

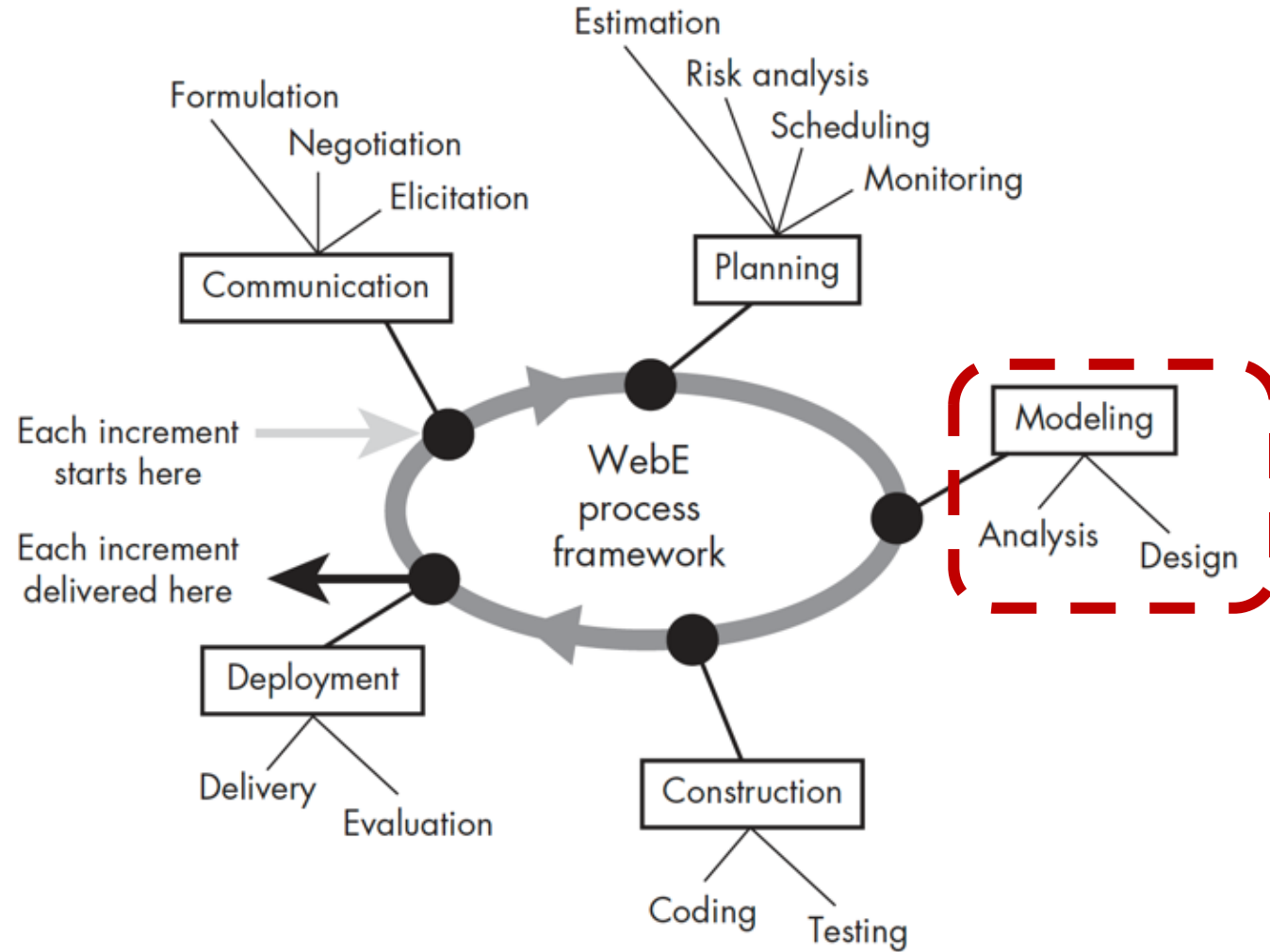


Lección 4.2

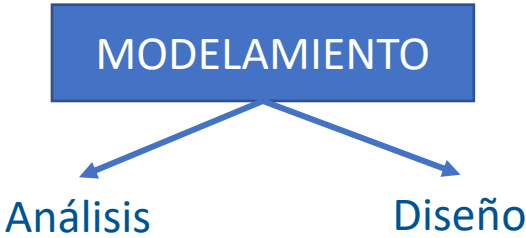
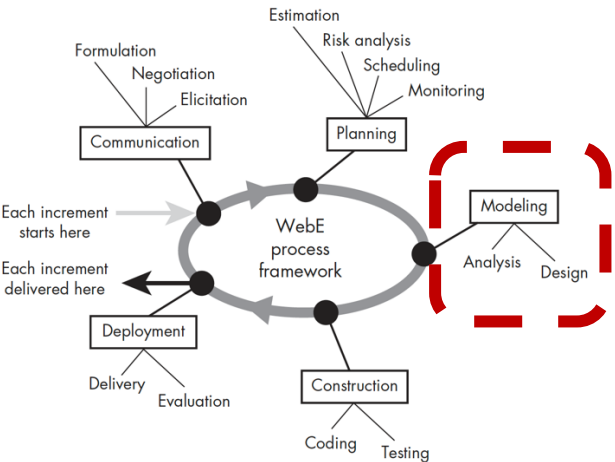
Diseño de la Interfaz de Usuario

Proceso de Ingeniería Web

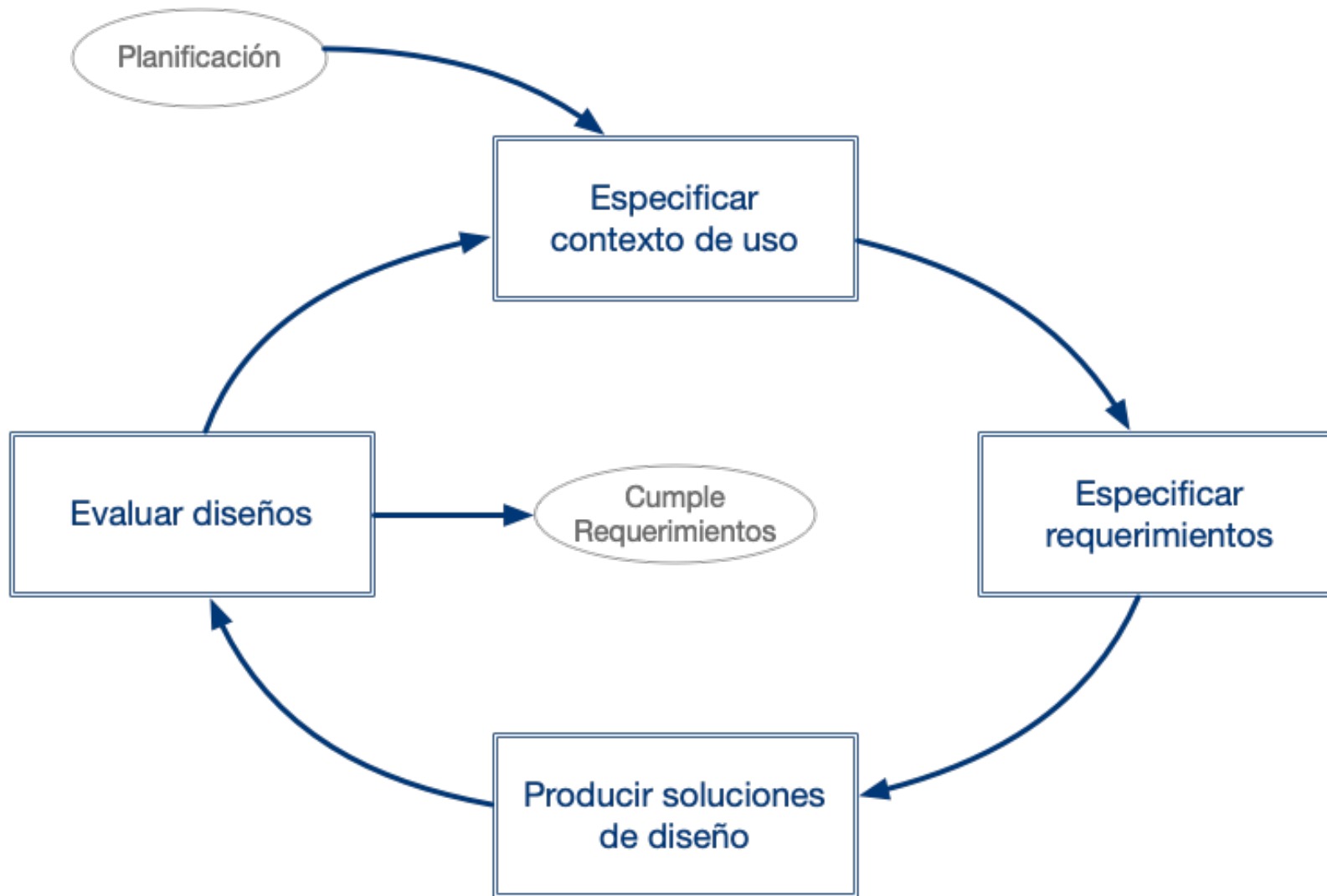
5 actividades



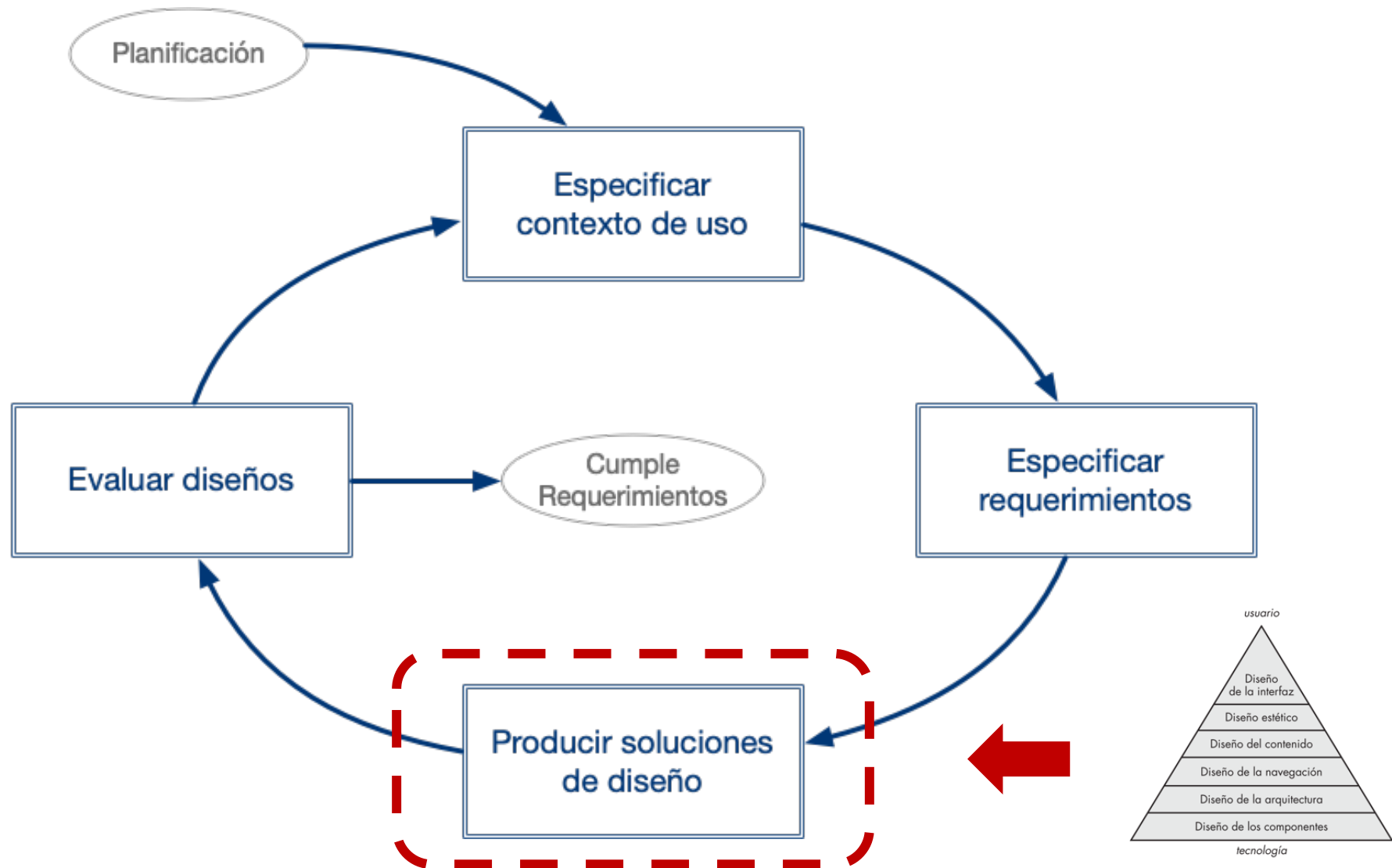
Proceso de Ingeniería Web



El DCU: En enfoque para el diseño de la UI




El DCU: En enfoque para el diseño de la UI



¿Cómo llego?

Investigación de Usuario

Fabio



Phrase
"Searching for genetic information in the plant with a huge amount of data"

Motivations
Support research in the field of applied genetics in citrus

Goals
- Identify genetic differences between groups of citrus varieties.

Needs
- Process files of genetic variations of several citrus varieties.
- Compare the variations between varieties.
- Identify the different variations between variety groups.
- Identify the pathways associated with the variations.

Used Devices

| | |
|--------------|-----|
| Tablet | No |
| Mobile Phone | No |
| Laptop | Yes |

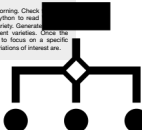
Age: 42

Job title: Researcher

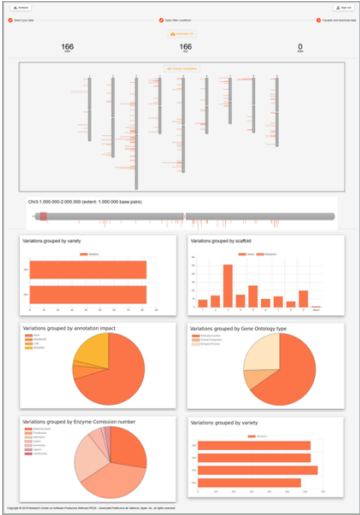
Occupation: Biotechnologist

Experience: 8 years

An ordinary Day in the life of Fabio
Fabio enters the genetic laboratory in the morning. Checks variables that should be studied. It uses Python to read containing the genetic variations of each variety. Generates comparison genetic variations between different varieties. Once the variations are identified, use the ISV tool to focus on a specific region of the genetic sequence where the variations of interest are.

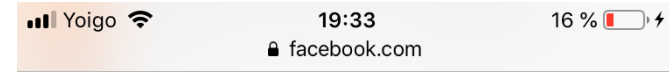
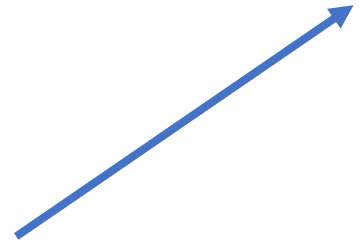


Producción de Soluciones



El diseño no es trivial

como cuando te dicen “pero si solo es aumentar 7 campos y un botón”

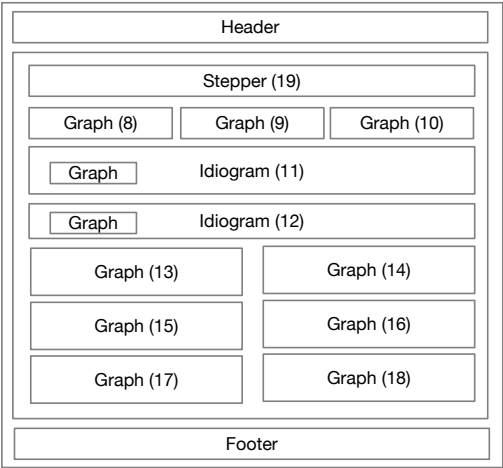
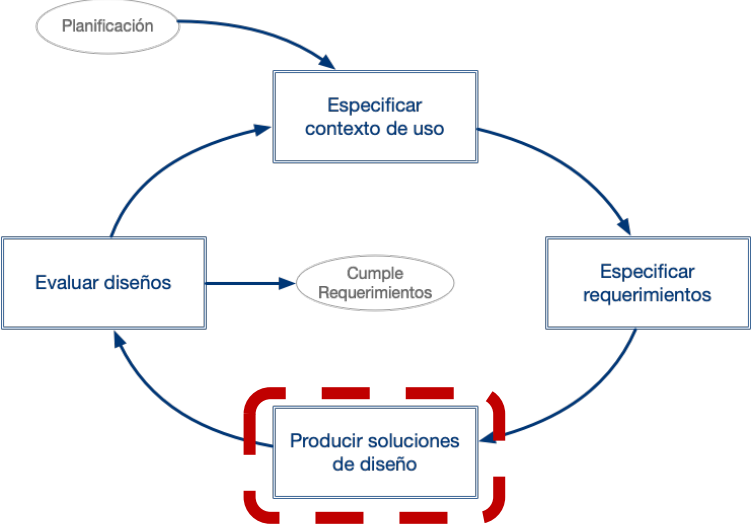


facebook.com

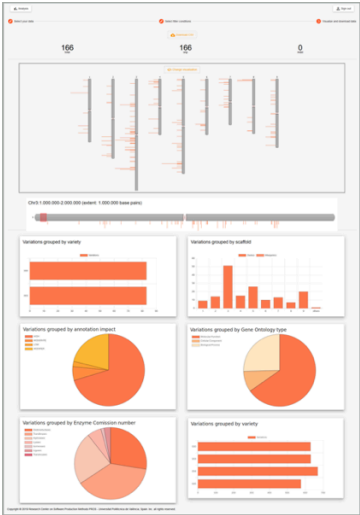
como cuando te dicen "pero si solo es aumentar 7 campos y un botón"



Producir Soluciones de Diseño: Artefactos claves



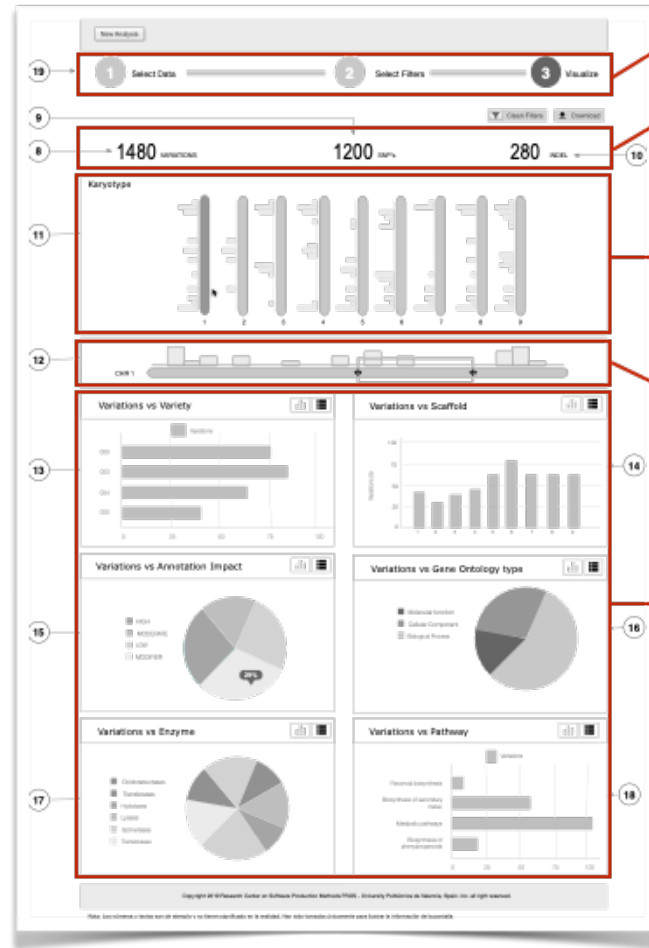
Diseño Conceptual



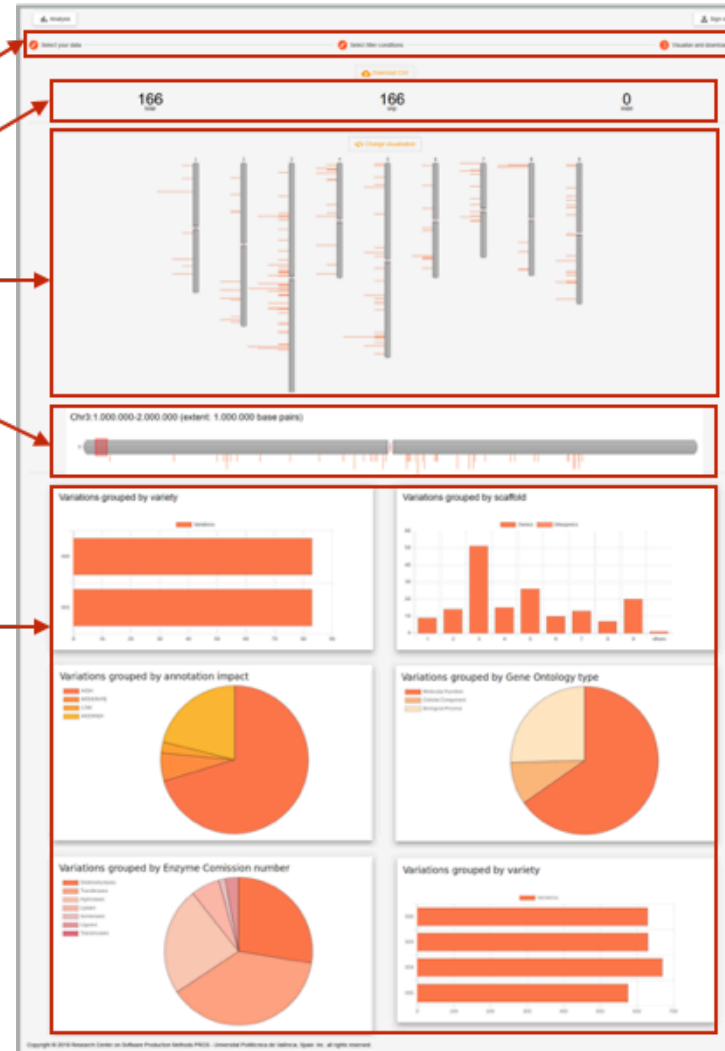
Diseño Físico

Trazabilidad

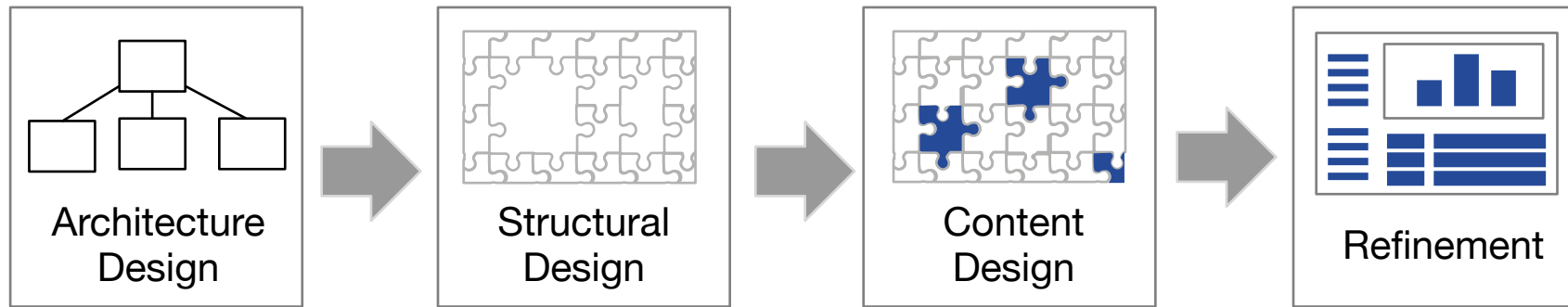
DESIGN UI Conceptual Model



IMPLEMENTATION Web Page



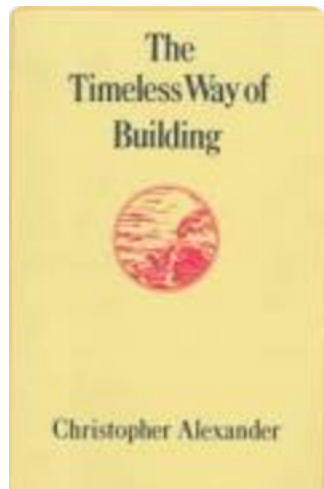
Proceso de Diseño de UI



= Patrón de Diseño de UI

Origen de los Patrones

- Area: Arquitectura, Construcción
- Autor: Christopher Alexander
- Libro: The Timeless Way of Building (1979)



Ejemplo



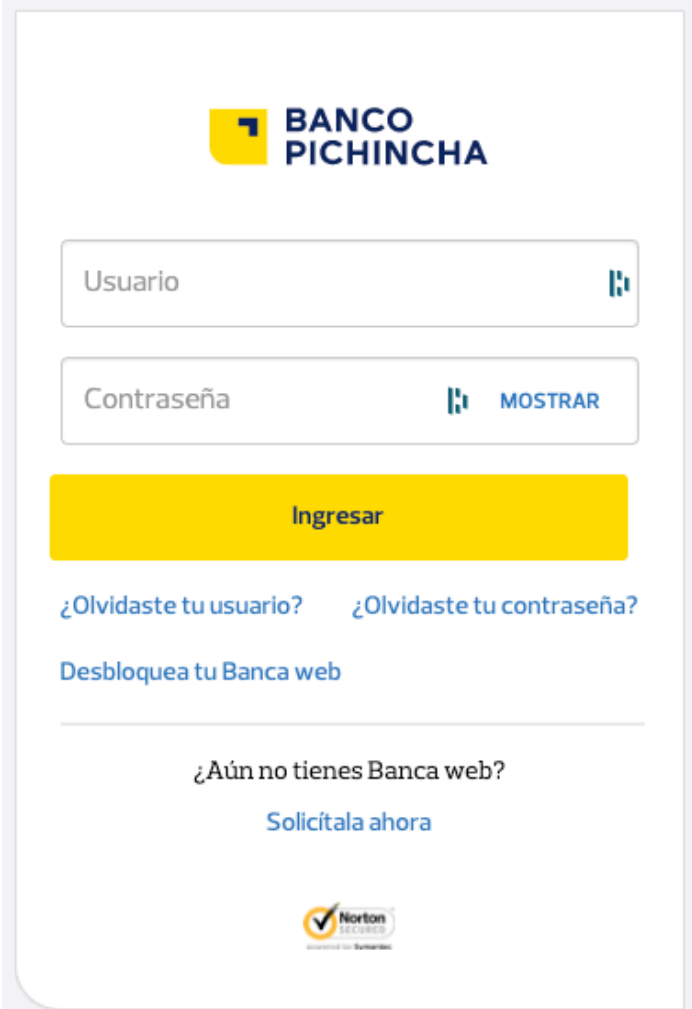
Actividad: Visualizar Historia de los Patrones (TikiToki)



¿Que es un Patrón de UI?

Es una **solución de diseño** que se emplea de manera **recurrente** para abordar un **problema común** de diseño en la interfaz de usuario

- Ejemplo: Formulario Login

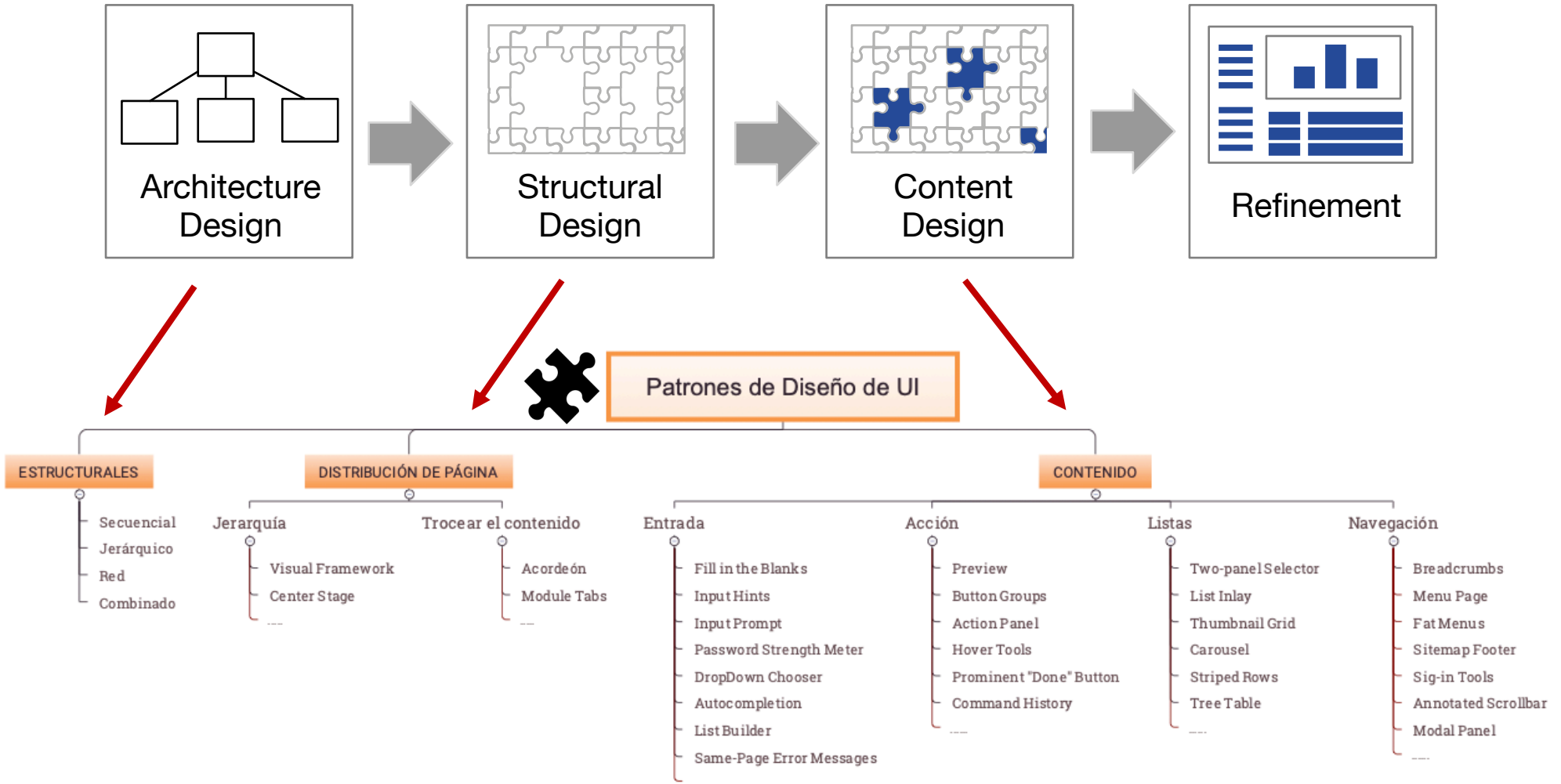


The image shows a login form for Banco Pichincha. At the top right is the logo, which consists of a yellow square with a white stylized 'P' and the text 'BANCO PICHINCHA' in black. Below the logo are two input fields: 'Usuario' and 'Contraseña'. The 'Contraseña' field has a 'MOSTRAR' link to its right. A yellow button labeled 'Ingresar' is positioned below the fields. Underneath the button are two links: '¿Olvidaste tu usuario?' and '¿Olvidaste tu contraseña?'. Below these is a link 'Desbloquea tu Banca web'. A horizontal line separates this section from the bottom part, which contains the text '¿Aún no tienes Banca web?' and a link 'Solicítala ahora'. At the bottom center is the Norton logo with the text 'Norton SECURED BY Symantec'.

Estructura de un Patrón (Tidwell)

- **Nombre**
 - Nombre significativo
 - **Ejemplo**
 - Una imagen que captura la solución
 - **¿Qué?**
 - Descripción del problema
 - **¿Cuándo?**
 - La situación que da lugar al problema
 - **¿Por qué?**
 - Mejoras que produce el patrón
 - **¿Cómo?**
 - Descripción de la Solución
- Nombre: Login
 - **¿Qué?**
 - Cuando sea necesario, solicita a los usuarios autenticarse usando una combinación de correo y contraseña
 - **¿Cuándo?**
 - Cuando usuarios frecuentemente retornan a un sitio que usa su información, es conveniente solicitar al usuario ingresar una sola vez su información. Usar la información en las sucesivas visitas futuras al sitio.
 - **¿Por qué?**
 - Usuarios no les gusta ser interrumpidos por procesos de autenticación
 - **¿Cómo?**
 - Solicita a los usuarios autenticarse, solo cuando es necesario, usando una combinación de correo electrónico y contraseña

Flujo de trabajo recomendado



Patrones de Estructura

Patrones de Diseño de UI

ESTRUCTURALES

- Secuencial
- Jerárquico
- Red
- Combinado

DISTRIBUCIÓN DE PÁGINA

Jerarquía

- Visual Framework
- Center Stage
-

Trocear el contenido

- Acordeón
- Module Tabs
-

CONTENIDO

Entrada

- Fill in the Blanks
- Input Hints
- Input Prompt
- Password Strength Meter
- DropDown Chooser
- Autocompletion
- List Builder
- Same-Page Error Messages
-

Acción

- Preview
- Button Groups
- Action Panel
- Hover Tools
- Prominent "Done" Button
- Command History
-

Listas

- Two-panel Selector
- List Inlay
- Thumbnail Grid
- Carousel
- Striped Rows
- Tree Table
-

Navegación

- Breadcrumbs
- Menu Page
- Fat Menus
- Sitemap Footer
- Sig-in Tools
- Annotated Scrollbar
- Modal Panel
-

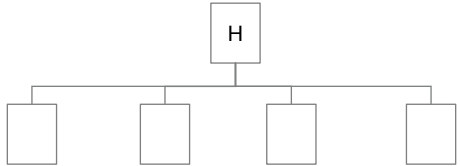
Patrones de Estructura

- **Arquitectura de Información** es el arte de **organizar un espacio de información**
- Cosas a pensar:
 - ¿Qué objetos están siendo mostrados a los usuarios?
 - ¿Cómo están organizados y ordenados?
 - ¿Qué se necesita hacer con estos objetos?
 - ¿De cuántas maneras puedes diseñar una presentación de estas cosas y tareas?

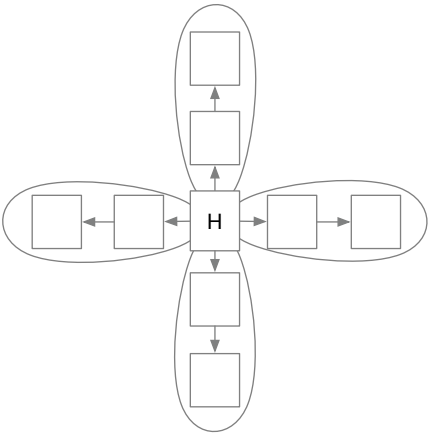
Patrones de Estructura



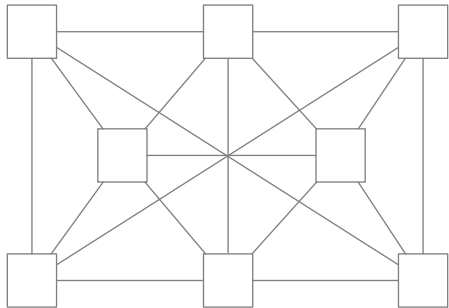
Secuencial



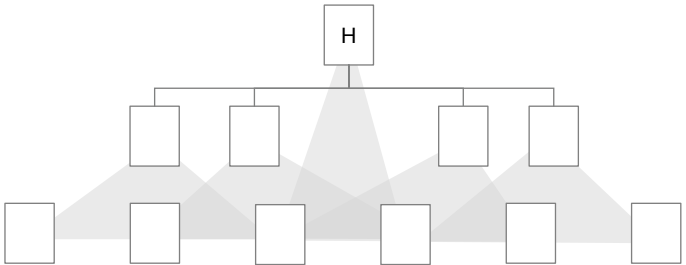
Jerárquico



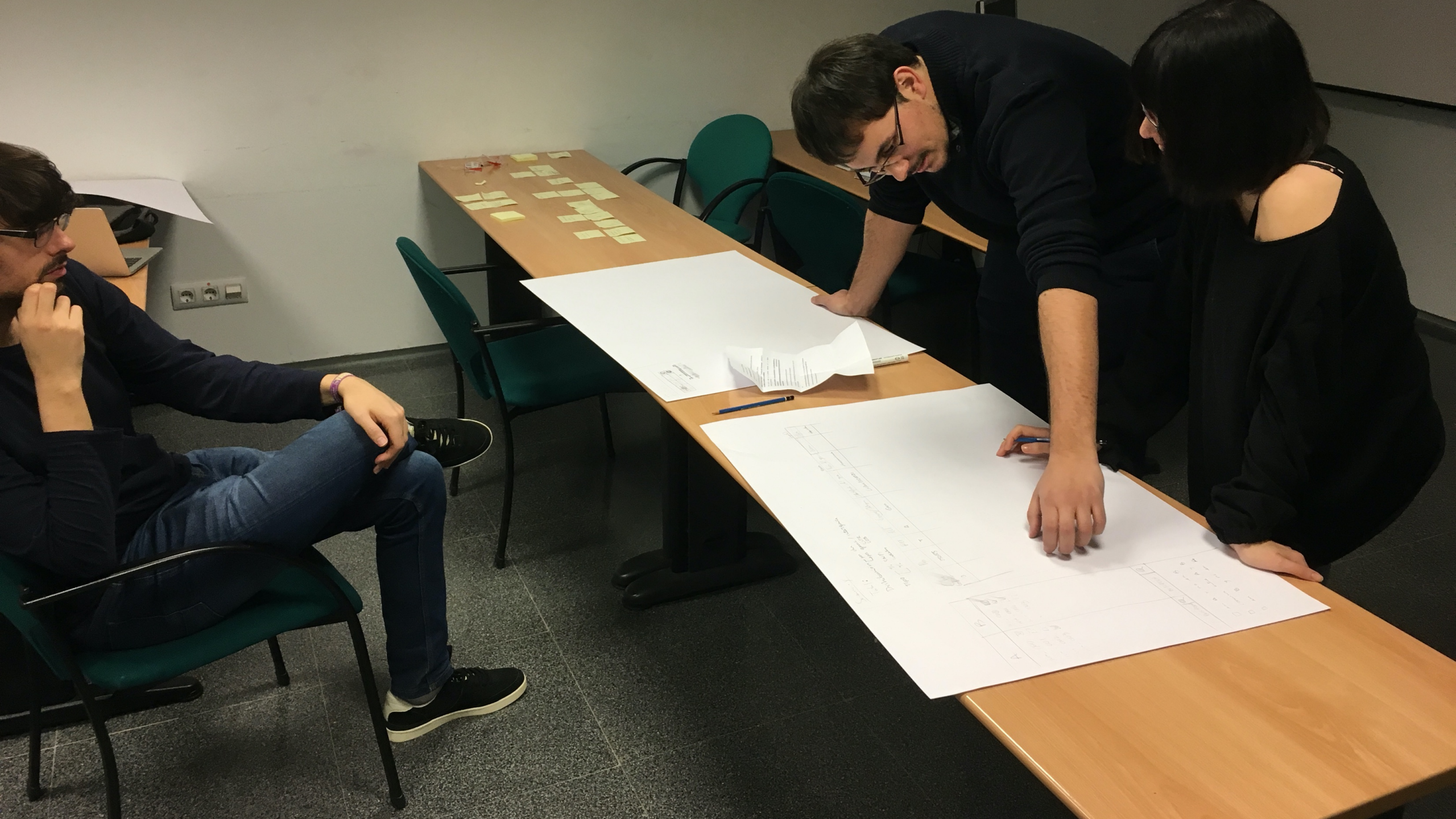
Hub and spoke



Red



Combinado



Patrones de Estructura

Patrón: Secuencial (Wizard)

¿Qué?

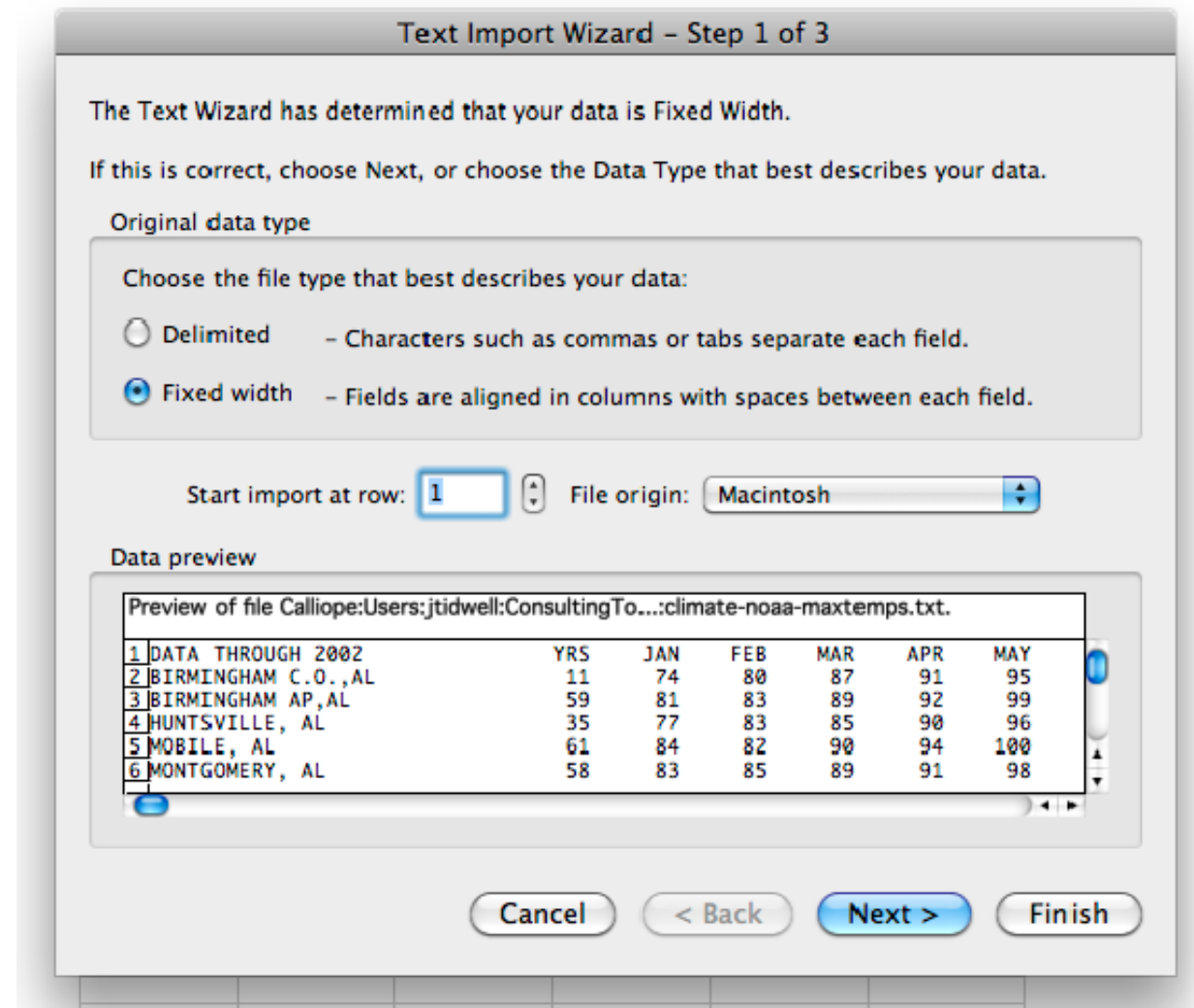
- Guía al usuario paso a paso
- Orden establecido

¿Cuándo?

- Usuarios son novatos
- Tareas= serie de decisiones

¿Por qué?

- Divide y vencerás

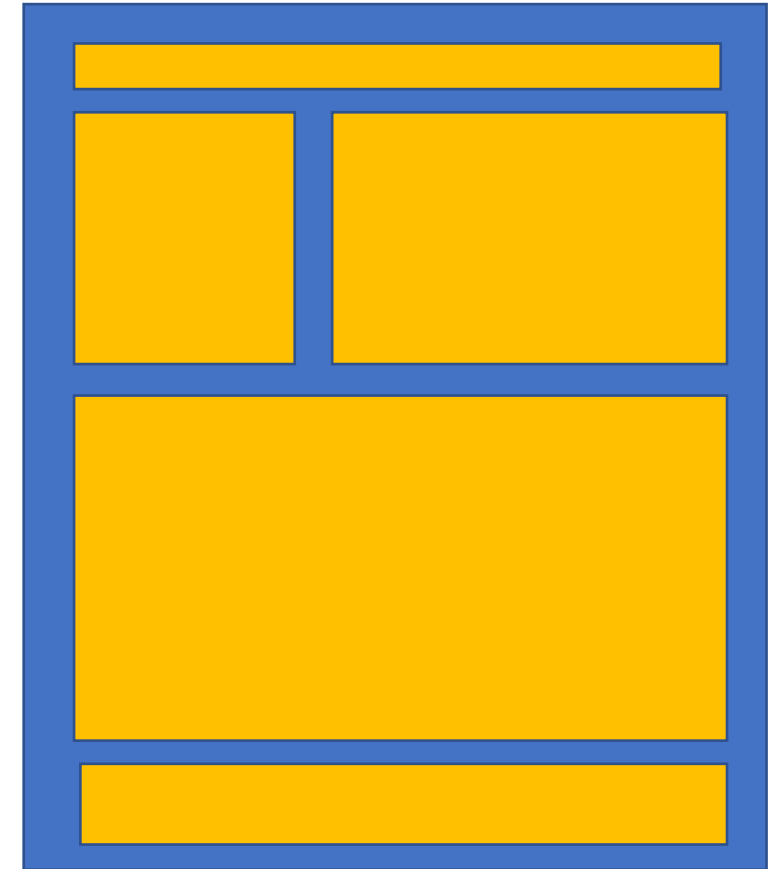


Patrones de Diseño de Distribución de la Página



Patrones de Diseño de Distribución de la Página

- *Page Layout* es el arte de manipular la **atención** del usuario en una página para expresar significado, secuencia y puntos de interacción.
- Cosas a pensar:
 - ¿Qué debería **captar** más la atención?
 - ¿Qué cosas tienen **menor/mayor** atención?



Patrones de Diseño de Distribución de la Página

■ *Conceptos de Percepción*

1. Densidad
2. Color de fondo
3. Ritmo
4. Tamaño y Posición



Figure 4-2. Ways to emphasize blocks of text or small items (clockwise from upper left): density, background color, rhythm, and position and size

Patrones de Diseño de Distribución de la Página

■ Leyes Gestalt

Proximidad

COLLECTION ONLY
Lunch Deal
£3.99
1 Italian small pizza
Any Canned Drink
Only available before 4pm

Terms and Conditions apply

Get this deal →

COLLECTION ONLY
Pizza Deal
£9.99 *
1 Large Pizza
Garlic Bread

Terms and Conditions apply

Get this deal →

Región Común

Offers
300C Offers
Ypsilon Offers
Hire Purchase - 0% APR Representative
Chrysler Horizon PCP
Grand Voyager Offers

CHRYSLER YPSILON 5-DOOR CITY CAR
AVAILABLE WITH 0% APR REPRESENTATIVE ON HIRE PURCHASE. TS & CS APPLY*.

| | |
|----------------------------------|-------------------------|
| Model | Ypsilon 1.2 S |
| On the Road Price | £10,750 |
| Customer Deposit | £0 |
| Amount of Credit | £10,750 |
| Monthly Payment | £179 |
| Total Amount Payable by Customer | £10,750 |
| Duration of Contract | 60 |
| Rate of Interest (used) | 0.00% |
| | 0.0% APR Representative |

Promotion available on new Ypsilon models registered before 30th June 2014. 0% APR Hire Purchase available for up to a 5 year term. Finance subject to status. Guarantees may be required. Terms and Conditions apply. Chrysler Financial Services, PO BOX 4465, Slough, SL1 0RN.

Click to find your nearest Chrysler dealer

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- OUR WORLD
- FOOTBALL
- ABOUT US
- CONTACT US

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Patrones de Diseño de Distribución de la Página

Patrón: Visual Framework

¿Qué?

- Aplicar misma gama
- Diseño flexible

¿Cuándo?

- Existen varias páginas
- Quieres facilidad de usar y navegar

¿Por qué?

- Mejora consistencia
- Fácil de aprender

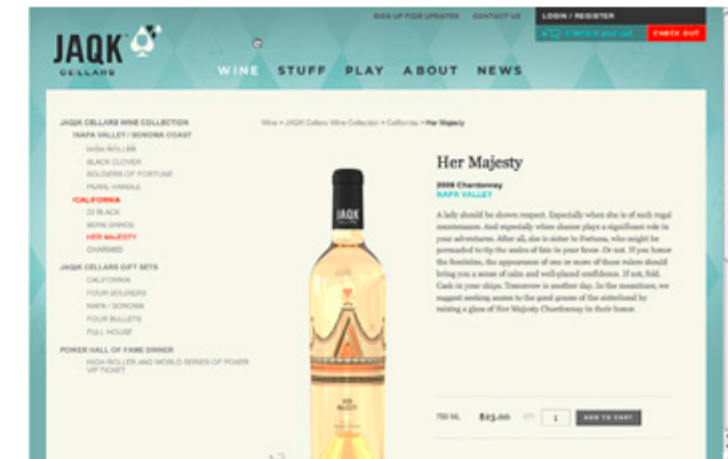


Figure 4-15. JAQK

Patrones de Diseño de Distribución de la Página

Patrón: **Acordeon**

¿Qué?

- Modulariza contenido en pilas colineales que abren y cierran

¿Cuándo?

- Contenidos heterogeneos
- Poco espacio
- Ver módulos al mismo tiempo

¿Por qué?

- Su uso es común
- Fácil manejo
- No sobrecarga la página con contenido

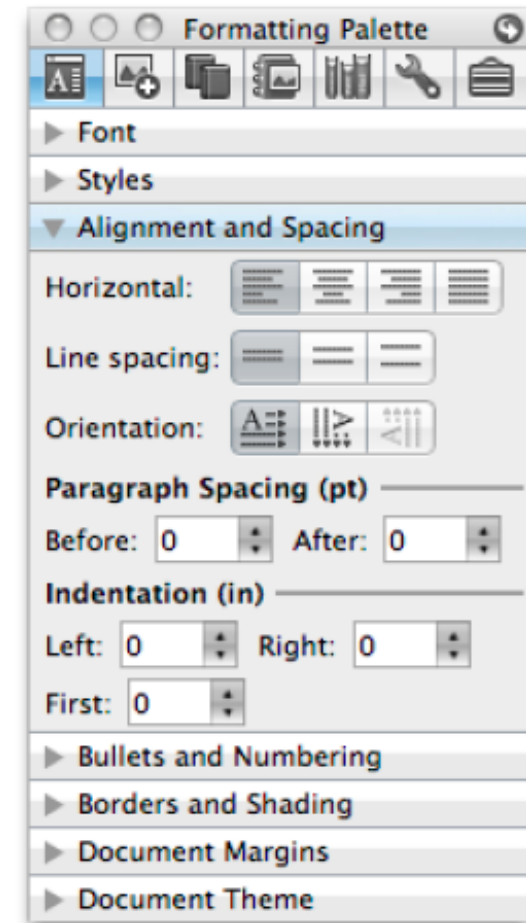
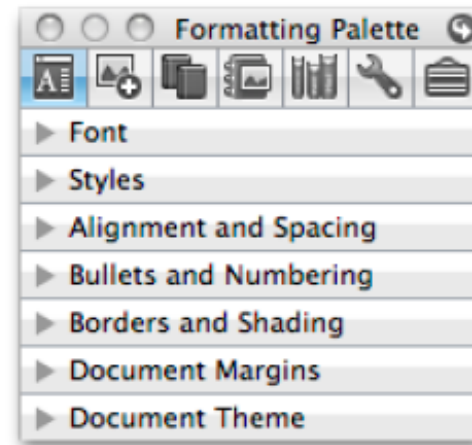


Figure 4-35. *Word palette*

Patrones de Diseño de Distribución de la Página

Patrón: **Module Tabs**

¿Qué?

- Áreas pequeñas con lengüetas

¿Cuándo?

- Contenidos heterogéneos
- Poco espacio
- Ver módulos uno a la vez

¿Por qué?

- Su uso es común
- Fácil manejo
- No sobrecarga la página con contenido



Figure 4-31. MapQuest

Patrones de Contenido



Patrones de Contenido



Patrones de Contenido: Entrada

Fill in the Blanks



A form titled "Foreign Exchange" with two dropdown menus. The first dropdown is labeled "One" and has "Europe Euro" selected. The second dropdown is labeled "in" and has "U.S. Dollar" selected.

Figure 8-7. *The New York Times*

Input Prompt



A registration form with a "Name" label and two input fields: "First Name" and "Last Name".

Figure 8-15. *Yahoo! registration page*

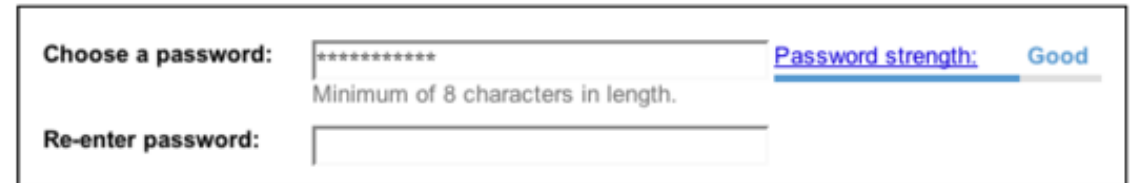
Input Hints



A registration form with two input fields. The first is labeled "Full name" and has the hint "Your full name will appear on your public profile". The second is labeled "Username" and has the hint "Your public profile: <http://twitter.com/> USERNAME".

Figure 8-10. *Twitter registration page*

Password Strength Meter



A password strength meter with two input fields: "Choose a password:" and "Re-enter password:". The "Choose a password:" field contains "*****" and has a "Password strength:" label with a "Good" indicator. Below the field is the text "Minimum of 8 characters in length."

Figure 8-18. *Gmail registration page*

Patrones de Contenido: Entrada

Same-Page Error Messages

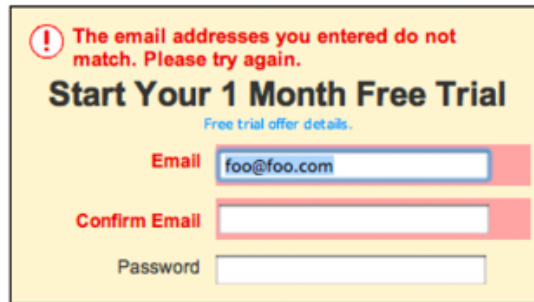


Figure 8-35. Netflix registration box

Autocompletion

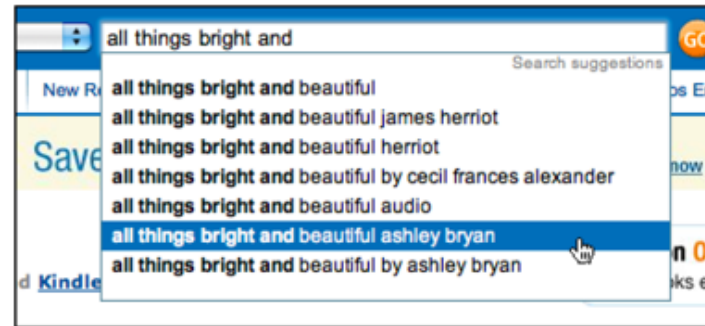
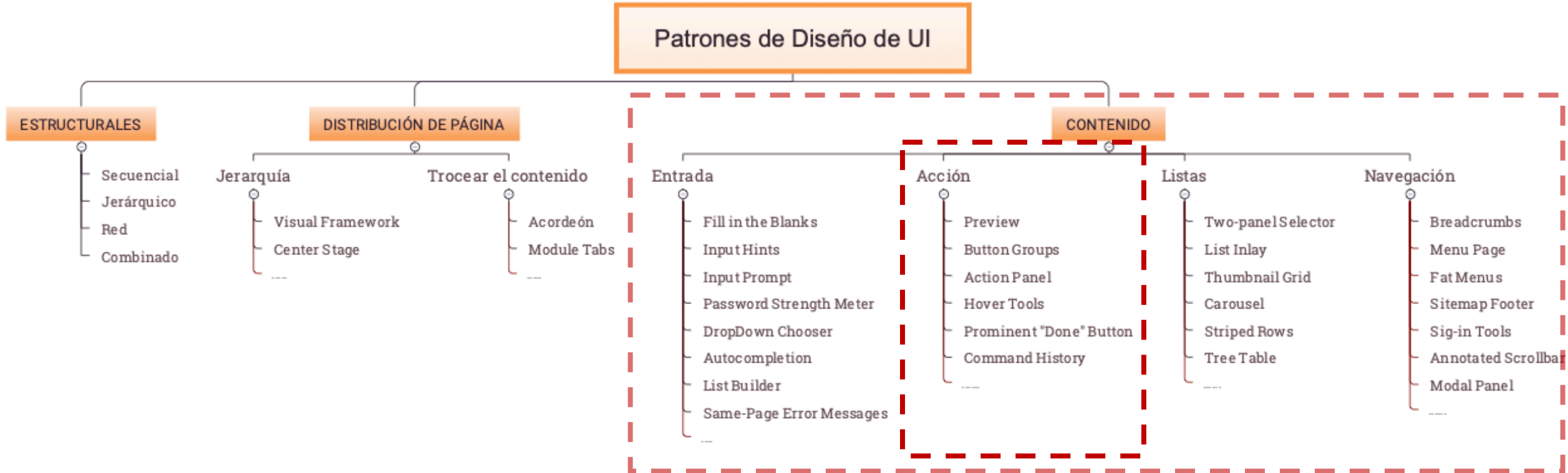


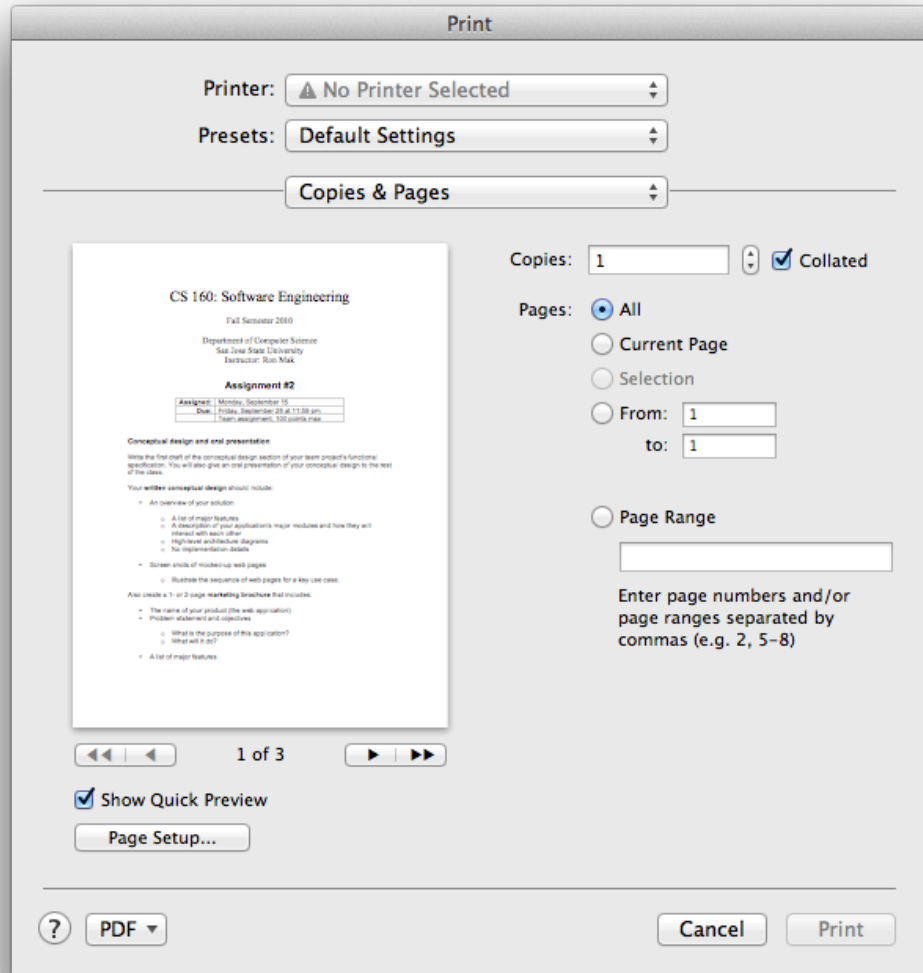
Figure 8-22. Amazon

Patrones de Contenido



Patrones de Contenido: Acciones

Preview



Button Groups

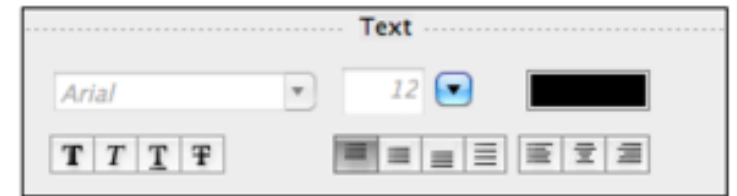
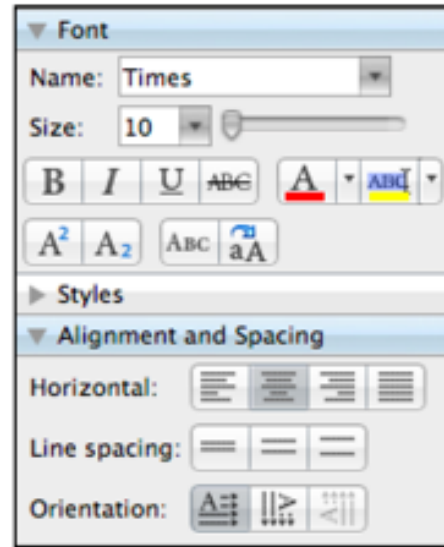


Figure 6-4. Microsoft Word and Adobe Flash Builder

Patrones de Contenido: Acciones

Hover Tools

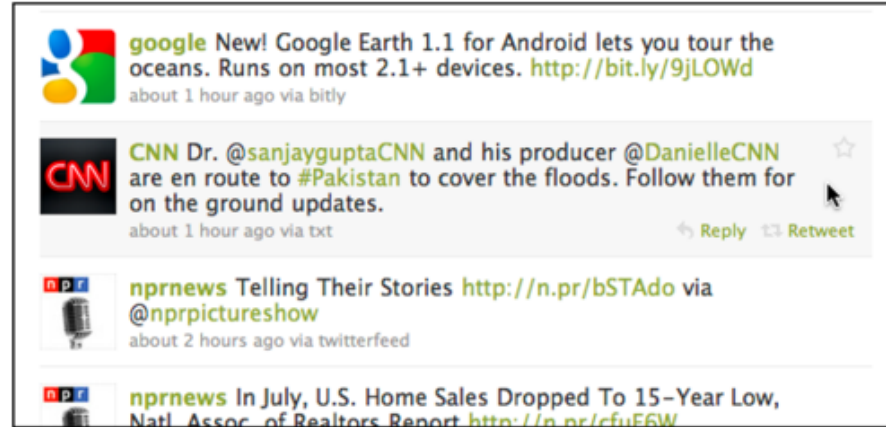
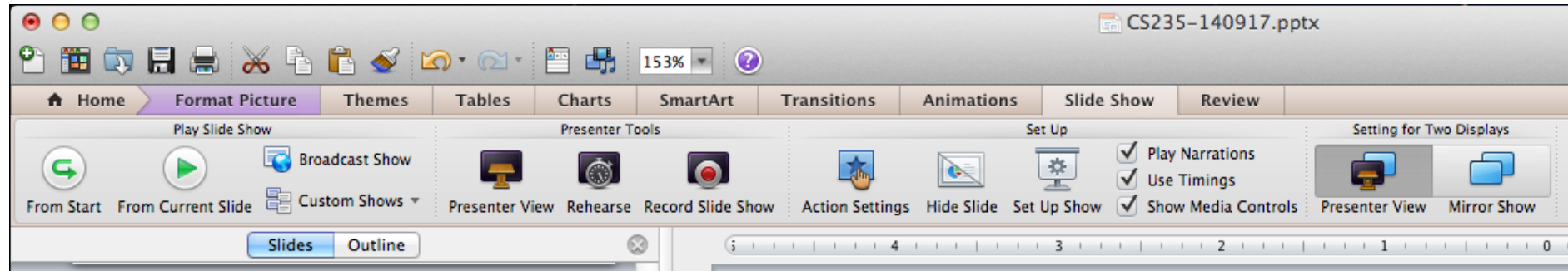
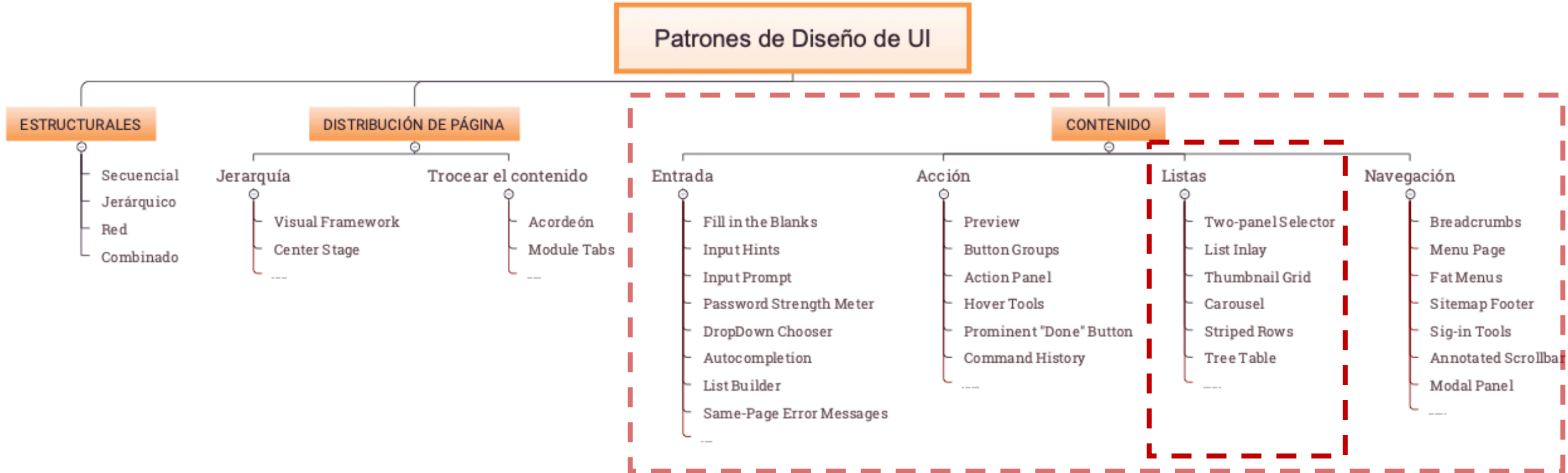


Figure 6-6. Twitter

Action Panel



Patrones de Contenido



Patrones de Contenido: Listas

Carousel

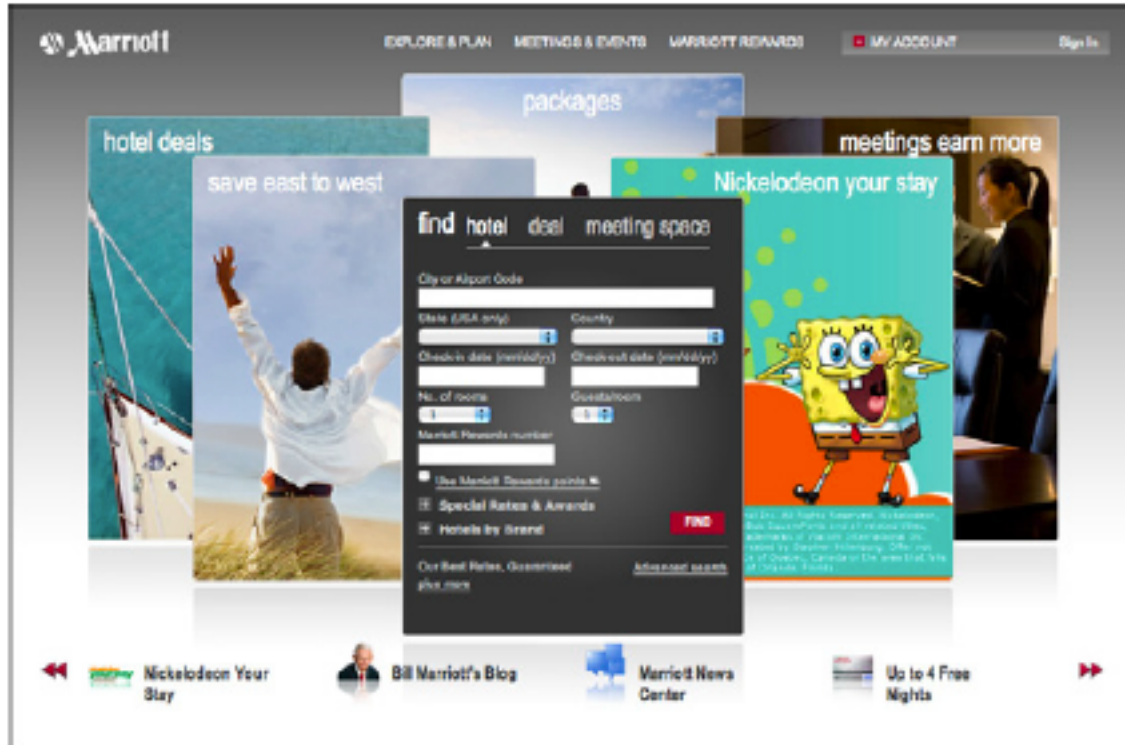


Figure 5-16. Marriott

Thumbnail Grid

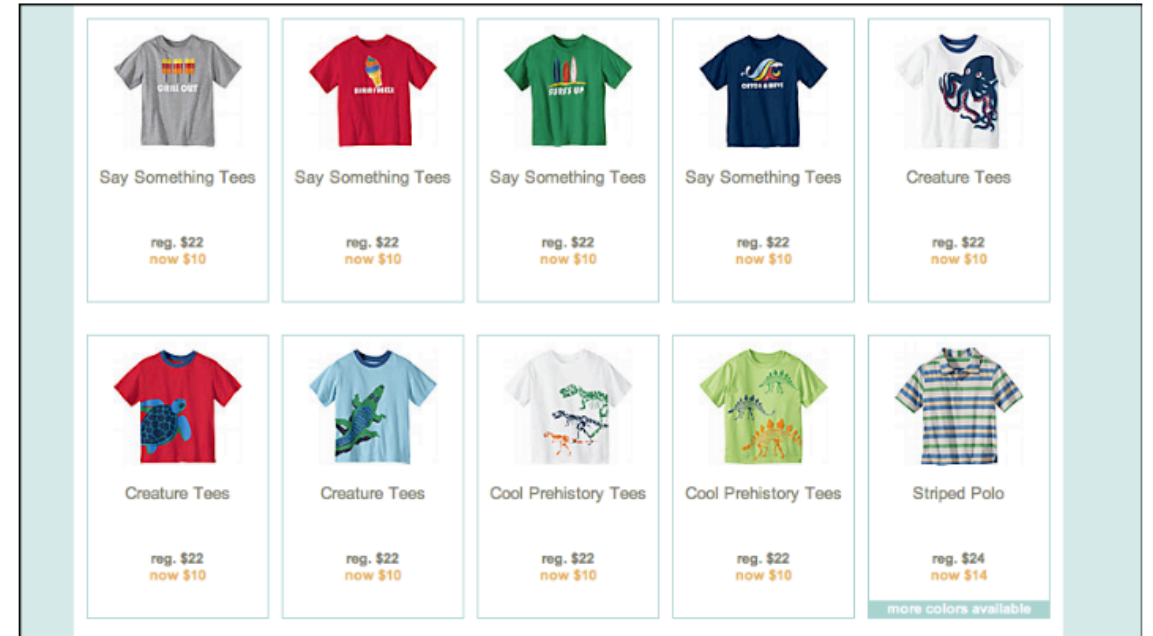
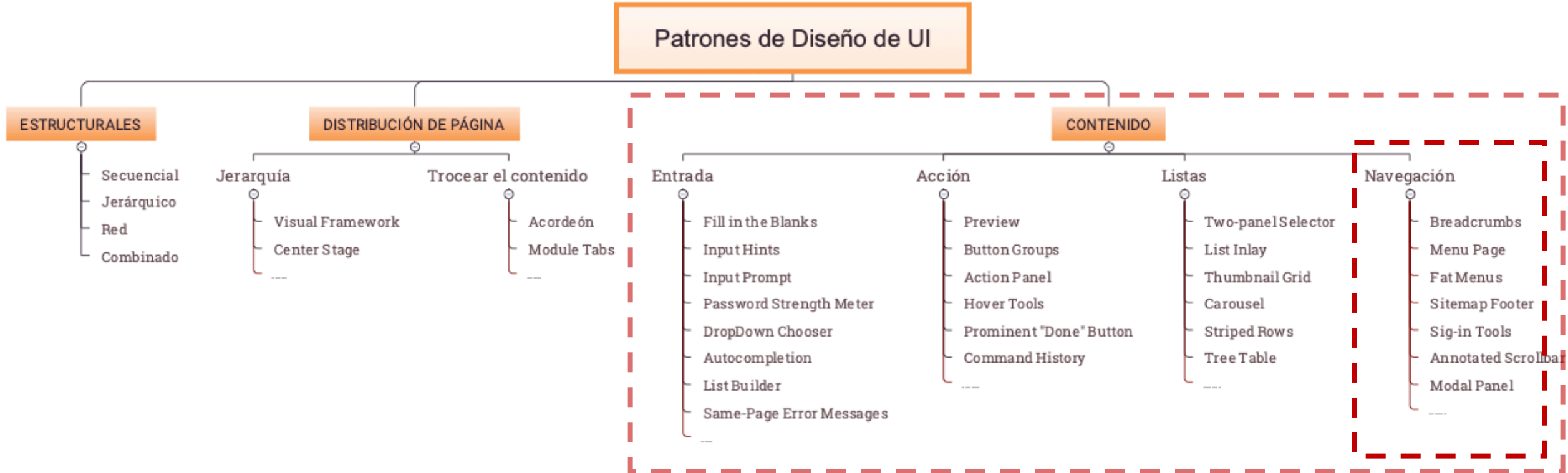


Figure 5-10. Hanna Andersson product listing

Patrones de Contenido



Patrones de Contenido: Navegación

Breadcrumbs



Figure 3-52. Target breadcrumbs

Patrones de Contenido: Navegación

Manu Page

The screenshot shows the Craigslist website interface for the Boston area. The layout is organized into several columns and sections:

- Header:** "craigslist" logo on the left, "boston" location with sub-links (gbs, nwb, bmv, nos, sob) in the center, and "other cities", "us states", and "countries" on the right.
- Left Column:** "post to classifieds", "my account", "help, faq, abuse, legal", "search craigslist" (with "swingset" and "for sale" filters), "event calendar" (with a calendar grid), and "haiti earthquake relief", "avoid scams & fraud", "personal safety tips", "craigslist blog", "craigslist facebook".
- Community Section:** "community" header with sub-links: "activities", "lost+found", "artists", "musicians", "childcare", "local news", "general", "politics", "groups", "rideshare", "pets", "volunteers", "events", "classes".
- Housing Section:** "housing" header with sub-links: "spts / housing", "rooms / shared", "sublets / temporary", "housing wanted", "housing swap", "vacation rentals", "parking / storage", "office / commercial", "real estate for sale".
- Jobs Section:** "jobs" header with sub-links: "accounting+finance", "admin / office", "arch / engineering", "art / media / design", "biotech / science", "business / mgmt", "customer service", "education", "food / bev / hosp", "general labor", "government", "human resources", "internet engineers", "legal / paralegal", "manufacturing", "marketing / pr / ad", "medical / health", "nonprofit sector", "real estate", "retail / wholesale", "sales / biz dev", "salon / spa / fitness", "security", "skilled trade / craft", "software / qa / dba".
- For Sale Section:** "for sale" header with sub-links: "appliances", "arts+crafts", "antiques", "auto parts", "barter", "baby+kids", "bikes", "beauty+hlt", "boats", "cars+trucks", "books", "cds/dvd/vhs", "business", "cell phones", "computer", "clothes+acc", "free", "collectibles", "furniture", "electronics", "general", "farm+garden", "jewelry", "garage sale", "materials", "household", "rvs", "motorcycles", "real estate".
- Personal Section:** "personals" header with sub-links: "strictly platonic", "women seek women", "women seeking men", "men seeking women", "misc romance", "casual encounters", "missed connections", "rants and raves".
- Discussion Forums Section:** "discussion forums" header with sub-links: "1099", "gifs", "pets", "apple", "haiku", "philos", "arts", "health", "politic", "atheist", "help", "psych", "autos", "history", "queer", "beauty", "housing", "recover".
- Other Cities Section:** "other cities" header with sub-links: "albany", "boston", "cape cod", "catskills", "eastern ct", "glens falls", "harford", "hudson valley", "long island", "maine", "new hampshire", "new haven", "new york", "north jersey", "northwest ct", "rhode island", "south coast", "vermont", "western mass", "worcester".
- US States Section:** "us states" header with sub-links: "alabama", "alaska", "arizona", "arkansas", "california", "colorado", "connecticut", "dc", "delaware", "florida", "georgia", "guam", "hawaii", "idaho", "illinois", "indiana", "iowa", "kansas", "kentucky", "louisiana", "maine", "maryland", "mass", "michigan", "minnesota", "mississippi", "missouri", "montana", "n carolina", "n hampshire", "oklahoma".
- Countries Section:** "countries" header with sub-links: "argentina", "australia", "austria", "bangladesh", "belgium", "brazil", "canada", "caribbean", "chile", "china", "colombia", "costa rica", "croatia", "czech repub", "denmark", "ecuador", "egypt", "finland", "france", "germany", "great britain", "greece", "hong kong", "hungary", "india", "indonesia", "ireland", "israel", "italy", "japan", "korea".

Figure 3-14. Craigslist

Patrones de Contenido: Navegación

Fat Menus

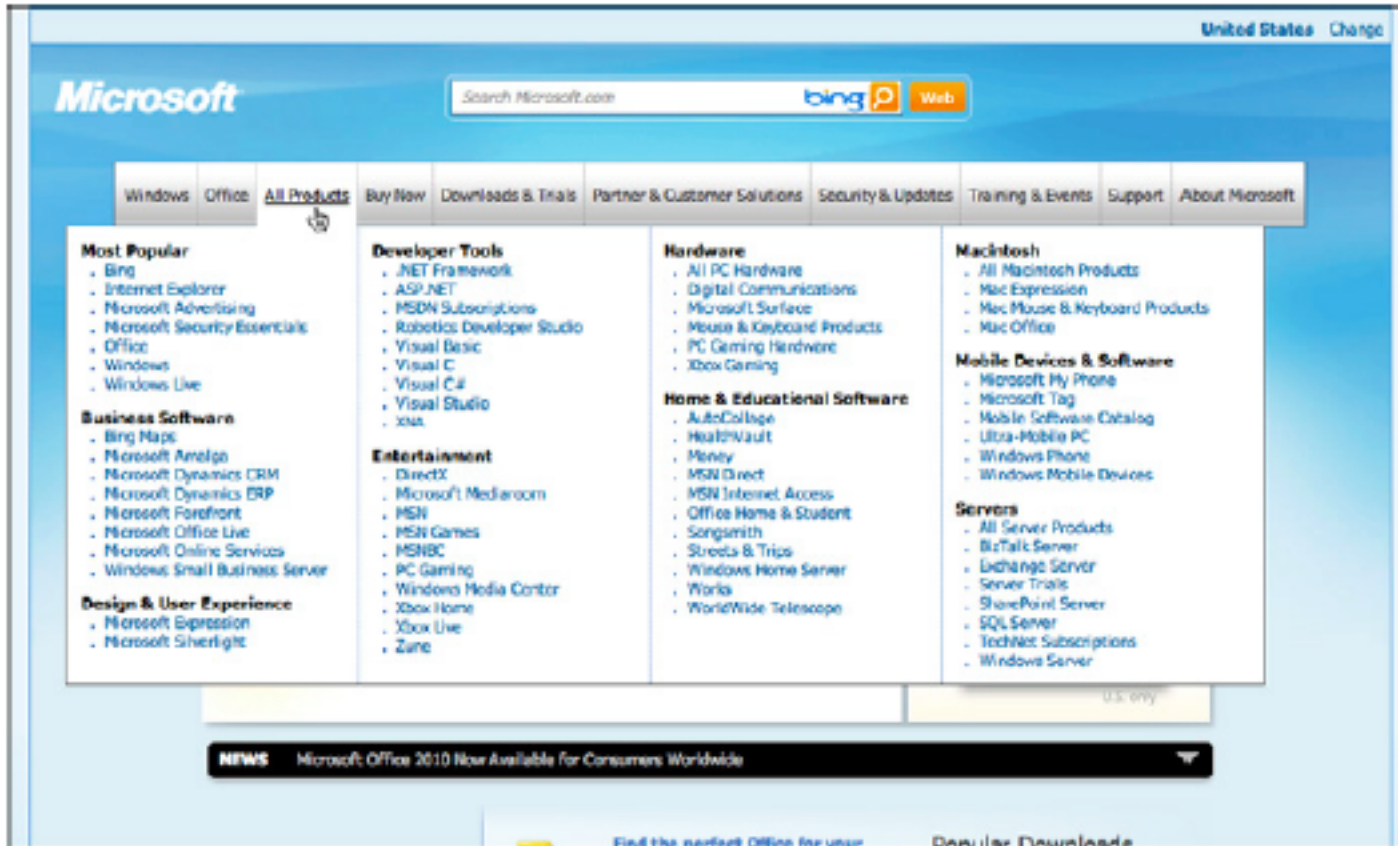


Figure 3-33. Microsoft's All Products menu

Patrones de Contenido: Navegación

Sitemap Footer



Figure 3-38. Whole Foods footer

Sig-in Tools



Figure 3-44. Flickr sign-in tools

Patrones de Contenido: Navegación

Annotated Scrollbar

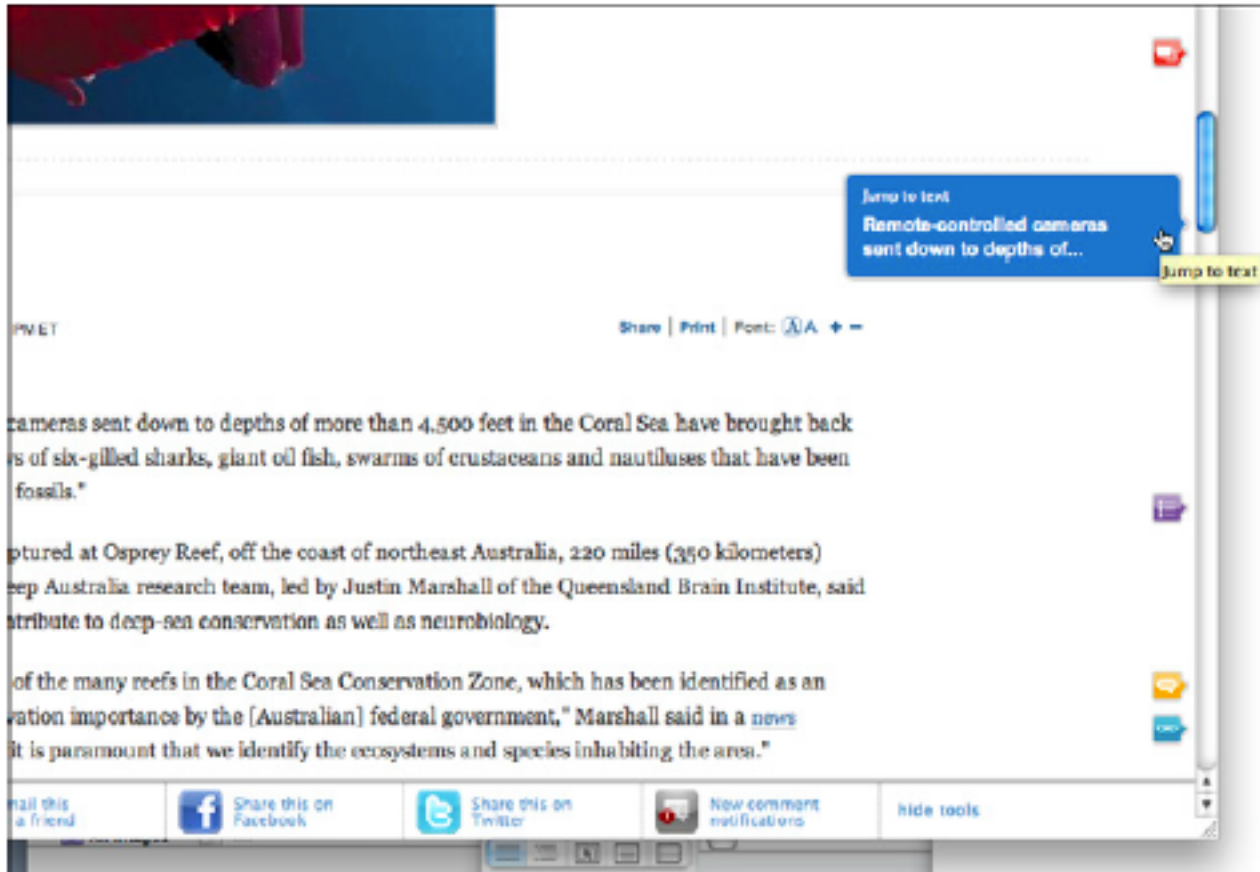


Figure 3-56. MSNBC scrollbar showing page sections

Patrones de Contenido: Navegación

Modal Panel

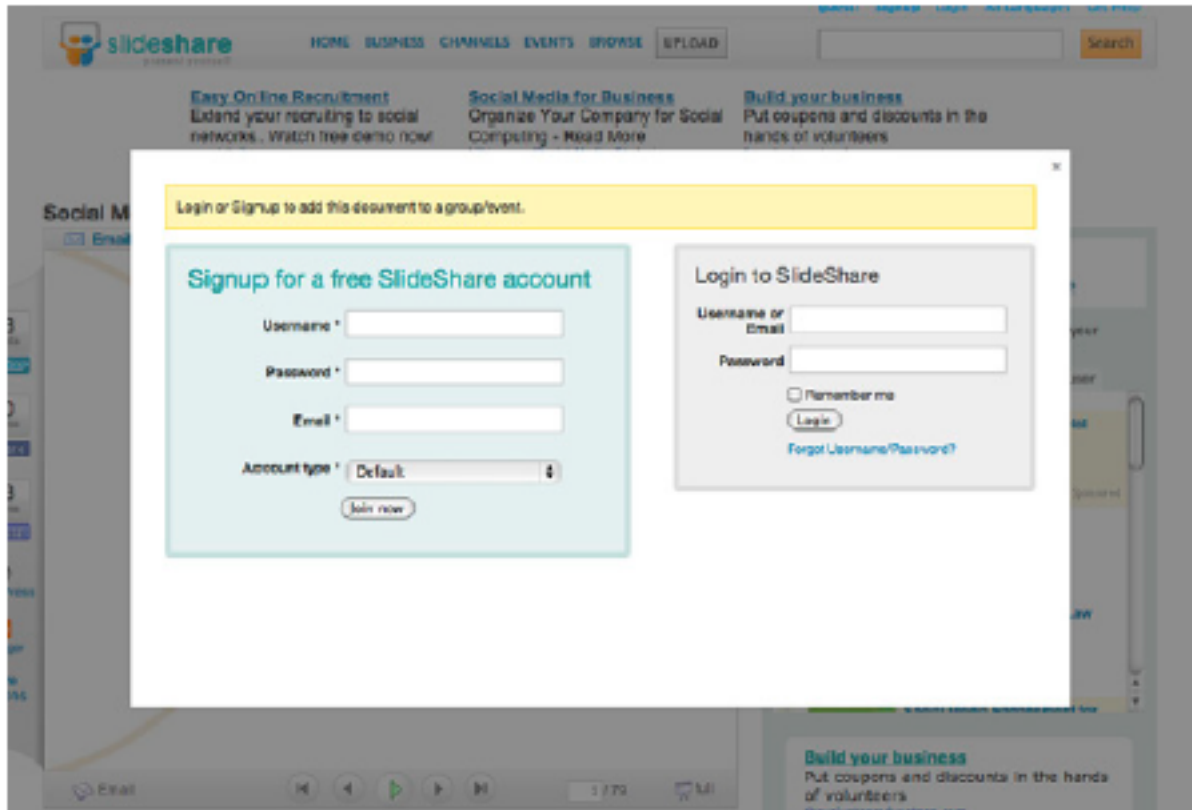


Figure 3-23. SlideShare's login modal panel

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