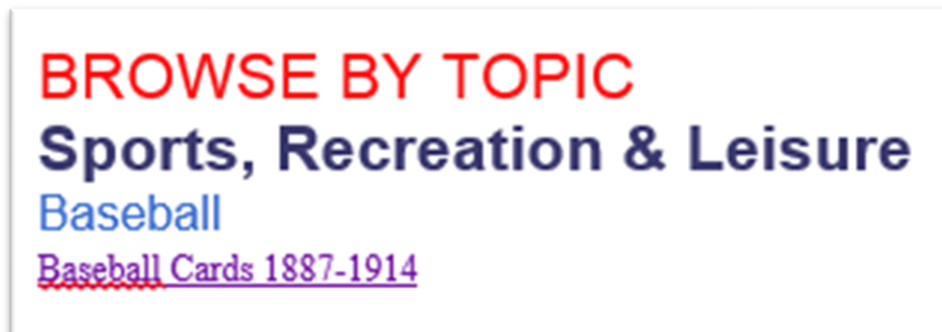
# Content Structuring Guidelines

- Rules for forming menu trees:
  - Use task semantics to organize menus
  - Limit the number of levels (i.e. prefer broad–shallow to narrow–deep)
  - Create groups of logically similar items:
    - e.g. Level 1: countries, Level 2: states, Level 3: cities
  - Form groups that cover all possibilities:
    - e.g. Age ranges: [0–9] [10–19] [20–29] and [ $\geq$  30]
  - Make sure that items are non-overlapping:
    - e.g. use “Concerts” and “Sports.” over “Entertainment” and “Events”
  - Arrange items in each branch
    - by natural sequence (not alphabetically) or group related items
  - Keep ordering of items fixed (or possibly duplicate frequent items in dedicated section of the menu)



# Visual hierarchy

- Visual hierarchy is a technique to indicate visually a position in the menu structure
- The set of headers below from the Library of Congress collections webpages gives a clear indication of progress down the tree
  - When users want to do a traversal back up the tree or to an adjoining menu at the same level, they will feel confident about what action to take



First level heading

Second level heading

Third level heading

# Exact Content Organisation Schemes

**Exact organization schemes divide information into well-defined and mutually exclusive sections.**

- 1. Alphabetical:** in phone books, book stores and directories of all kinds.
  - Problem: formal names sometime differs from informal
- 2. Chronological:** for historical archives, diaries and calendars, and event or TV guides
- 3. Geographical** suits travel subjects, social and political issues and regional organizations
  - such as wine sites, local foods

# Chronological classification

Sign In or Sign Up | Yahoo!7 | Mail | TV | News | Finance | Sport | Lifestyle | Entertainment | Travel | Cars | Jobs | Real Estate | More

**YAHOO! TV** | Search | Search Web

**TV GUIDE HOME** | MY TV CHANNELS | MY TV SHOWS | HELP | YAHOO!7 TV | PLUS7 | Missed your favourite TV show? Catch-up with PLUS7

Show **Free to Air** in **NSW - Sydney** on **Tue, 16 Dec** at **2:00am** | Program finder: | FIND

Highlight: ☐ Family ☐ Drama ☐ Entertainment ☐ News & Documentaries ☐ Sport ☐ Lifestyle ☐ Movies ☐ Reality ☐ Shows I like ☐ Display highlighted only

TUESDAY 16 December	WEDNESDAY 17 December	THURSDAY 18 December	FRIDAY 19 December	SATURDAY 20 December	SUNDAY 21 December	MONDAY 22 December
<b>2:00am</b>	<b>2:30am</b>	<b>3:00am</b>	<b>3:30am</b>	<b>4:00am</b>		
<b>Harry's Practice</b> 2:00am - 2:30am	<b>Home Shopping</b> 2:30am - 3:00am	<b>Home Shopping</b> 3:00am - 3:30am	<b>Sons and Daughters</b> 3:30am - 4:00am	<b>NBC Today</b> 4:00am - 5:30am		
<b>All Worked Up</b> 2:00am - 2:30am	<b>All Worked Up</b> 2:30am - 3:00am	<b>Inside West Coast Customs</b> 3:00am - 4:00am		<b>Pimp My Ride</b> 4:00am - 4:30am	<b>Motor Mate</b> 4:30am - 6:00am	
<b>Danoz</b> 2:00am - 2:53am	<b>Global Shop</b> 2:53am - 3:21am		<b>Extra</b> 3:21am - 3:48am	<b>Good Morning America</b> 3:48am - 5:00am		
<b>Secret Sunshine</b> 11:55pm - 2:30am	<b>Beat The Ancestors</b> 2:30am - 3:25am		<b>Engineering Giants</b> 3:25am - 4:25am		<b>Food Lovers' Guide Australia</b> 4:25am - 5:00am	
<b>Home Shopping</b> 2:00am - 2:30am	<b>Home Shopping</b> 2:30am - 3:00am	<b>Home Shopping</b> 3:00am - 3:30am	<b>Home Shopping</b> 3:30am - 4:00am	<b>Life Today with James Robison</b> 4:00am - 4:30am	<b>CBS This Morning</b> 4:30am - 6:00am	
<b>Carlito's Way</b> 1:00am - 4:00am				<b>Love Thy Neighbour</b> 4:00am - 4:30am	<b>Shortland Street</b> 4:30am - 5:00am	

**Watch your favourite TV shows** | | **Watch now** | **PLUS7**

# Geographical classification



# Ambiguous content organisation schemes

Ambiguous organization supports the information seeking by grouping items in intellectually meaningful ways.

- **Faceted classification** Dalykinė klasifikacija
  - Major concepts of the site, their facets (attributes) and their values
  - By **topics**: Yellow pages, travel agencies, recipe sites, ...
  - By **tasks**: In text editors: edit, insert, format, ...;
  - By **audience**:
    - bank sites: private and business clients;
    - Universities – prospective students, students, staff
- **Metaphors**: desktop, folder, file.
- **Hybrid**: combination of various schemes.

# Faceted classification: travel agency

The screenshot shows the Expedia.co.uk website. At the top, there's a navigation bar with the logo and links for Account, My Scratchpad, Manage Trips, and Support. Below this is a secondary navigation bar with links for Home, Hotels, Flights, Flight + Hotel, Car, Trains, Last Minute, Beach, Deals, City Breaks, Things to Do, and More. The main content area features a large search form with tabs for Flights, Hotels, Flight + Hotel (selected), Cars, Things to Do, NEW Trains, and Discover. The Flight + Hotel tab is active, showing fields for Flying from, Flying to, Departing, Returning, Rooms, Adults (18+), and Children (0-17). There's also a checkbox for 'I only need a hotel for part of my stay' and a dropdown for 'Preferred class' set to Economy. A yellow 'Search' button is at the bottom left of the form. To the right of the search form is a promotional banner for Millennium Hotels and Resorts with a 'BOOK NOW' button. At the bottom right, there's a Nectar logo and text about collecting Nectar points.

- Major concepts: **flights, hotels, cars...**
- Common facet for all concepts: **price**
- Unique facets: flights go from one city to another, hotels are located in a single city but may be part of a chain, etc.

# Task classification

Info

New

Open

Save

Save As

History

Print

Share

Export

Close

Account


Feedback

Options

Info

Lecture7\_Information\_architecturePart2


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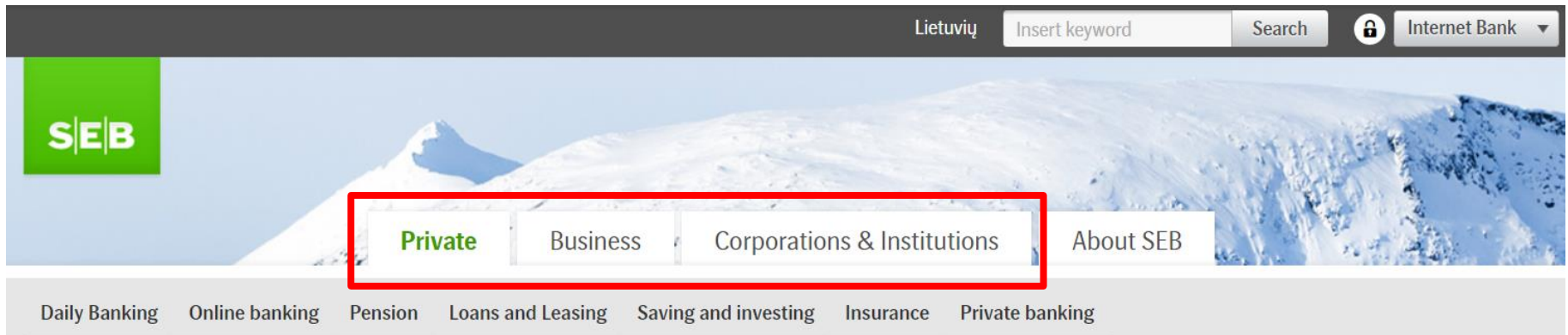
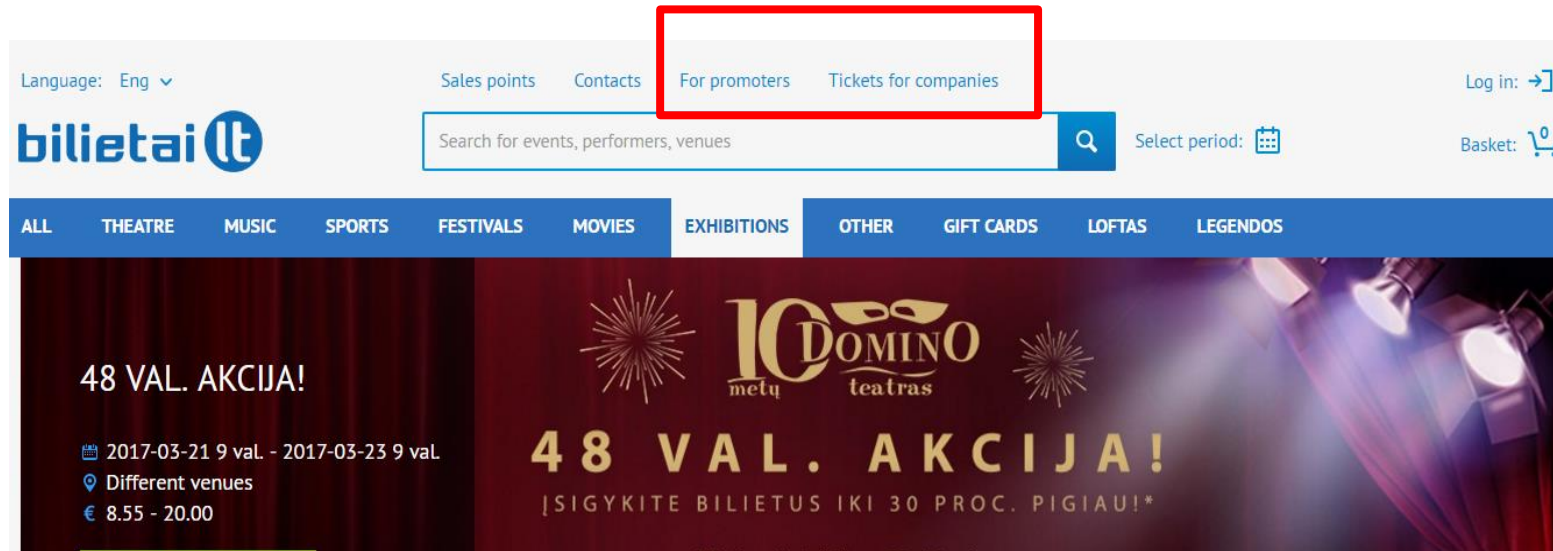


Manage Presentation ▾

Manage Presentation

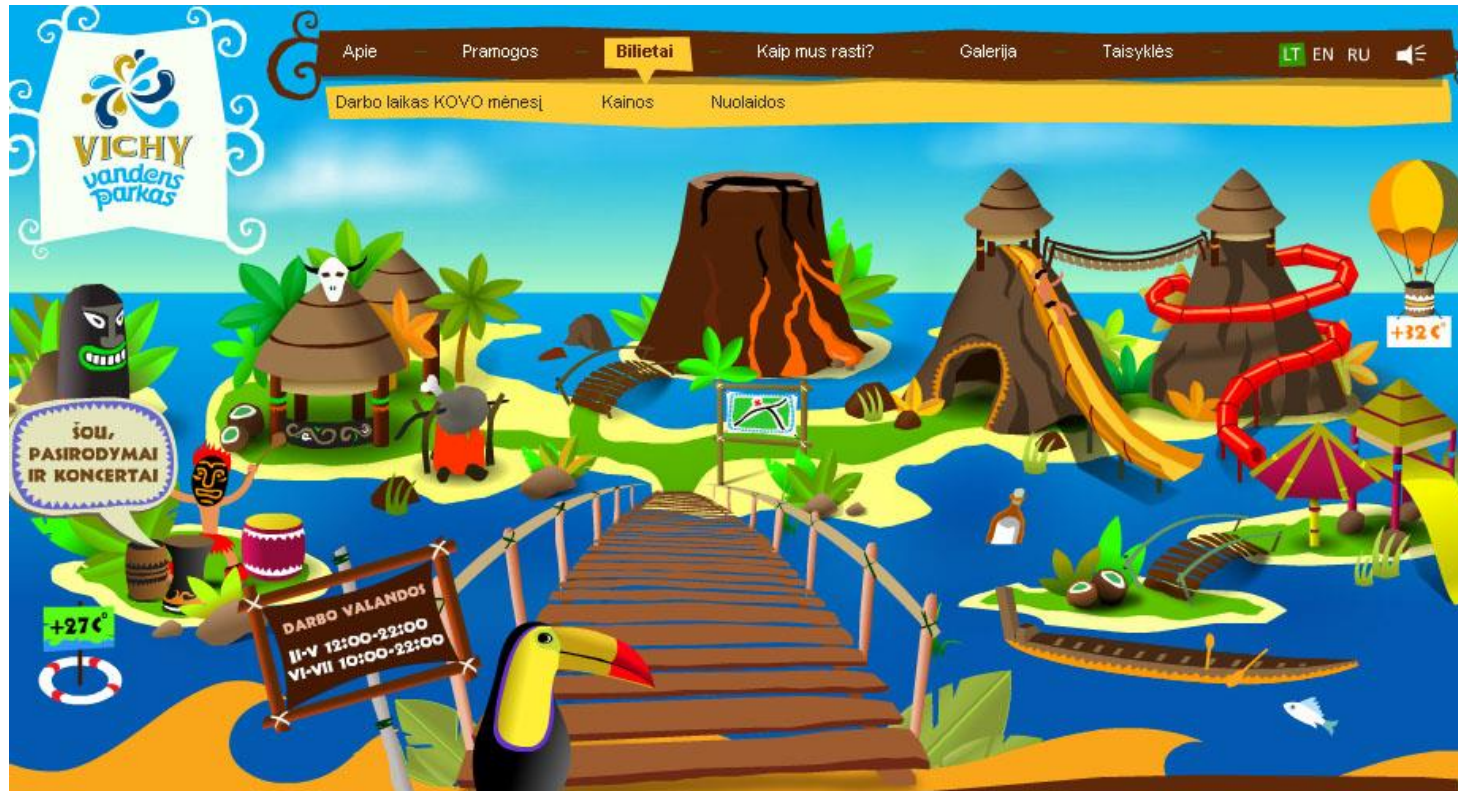
 There are no unsaved changes.

# Classification by audience





# Metaphor-based organisation: Aqua Park Vichy



# Social classification

- User **tagging** in social networks
  - a **tag** is a keyword or term assigned to a piece of information
- Tag clouds



**epiblt**  
May 12, 2009  
(less info)  
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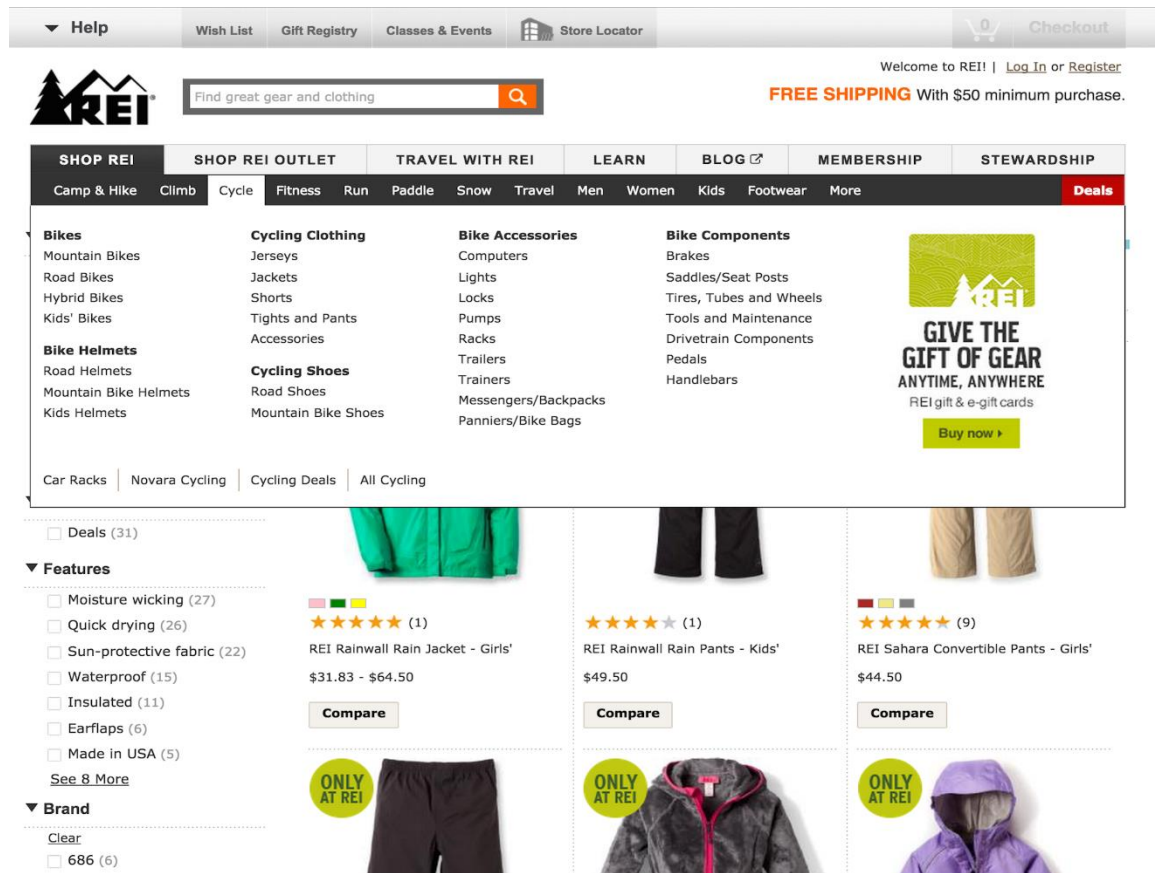
Suopis ir Rambynas vel uždainavo. Kad vyrams  
valios nepritrūktu.

Category: [Music](#)

Tags: [Suopis](#) [Rambynas](#) [Ramonai](#) [be](#) [taves](#)  
[nelabai](#) [laike](#) [rinkimai](#) [europos](#)  
[parlamentas](#)

in comics community computer cooking cool **CSS** culture d  
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fun funny game **games** **google** graphics hardware **he**  
images imported inspiration internet iphone java  
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opensource osx photo **photography** photos **photo**  
mming python radio rails recipe **recipes** reference re  
security seo sga **shopping** slash social socialnetworking

# Example of hybrid classification



E-commerce site REI Bicycle category is initially opened: 34 elements are grouped into the bid 2-dimensional menu

# Labelling system

- Labels represent larger chunks of information
  - Should match the user's language
- Formats: textual and iconic
- Labels include:
  - Contextual links
    - Hyperlinks to information on other page
  - Heading
    - Describe the content that follows them
  - Navigation system choices
  - Index terms: keywords, tags for searching

# Problems with labelling

- Contextual link directs to home page, instead of specific page
  - User has repeatedly search for information in drivers page
- The category of the active page is not highlighted
- Cycled links
  - Visitors can not notice that the page has been already visited

# Designing labels

- Creation is based on content analysis
- Label should be created by content authors
  - For example, by users in card sorting
- Narrow scope whenever possible
- Design consistent labelling systems
  - Consistency is affected by style, presentation, syntax, granularity, comprehensiveness, audience

# Guidelines for labelling

## 1. Use familiar and consistent terminology.

Carefully select terminology that is familiar to the designated user community and keep a list of these terms to facilitate consistent use

## 2. Ensure that items are distinct from one another

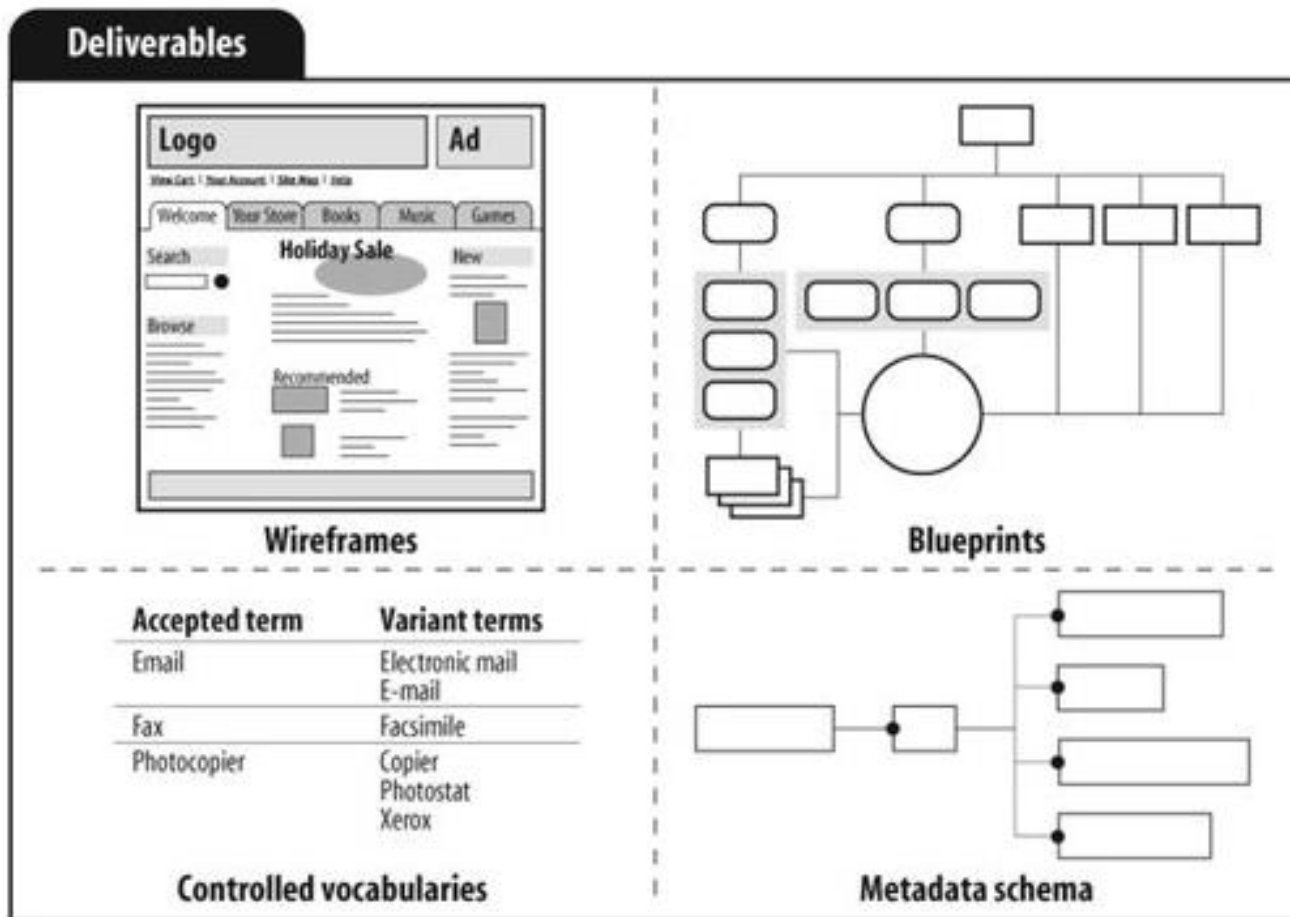
Each item should be distinguished clearly from other items. For example, “Slow tours of the countryside,” “Journeys with visits to parks,” and “Leisurely voyages” are less distinctive than are “Bike tours,” “Train tours to national parks,” and “Cruise-ship tours”



# Guidelines for labelling (2)

3. Use consistent and concise phrasing
  - Review the collection of items to ensure consistency and conciseness.
  - Users are likely to feel more comfortable and be more successful with
    - “Animal,” “Vegetable,” and “Mineral” than with
    - “Information about animals,” “Vegetable choices you can make,” and “Viewing mineral categories”
4. Bring the keyword to the fore
  - Try to write menu items such that the first word aids the user in recognizing and discriminating between items
    - “Size of type” instead of “Set the type size.”
  - Then, if the first word indicates that this item is not relevant, users can begin scanning the next item

# Information architecture deliverables



Refers to a number of techniques concerned with understanding how people classify and categorize things.

Exercise with users groups

## **CARD SORTING**

# Card sorting

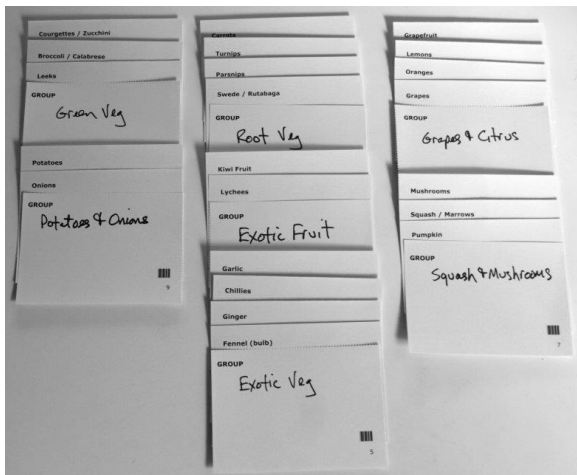
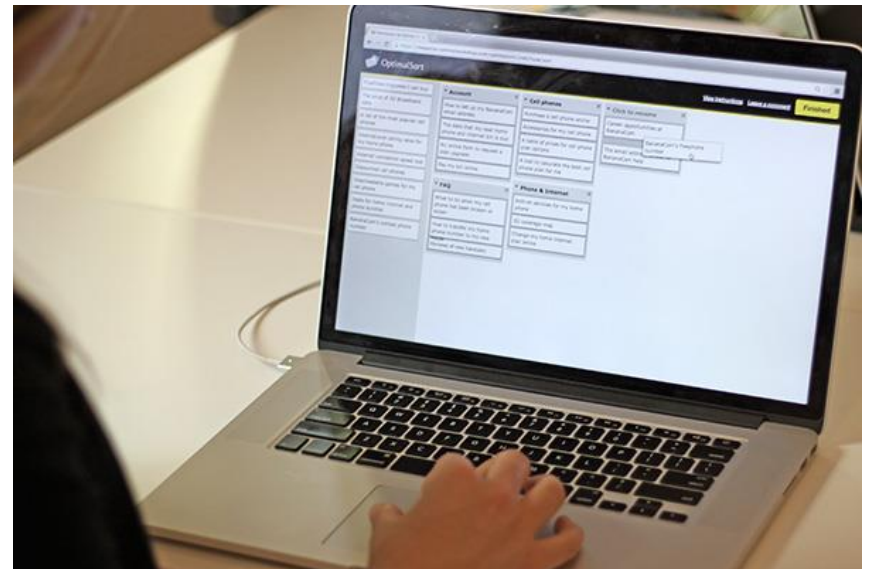
- Open card sorting
  - starts with blank cards, participants are asked to write down the objects or actions they think are important in some domain.
  - These are then gathered together into categories
- Closed card sorting
  - starts with predefined categories and asks participants to place objects into the categories

# Card sorting

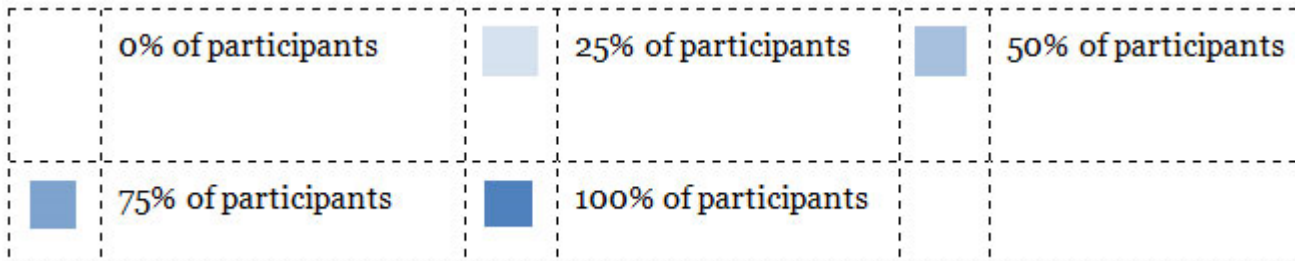
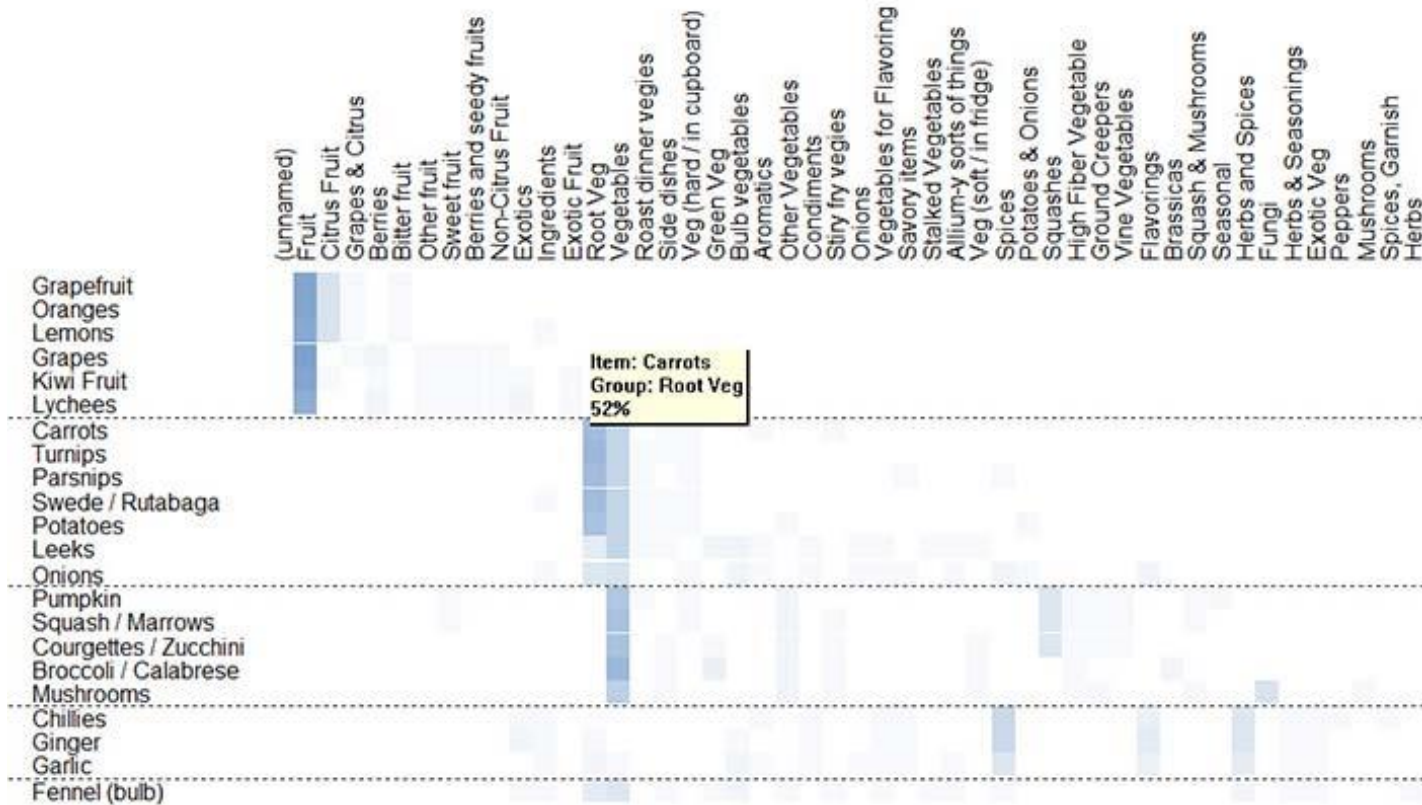
## Moderated



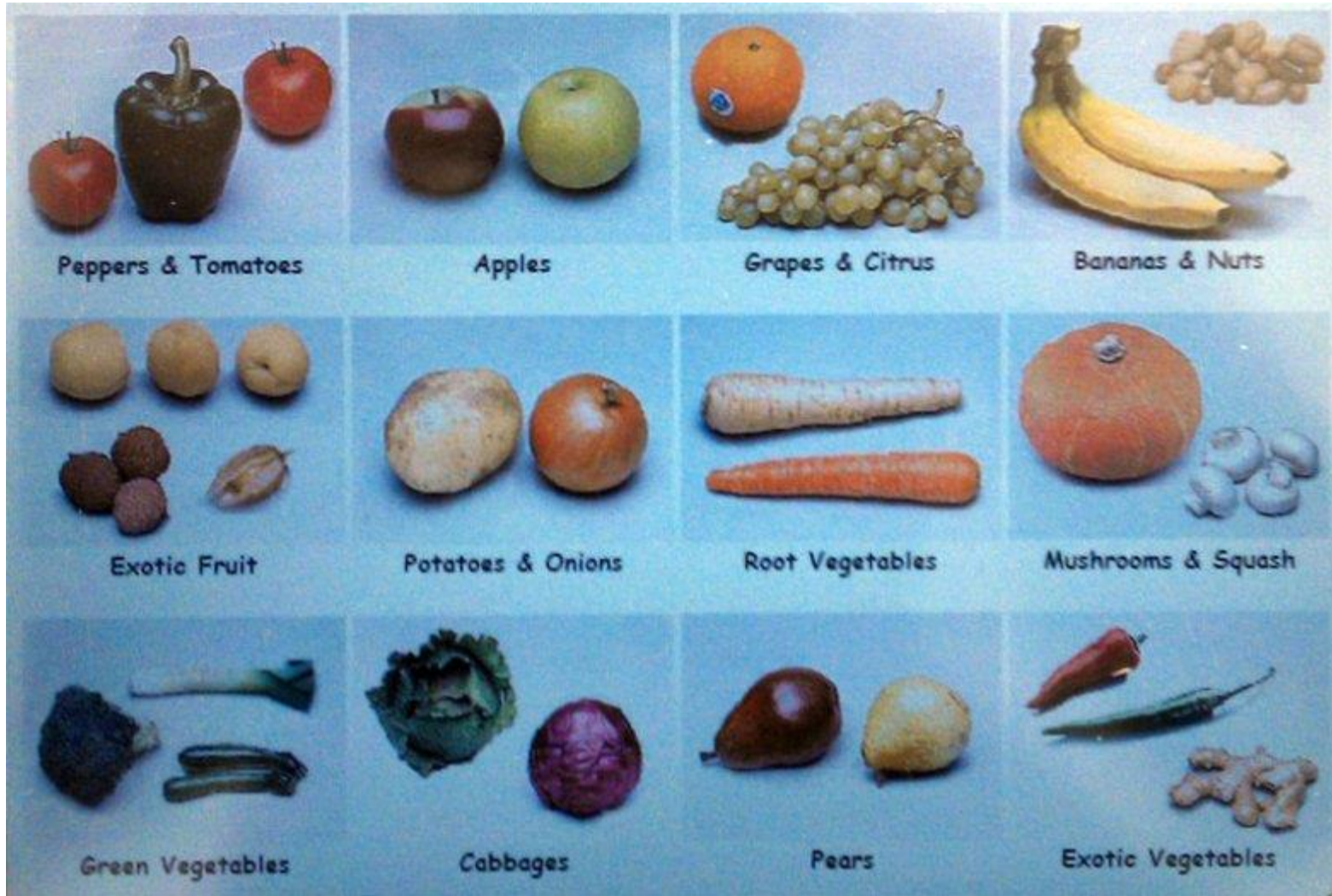
## Using tools



# Example of card sorting









# Building effective information architecture

1. Understand the business requirements and the content for the system.
2. Conduct cards sorting exercises with a number of representative users.
3. Evaluate the output of exercises. Look for trends in grouping and labelling.
4. Develop a draft information architecture (i.e. information groupings and hierarchy).
5. Evaluate the draft IA using the card-based classification evaluation technique.
6. Iterate 2-5 steps until stable pattern will be developed.
7. Document the information architecture in a site map
8. Define a number of common user tasks (in storyboards or scenarios)
9. Walk other members of the project team through the storyboards and leave them in shared workspaces for comments.
10. If possible within the constraints of the project, it is good to conduct task-based usability tests on wireframes and mockups as it provides valuable feedback without going to the expense of creating higher quality designs.
11. Create detailed page layouts to support key user tasks. Page layouts should be annotated with guidance for visual designers and developers.

Structure and navigation must support each other and integrate with search and across subsites. Complexity, inconsistency, hidden options, and clumsy UI mechanics prevent users from finding what they need

## **IA DESIGN MISTAKES**

<https://www.nngroup.com/articles/top-10-ia-mistakes/>

# Structure mistakes

## 1. No structure

Common on news sites and catalog-based e-commerce sites

## 2. Search and structure not integrated

- users often need to navigate the neighborhood around their search destination.
- Do not indicated user location

## 3. Missing category landing pages

- Provide category overview

# Structure mistakes

## 4. Extreme polyhierarchy

- Items can be located in multiple locations
- Provide faceted filtering for large item space

## 5. Subsites/Microsites Poorly Integrated with Main Site

- While updating content integrate these subsite within the overall structure

# Navigation mistakes

## 6. Invisible Navigation Options

- Make it visible on all pages
- Avoid banner blindness

## 7. Uncontrollable Navigation Elements

## 8. Inconsistent Navigation

## 9. Too Many Navigation Techniques

## 10. Made-Up Menu Options

# Summary

- Information architecture is concerned with
  - understanding the structure and
  - organization of the content of the site.
- Navigation concerns
  - how people move around the site and
  - how they get to know
    - what is on the site and where it is.

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