

Session 1

Introduction to User Interface Design

For Aptech Only



Learning Objectives

- Define User Interface (UI) and UI design
- List and explain different elements of UI Design
- Describe the principles of UI Design
- Describe the types of UI Design
- Explain the UI Design process
- Describe the models in UI Design
- Define Mobile UI
- Explain Color Theory
- Understand the concepts of Design Thinking
- Use the best practices in UI Design



What is User Interface (UI)?

Means by which user and computer interact.

Comprises software and hardware.

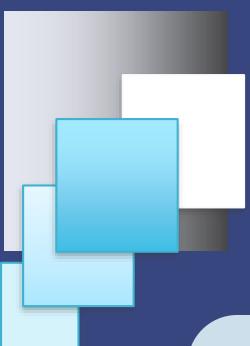
UI comprises:

- Textual, graphical, and auditory information.
- Control sequences.



Example of a most common UI: Automatic Teller Machine (ATM)





What is User Interface Design (UXD)?

Information Architecture

Organizing, structuring, and labelling content

Interaction Design

Creating engaging interfaces

Visual Design

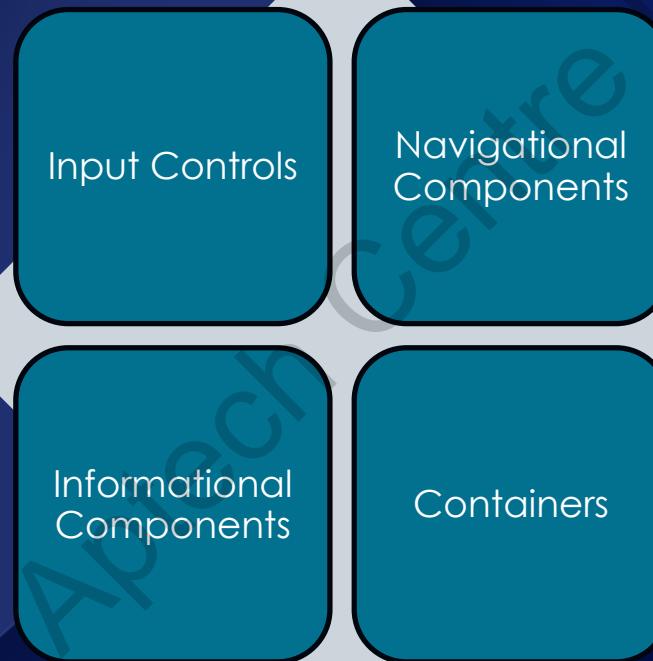
Aesthetics of a site

- The overall goal of the UXD is to make the user's experience and interaction as simple and efficient as possible.



Parts of User Interface Design

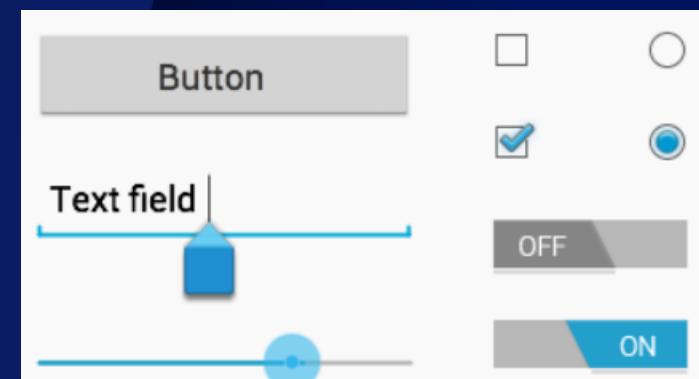
- Fundamental parts of most user interfaces are as follows:



Parts of User Interface Design

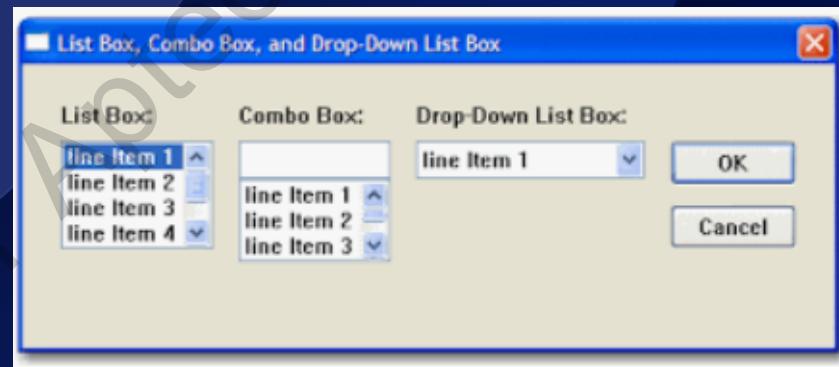
- **Input Controls:**

Element	Description
Button	Clicking performs an action.
Radio button	Selects one item from a set.
Checkbox	Selects one or more options from a set.



Parts of User Interface Design

Elements	Description
Dropdown list	Select one item at a time; similar to radio buttons, but more compact.
Dropdown button	Displays a dropdown list of exclusive items.
List box	Contains a list of options that user can select.
Text field	A basic text control for entering text.



Parts of User Interface Design

- **Navigational Components:**

Element	Description
Search Field	Uses the keyword to return the results.
Breadcrumb	Tracks location within programs.
Pagination	Divides content between pages.
Tags	Find content in the same category.
Icons	An intuitive symbol to help users navigate the system.
Image Carousel	Allows user to browse and select items.



Image Carousel

Tags

- Costs (72)
- Health Conditions (54)
- Improving Care (53)
- Prevention (50)
- Rights, Protections and Benefits (135)
- Insurance Coverage (141)

Clean Fresh Modern
Unique X +

Parts of User Interface Design

- **Informational Components:**

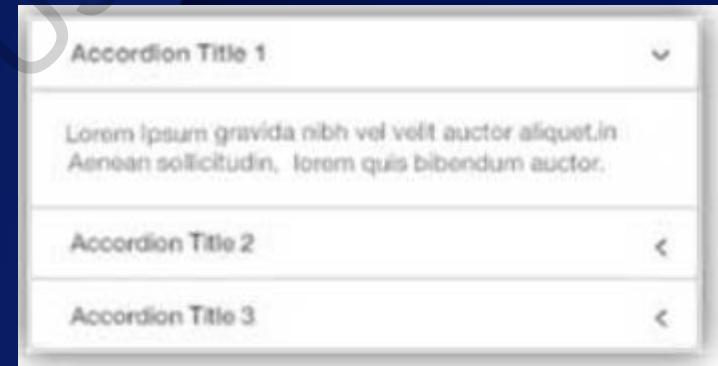
Elements	Description
Tooltip	Used in conjunction with a cursor, usually a pointer.
Notification	Update messages.
Progress Bar	Indicates where a user is as they advance through a series of steps in a process.
Message Box	Informs users to take action so that they can move forward.
Modal Window (pop-up)	A child window that requires users to interact with it before it can return to operating the parent application.



Parts of User Interface Design

- **Containers:**

Element	Description
Accordion	A vertically stacked list of items that utilizes show/hide functionality



People also ask :

- What are UI containers?
- What is a container in UX design?
- What is UI component?
- What is content container in Web design?
- Which is better bootstrap or semantic UI?
- How do I center text in semantic UI?

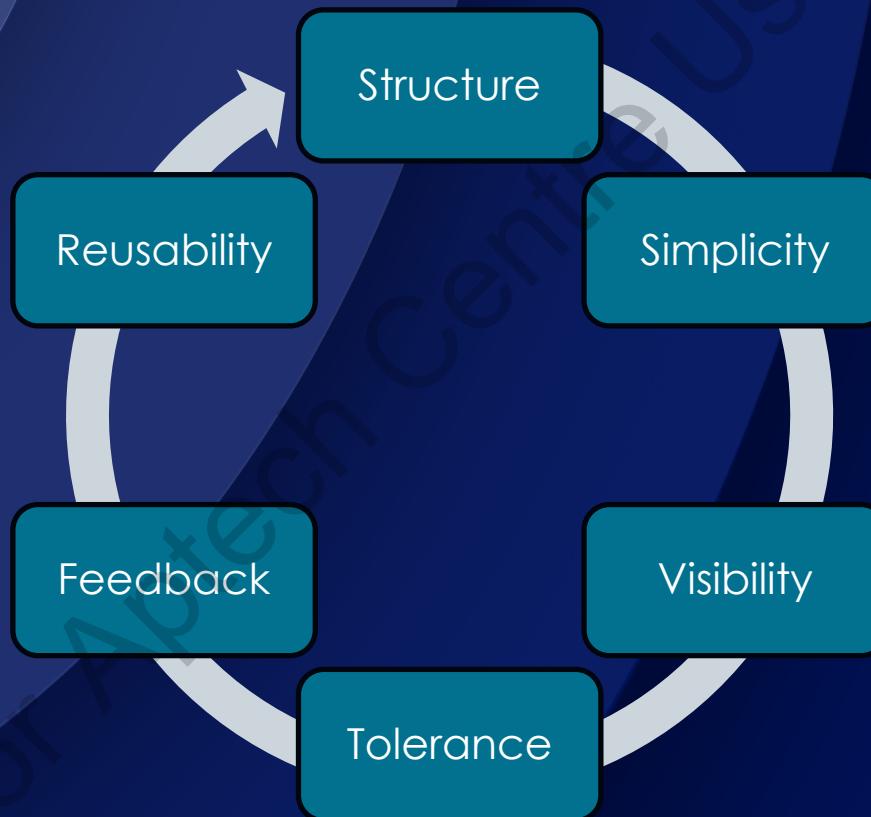
Feedback

Accordion Example



Dialogues/Principles and Attributes of User Interface Design

- The UI design principles include:



Dialogues/Principles and Attributes of User Interface Design

2-7

■ Structure Principle

- About overall UI architecture.
- Design should be clear: visually, theoretically, linguistically.
- Must provide paths to useful information.



*Example of a clearly structured UI
Image Courtesy: <https://www.amazon.com>*

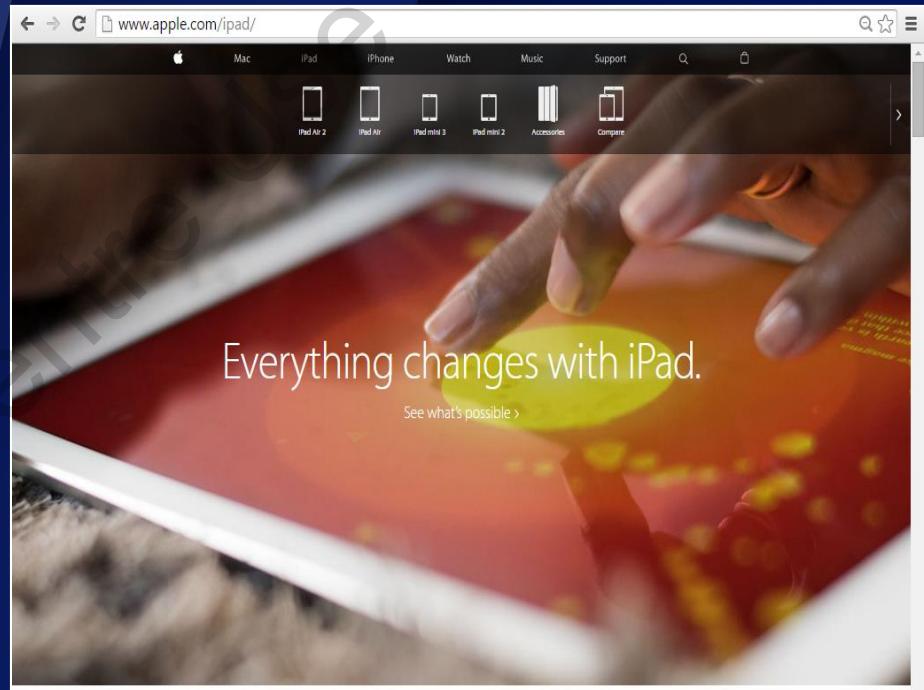


Dialogues/Principles and Attributes of User Interface Design

3-7

▪ Simplicity Principle

- Simple to learn and simple to use design.
- Include only important elements.
- Make common tasks easy.
- Provide shortcuts to longer procedures.



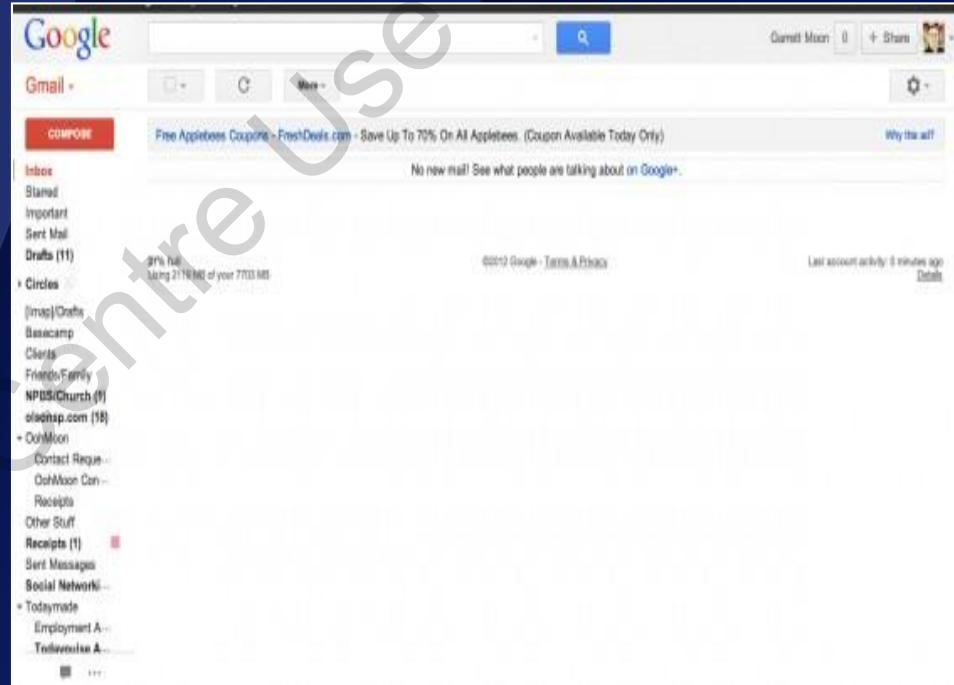
Example of a simple UI
Image Courtesy: <http://www.apple.com/ipad/>



Dialogues/Principles and Attributes of User Interface Design

▪ Visibility Principle

- All tasks must be visible.
- Avoid confusing the user with superfluous information.
- Use straight forward interface for easy navigation.



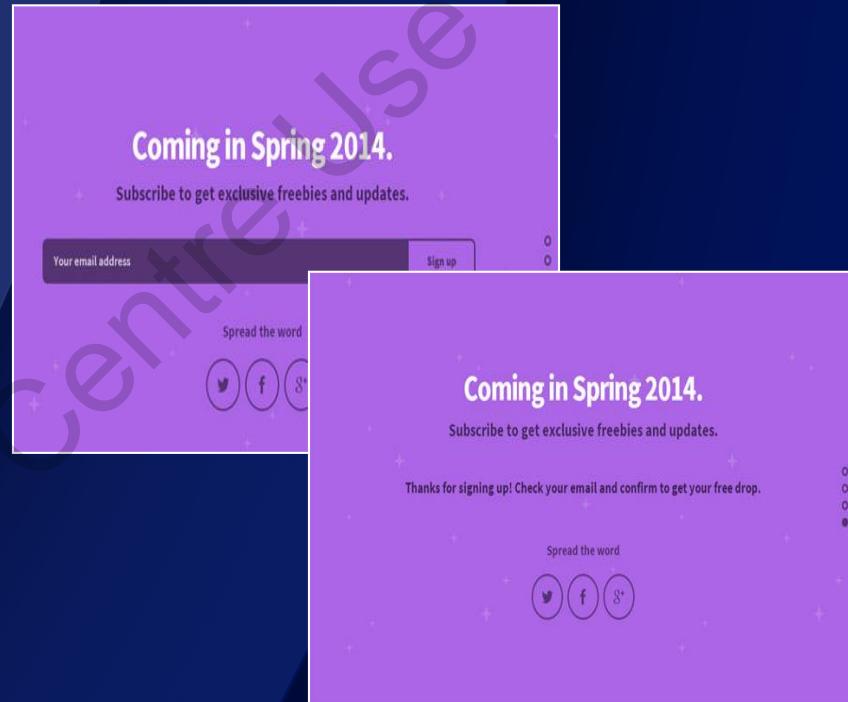
*Example of a clearly visible UI
Image Courtesy: <https://www.gmail.com>*



Dialogues/Principles and Attributes of User Interface Design

▪ Feedback Principle

- Inform users what is going on.
- Display the result of actions.
- Inform users about actions, changes of state or condition, and errors or exceptions.



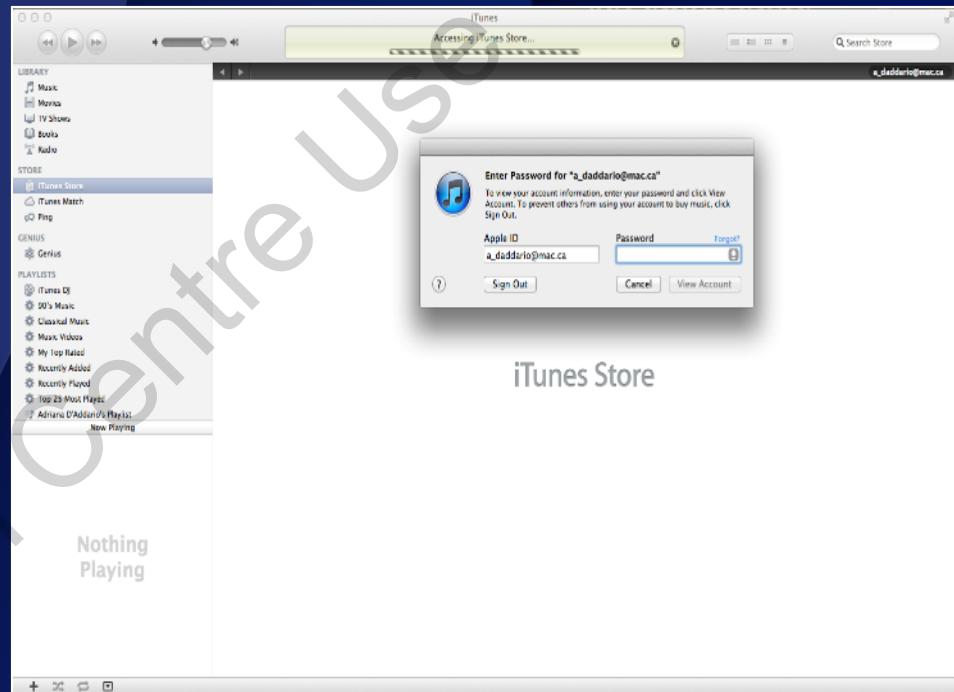
Example of UI displaying feedback
Image Courtesy: Kickdrop.me



Dialogues/Principles and Attributes of User Interface Design

■ Tolerance Principle

- Design prevents users from making errors.
- Allows user to learn how to use the site.
- Informs about errors.



iTunes Store

Example of a tolerant UI
Image Courtesy: <https://adaddario16.wordpress.com>



Dialogues/Principles and Attributes of User Interface Design

7-7

▪ Reuse Principle

- The UI design should reuse internal and external components and behaviors to maintain consistency with purpose.



Example of a reusable UI
Image Courtesy: <http://www.ebay.in/>



Types of User Interfaces

Command Language-based Interface

Menu-based Interface

Natural Language Interface

Touch Sensitive Interface

Web-based Interface

Graphical User Interface (GUI)



Types of User Interfaces

- **Command Language-based Interface:**
 - User issues commands in text form.
 - Example: MS-DOS.
- **Menu-based Interface:**
 - User accesses command through menu.
 - Examples: Cashpoint machines, iPods, mobile phones.
- **Natural Language Interface:**
 - User speaks to interact with system.
 - Example: Speech recognition software.



Types of User Interfaces

- **Touch Sensitive Interface**

- Uses touchscreen display as input and output device.
- Examples: Smartphones and POS machines.

- **Web-based Interface**

- Accepts input from keyboard and mouse.
- Provides output by generating Web pages transmitted via Internet.
- Web pages are viewed using Web browser program.



Types of User Interfaces

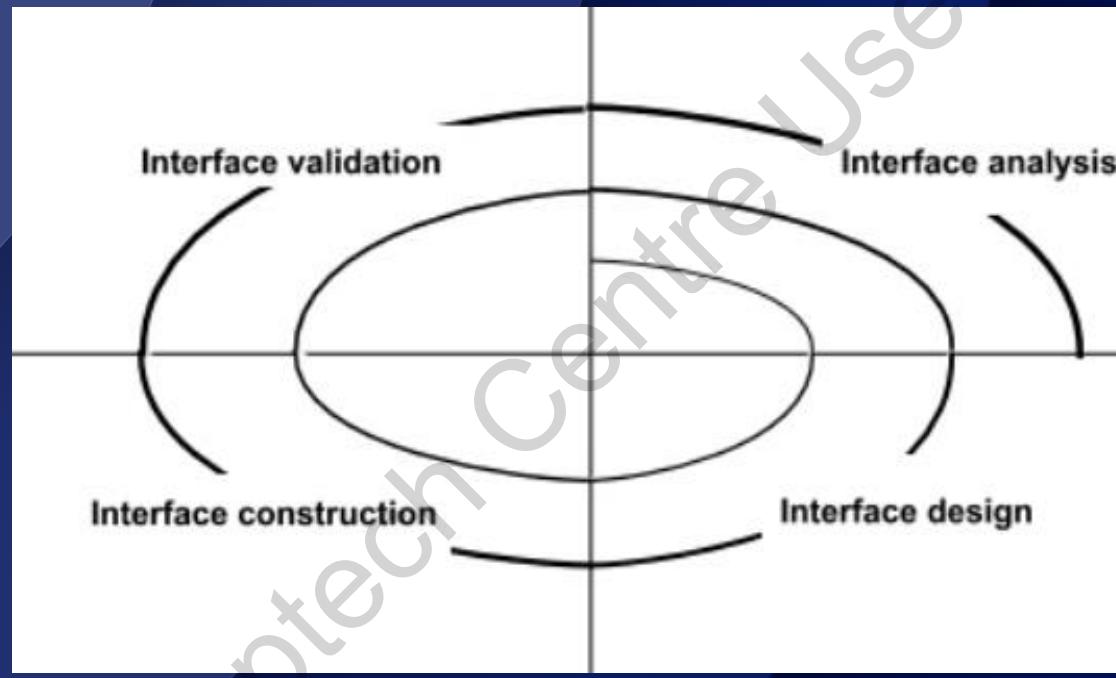
- **Graphical User Interface (GUI)**
 - Accepts input through keyboard and mouse.
 - Displays output on screen.
 - Common elements include:
 - Window
 - Menu
 - Icons
 - Pointer/Cursor



Elements of a Graphical User Interface (GUI)
 Image courtesy: <http://infonativesolutions.com/>



Processes in User Interface Design



User Interface Design Process



Processes in User Interface Design

Interface Analysis

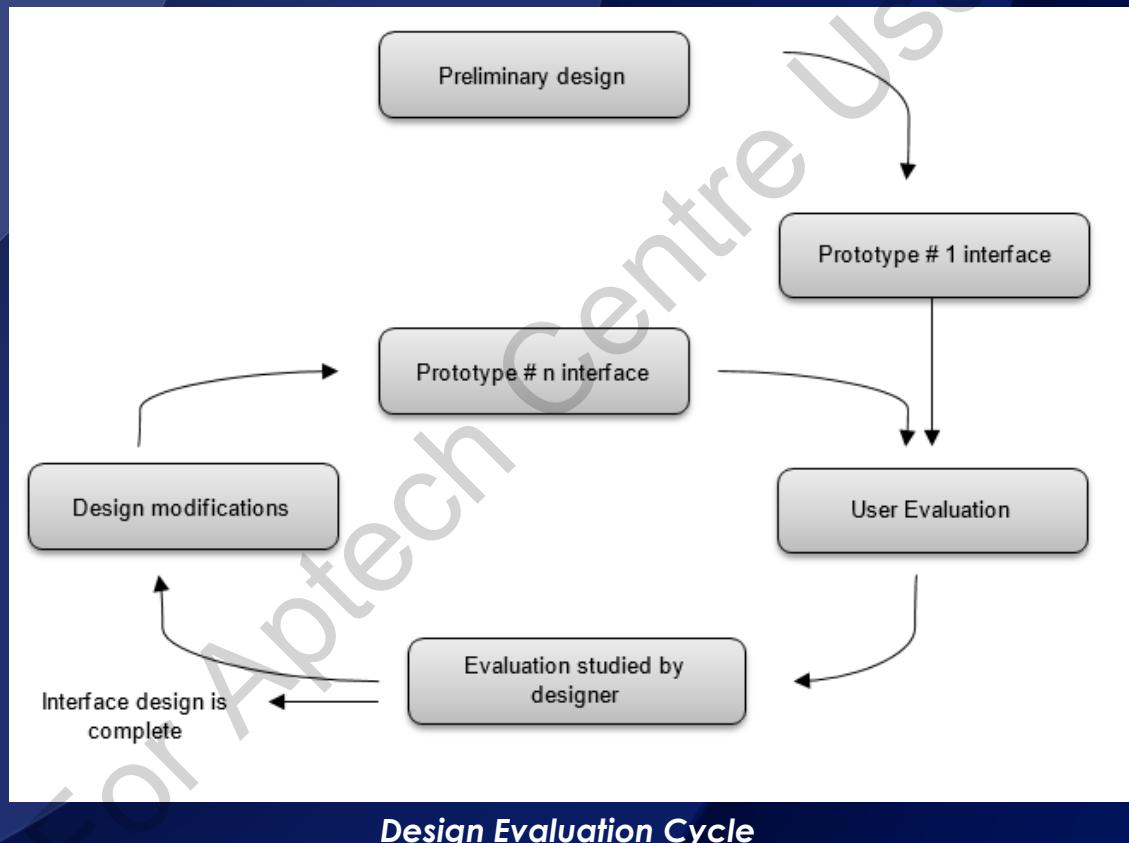
Interface Design

**Interface Construction /
Implementation**



Processes in User Interface Design

Fourth Step – Interface Evaluation





Models in User Interface Design

User Model

- Syntactic and semantic knowledge of user.

Mental Model

- Developed by user while interacting with system.

Design Model

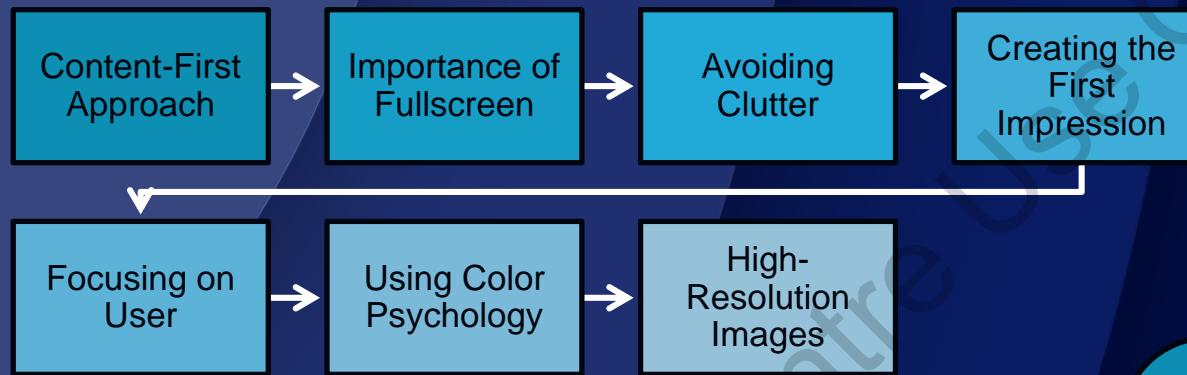
- Result of requirements analysis phase.

Implementation Model

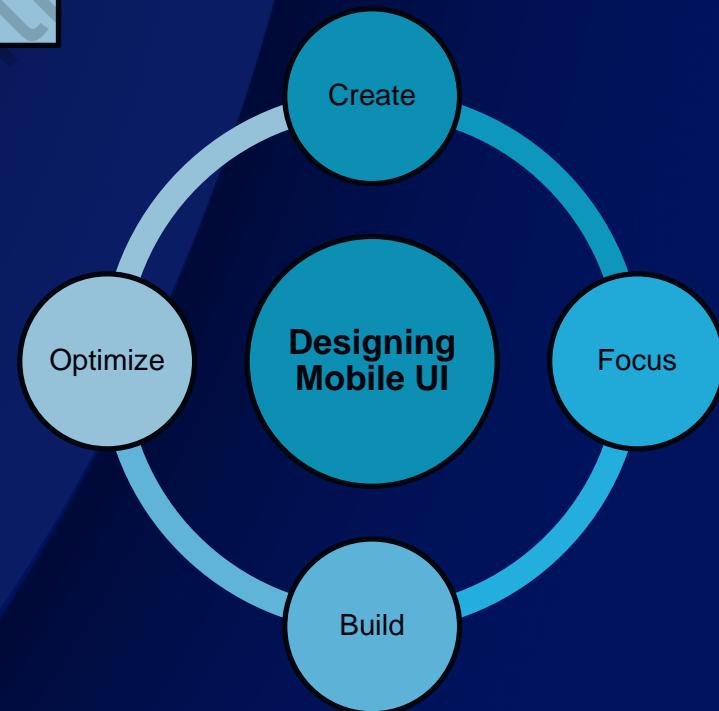
- Representation of how a system works.



Principles of Mobile User Interface Design



- An app must work on a range of devices.
- Create flexible user interfaces.
- Follow best practices.



Color Theory

1-2

Traditional
Color
Theory

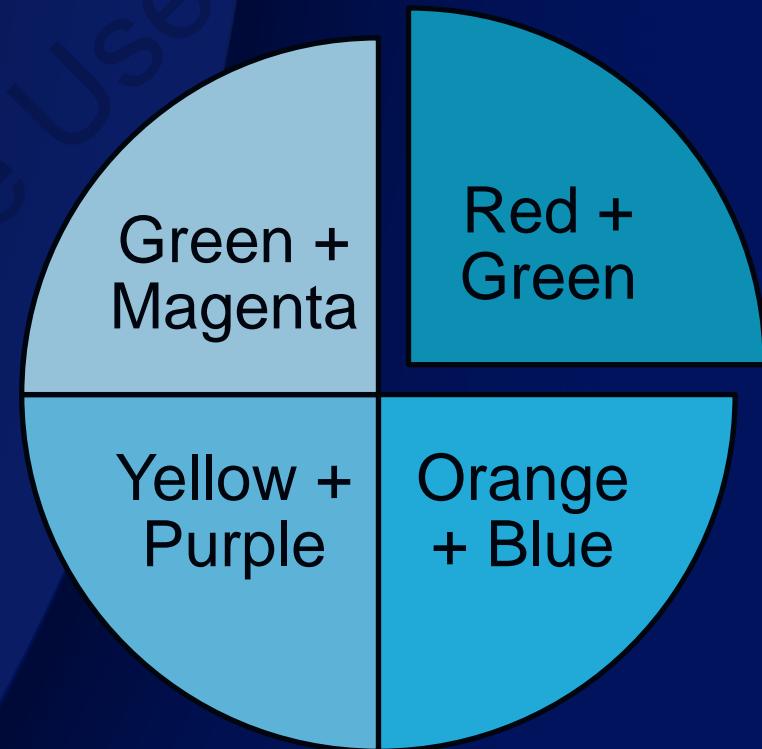
- Scientific way to ascertain complementary colors.

Modern
Color
Theory

- Mixing colors by adding/subtracting base colors.

Subtractive
Theory

- When mixing colors, some are absorbed and some reflected.

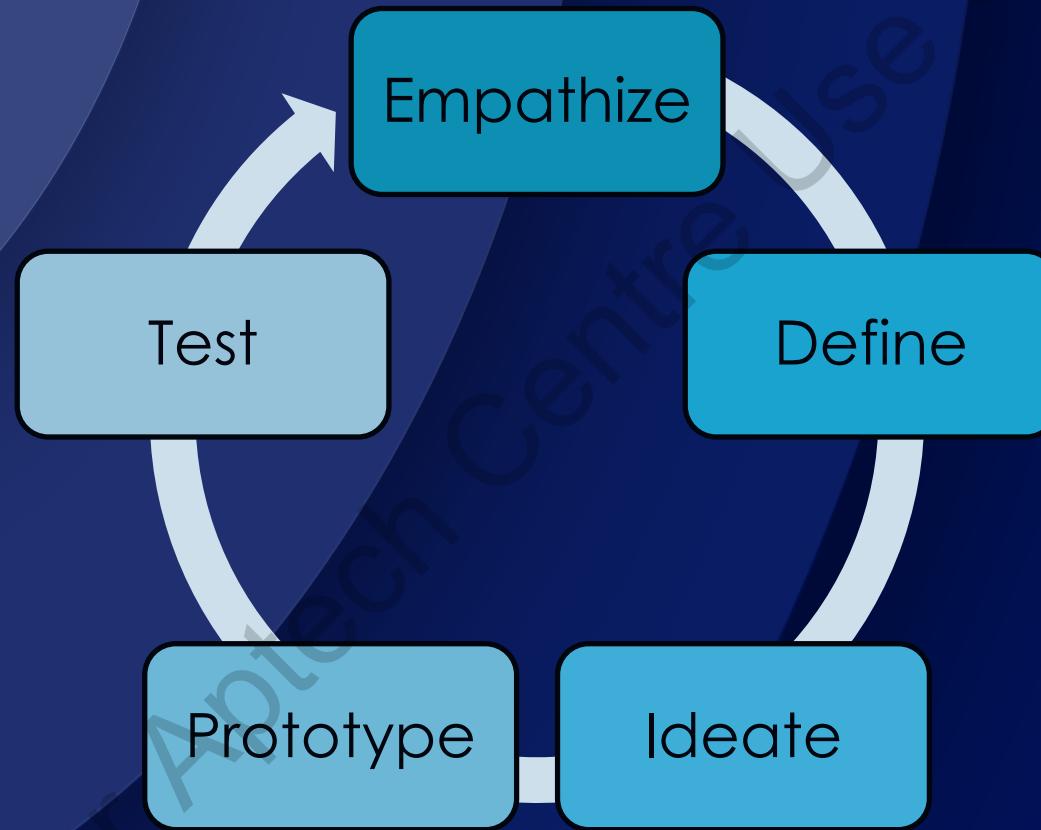


Color Combinations



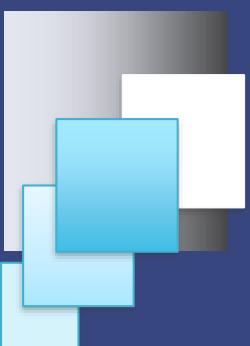
Design Thinking

2-2



Design Thinking Model





Best Practices in UI Design

Consistency

Patterns

Visual Hierarchy

User Control



Summary

- A user interface is the means by which a user and a computer system interacts.
- The fundamental parts of most user interfaces include Input Controls, Navigational Components, Informational Components, and Containers.
- The six important UI design principles are the Structure principle, Simplicity principle, Visibility principle, Feedback principle, Tolerance principle, and Reusability principle.
- The four model types especially important in designing a user interface are User model, Design model, Mental model, and Implementation model.
- Color theory is a scientific way to ascertain which colors complement each other.
- Design Thinking is a problem-solving or solution-based approach that is specific to design problems.



Session 2

Introduction to User Experience Design

For Aptech Only



Learning Objectives

- Define User Experience (UX) and User Experience Design
- Describe the difference between UI and UX
- Describe different elements of UX Design
- Explain the significance of UX
- List and explain the principles of User Experience Design
- Describe the best practices in User Experience Design
- Describe the UX design process
- Distinguish between a good and bad UX design

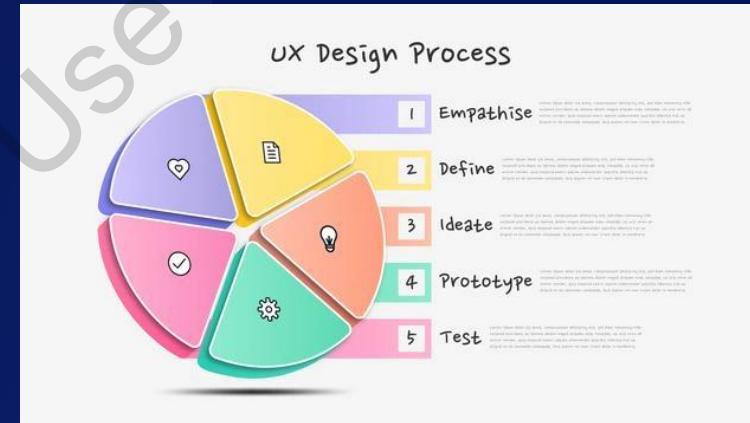


Definition of UX and UX Design

User Experience Design
Process of understanding user requirement to improve information architecture.

User Experience

Overall experience and satisfaction of user after using a Website or computer application.



Difference Between UI and UX

User Interface (UI)

- A collection of elements.
- Example: text fields and buttons.

User Experience (UX)

- Overall experience of using the interface.
- Identifies users and their requirements.
- Meets user requirements.



Difference Between UI and UX

User Interface (UI)

- Interaction point between user and the system.
- A component of the overall UX.
- Tangible.
- Visual design and interaction design are important.

User Experience (UX)

- The interaction itself.
- Includes the entire process of design.
- Subjective and difficult to measure.
- Focuses on human behavior.



Difference Between UI and UX

User Interface (UI)

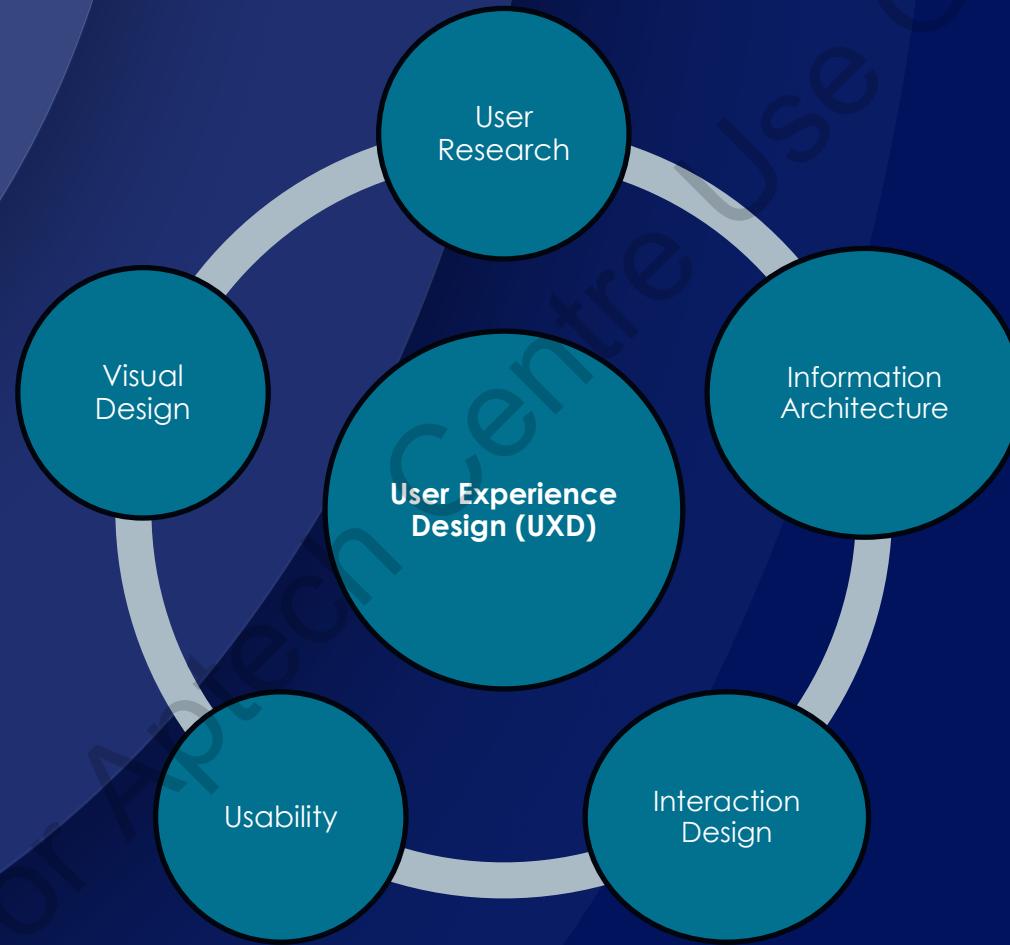
- Requires creative and convergent design.
- Focuses on presentation of content.
- Determining factor of UX.
- Process is detailed to meet requirements.

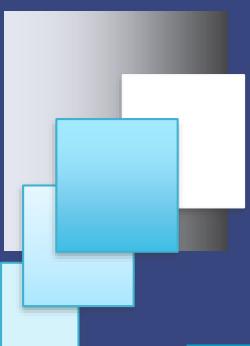
User Experience (UX)

- Requires creative and critical design.
- Focuses on context.
- Determines future use of the system.
- Understands users.



Elements of User Experience Design





Elements of User Experience Design

2-3

Visual Design

Represents the aesthetics of a Website.

Uses visual elements for communication.

Usability

Ease with which user uses the application.

A combination of various factors.



Elements of User Experience Design

Information Architecture

Focuses on organization of content.

Interaction Design

User-centric approach for interactive system.

User Research

Focuses on understanding user requirements, behaviors, expectations, and motivations.



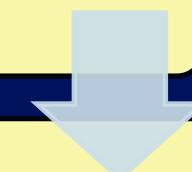
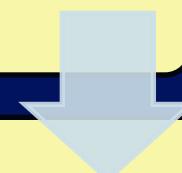


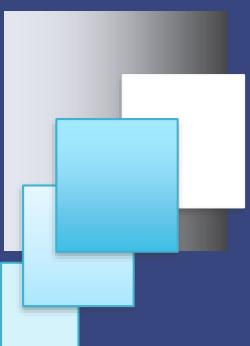
Significance of User Experience

Helps user to navigate the site.

Drives user back to the site.

Without UX, Websites, applications, and software can fail.





Principles of User Experience Design

1-8

Familiarity

Clarity

Recoverability

Responsiveness
and Feedback

Simplicity

Content Delivery

Delight



Principles of User Experience Design

Familiarity

- User can recognize familiar UI components.



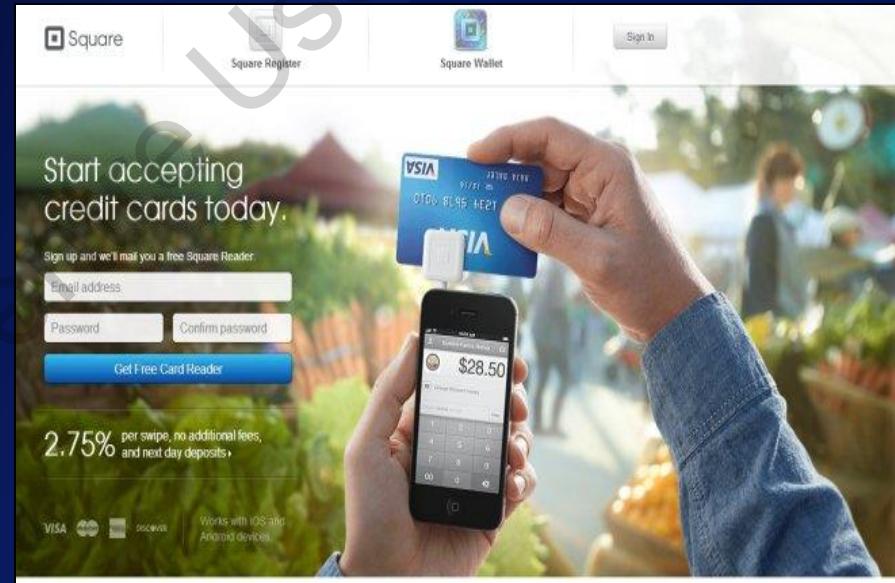
Example to Demonstrate Familiarity Principle
Image courtesy: <http://www.8164.org/familiarity-learnability/>

Principles of User Experience Design

3-8

Clarity

- Focuses on arrangement of elements on the page.
- Answers three basic questions:
 - What is it?
 - What can I do here?
 - Why should I do it?



Example to Demonstrate Clarity Principle
Image courtesy: <http://conversionxl.com/5-principles-of-persuasive-web-design/>



Principles of User Experience Design

Recoverability

- User actions should be reversible.
- Design should guide users on proceeding further.
- User should never be left at a 'dead-end'.

The screenshot shows the homepage of thetrainline.com. At the top, there's a navigation bar with links for Help, Business, Cookies, Mobile, Register, and Sign in. Below the navigation is a search bar with fields for 'From' and 'To'. The 'To' field has a red circle around its clear icon ('X'). To the right of the search bar is a section titled 'Cheap train tickets' with various promotional offers. At the bottom of the page, there are four promotional boxes: 'European Rail from £31', 'Save up to 50% on Hotels', 'Save up to 50% on West End shows', and 'Car hire from £20'.

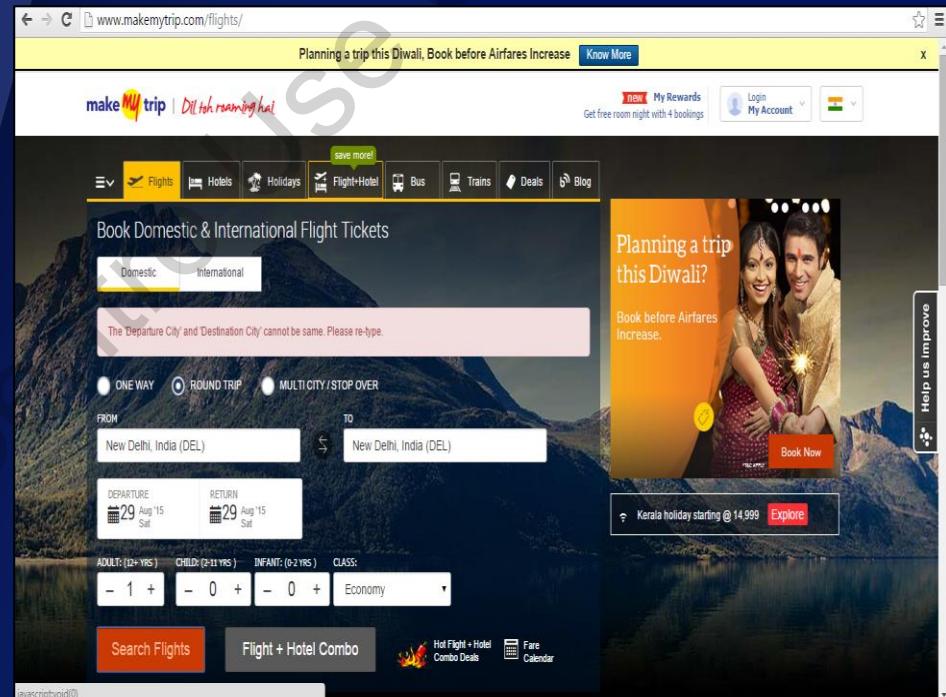
Example to Demonstrate Recoverability Principle
Image courtesy: thetrainline.com



Principles of User Experience Design

Responsiveness and Feedback

- No lag time in loading.
- Helpful information should be included.
- Provide appropriate and timely feedback.



Example to Demonstrate Responsiveness and Feedback Principle

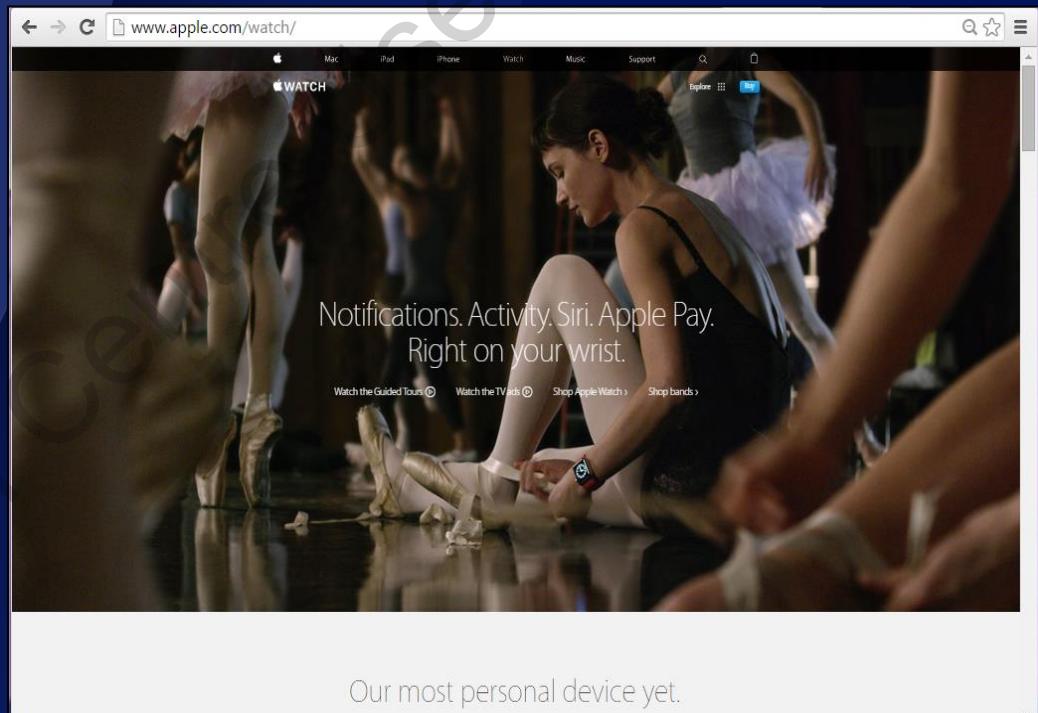
Image courtesy: <http://www.makemytrip.com/>

Principles of User Experience Design

6-8

Simplicity

- Simple to understand and simple to use.
- Include important elements.
- Common tasks should be simple.



Example to Demonstrate Simplicity Principle
Image Courtesy: <http://www.apple.com/watch/>



Principles of User Experience Design

Content Delivery

- Provide well-timed and relevant content.
- Increases user satisfaction.

Undaunted Courage : Meriwether Lewis, Thomas Jefferson, and the Opening of the American West (Paperback)

by **Stephen Ambrose** (Author) "From the west-facing window of the room in which Meriwether Lewis was born on August 18, 1774, one could look out at Rockfish Gap, in..." ([more](#))
Key Phrases: [twisted hair](#), [celestial observations](#), [Fort Mandan](#), [Meriwether Lewis](#), [Big White](#) ([more...](#))
★★★★★ (144 customer reviews)

List Price: \$17.00
 Price: **\$11.56** & eligible for **FREE Super Saver Shipping** on orders over \$25. [Details](#)
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Special Offers Available

In Stock.
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Page 5 of 10 (Start over)

Example to Demonstrate “Content Delivery” Principle

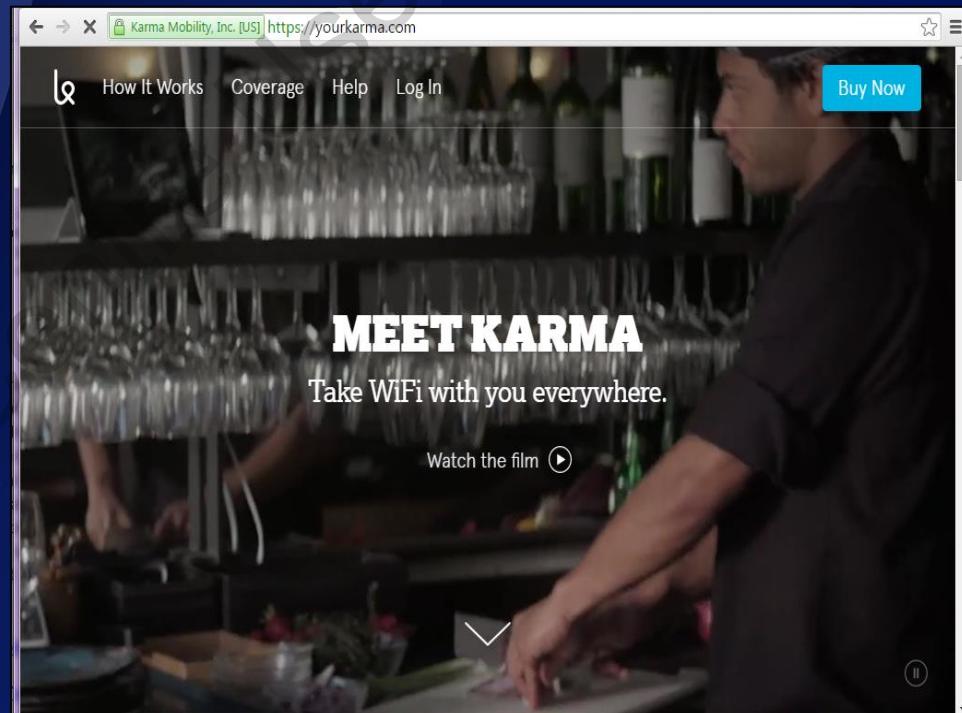
Image Courtesy: <https://www.amazon.com>

Principles of User Experience Design

8-8

Delight

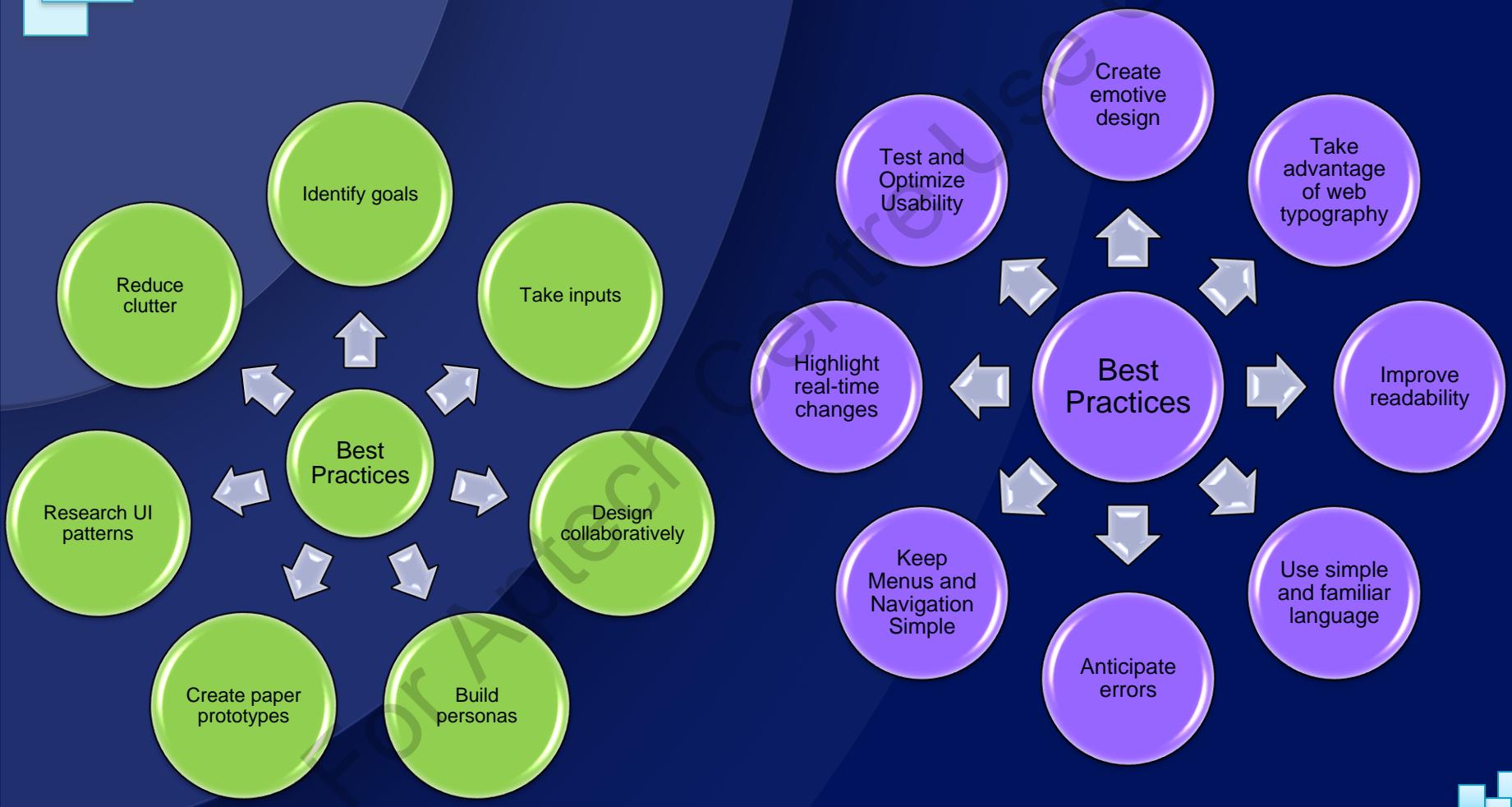
- Intuitive, simple, and attractive.
- Attention to detail.
- Use fonts, color palette, graphics, and animation wisely.



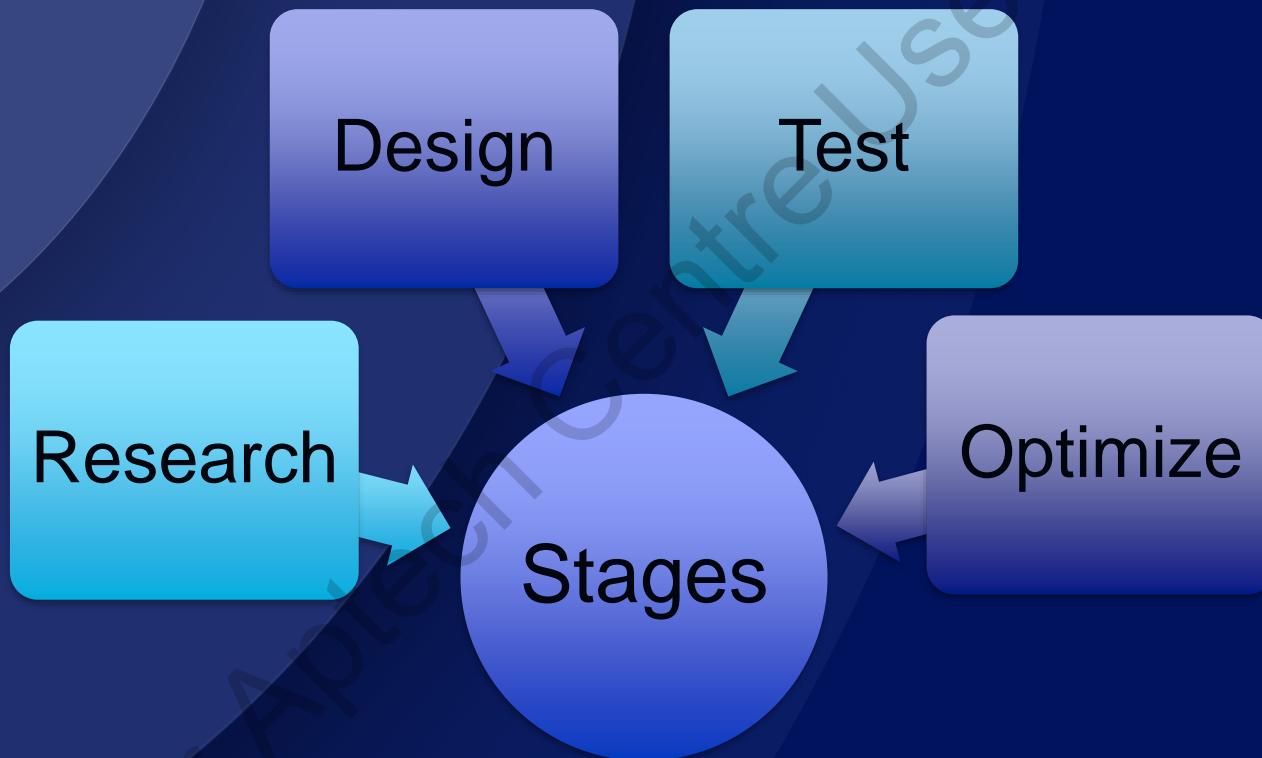
**Example to Demonstrate “Delight” Principle
Image Courtesy: <https://yourkarma.com/>**



Best Practices in User Experience Design



User Experience Design Process



User Experience Design Process

Research

- Important stage.
- Identifies content and design requirement.
- Eliminates assumptions.

Design

- Product assumes tangible shape.
- Information transformed into designs.
- Used for Information architecture.

Test

- Evaluates product.
- Requires observation of user navigation.
- Optimize design based on observations.
- Frequent testing helps resolve red flags early.
- Final product is user-approved.

Optimize

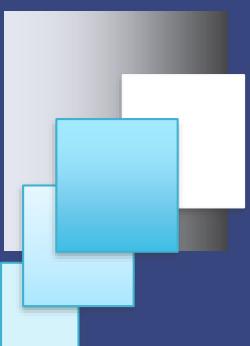
- A stage where the design will become perfect.
- An iterative process.
- May require several iterations.



Good vs. Bad UX Design

Good Design	Bad Design
Invisible to the user	Cluttered interface
Easy navigation	Poor navigation
Simple layout	Confusing layout
Pleasant color scheme	Bright color scheme
Mix of text and visuals	Heavy text content
Solicits feedback	No option for feedback





Good vs Bad UX Design

2-2



Display the Current State



Aesthetic Use of Color and Hierarchy



Using Clear Language



Handling Errors



Error Communication



Summary

- User Experience is the overall experience and satisfaction a user has when interacting with a product such as a Website or computer application.
- UX design is the process of understanding the requirements of a user and intuitively addressing them by improving the product's information architecture, interaction design, and visual design.
- Critical elements of a good UX design: Visual design, Usability, Information architecture, Interaction design, and User research.
- Key principles: Familiarity, Clarity, Recoverability, Responsiveness and Feedback, Simplicity, Content Delivery, and Delight.
- Well-defined UX process creates a positive experience. Process - Research, Design, Test, Optimize.
- Good design is useful, purposeful, provides better experience, and easy to understand. A bad design can be identified easily.



Session 3

Understanding Responsive Web Design



Learning Objectives

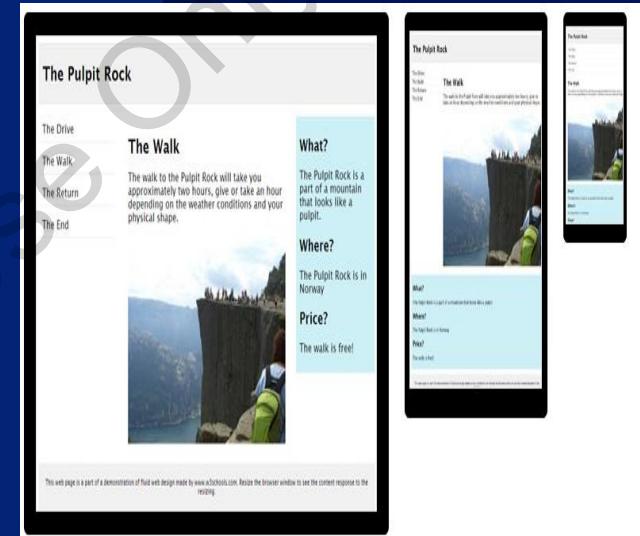
- Define Responsive UI design
- Describe the evolution of RWD
- Describe the importance of Progressive Enhancement
- Outline the differences between Graceful Degradation and Progressive Enhancement
- Explain the RWD Workflow
- Describe the significance of RWD



What is Responsive User Interface Design?

- Responsive Web Design (RWD) implies the formatting of Website design in a way for optimal viewing and exploring a wide range of devices, including traditional PCs, smartphones, and tablet devices.
- Responsive Web Design offers:

- Smooth navigation
- Easy reading
- Minimum pinching
- Reduces scrolling and zooming
- Excellent user experience



Example of RWD

Image Courtesy: <http://www.w3schools.com/>



Advantages to the Users

- A responsive Website is flexible to use
- It shuffles content, resizes images, and adjusts font size
- Allows users to read information as per their choice and requirements
- Helps in finding fast and intelligent sites
- Saves time for users while browsing the site
- Helps to increase user's experience



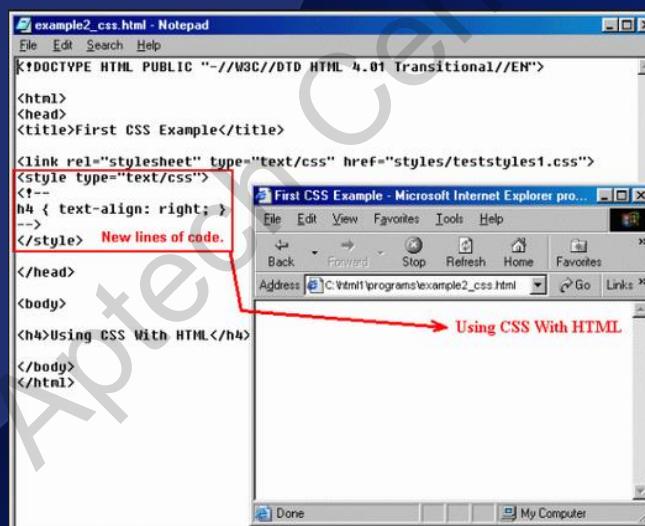
Advantages to the Web Designers

- Streamline the designing process
- Saves time and effort
- Cut down capital employed
- Eliminates the use to maintain multiple Websites
- Reduce maintenance and development cost
- Expand Return on Investment in long run
- Enhance SEO rank
- Better performance means better sales
- Higher conversion rates
- Increasing market share



Cascading Style Sheets

- Responsive Web Design (RWD) is a way of laying-out and coding a Website so that the Website can provide an excellent viewing experience.
- Cascading Style Sheets (CSS) helps the developer to point out when a certain style takes effect and provides printer-friendly style sheets if required.

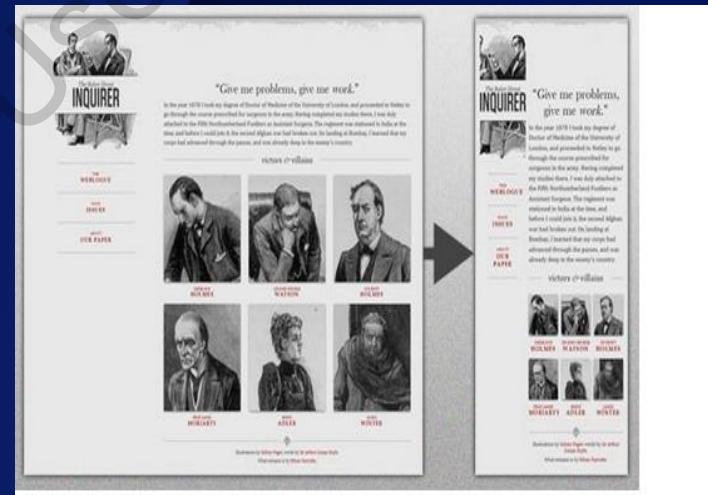


Example of a CSS



Evolution of RWD

- Cameron Adams in 2004 was the first to demonstrate a site layout example that adapts to browser viewport width.
- In May 2010, Ethan Marcotte's article coined the term Responsive Web Design and defined fluid grid/flexible images/media queries.
- In 2011, a book titled Responsive Web Design described the theory and practice of Responsive Web Design.



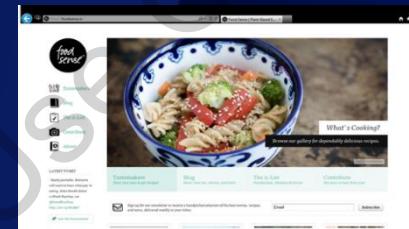
Example of a Responsive Web Design

Image Courtesy: <http://www.smashingmagazine.com/>



Fundamental Techniques for RWD

- **Fluid, Proportion-based Grids:** Arrange the grid columns in proportion based on page element sizing.
- **Flexible images:** Displays within the size available.
- **CSS3 Media Queries and Screen Resolutions:** Enable the Websites pages to utilize diverse CSS styles sheet based on media rule.



Navigation Appears on the Left



*In an 800x600 Resized Window,
Navigation Switches to the Top*



Same site on a Windows Phone



What is Progressive Enhancement?

- Allows Web developers to apply on building the best possible Websites while adjusting the issues inbuilt in those Websites being accessed by multiple unknown user-agents.
- Three different layers of Progressive enhancement used to enhance experience of interacting with Website:

First layer: HTML

Second layer:
CSS

Third layer:
JavaScript

- A Practical Example: The ultimate goal for users is to have a drag-and-drop experience that saves the menu order via AJAX. All user-agents should enable user to interact with our list in the way most appropriate to them.



Practical Example - First Layer - HTML

In the first layer, semantic mark-up of navigation is shown in navigation-1.html.

```
<form action="record.php" method="post">
  <fieldset>
    <legend>record of Navigation</legend>
    <ol>
      <li id="homepage-12">Homepage <label
          for="menu-id-12">Change the order for
          Homepage</label><input type="text"
          name="homepage-12" id="menu-id-12"
          value="1" /></li>
      <li id="contact-23">Contact Us
          <label for="menu-id-23">Change the order
          for Contact Us</label><input type="text"
          name="contact-23" id="menu-id-23"
          value="2" /></li>
      <li id="about-16">About Us <label
          for="menu-id-16">Change the order for About
          Us</label><input type="text" name="about-
          16" id="menu-id-16" value="3" /></li>
      <li id="latest-14">Latest News
          <label for="menu-id-14">Change the order
          for Latest News</label><input type="text"
          name="latest-14" id="menu-id-14" value="4"
          /></li>
    </ol>
  </fieldset>
  <p><input type="acknowledge"
  value="record new order" /></p>
</form>
```

Order of Navigation

1. Homepage	Change the order for Homepage	1
2. Contact Us	Change the order for Contact Us	2
3. About Us	Change the order for About Us	3
4. Latest News	Change the order for Latest News	4

Save new order

navigation-1.html



Practical Example - Second Layer - CSS

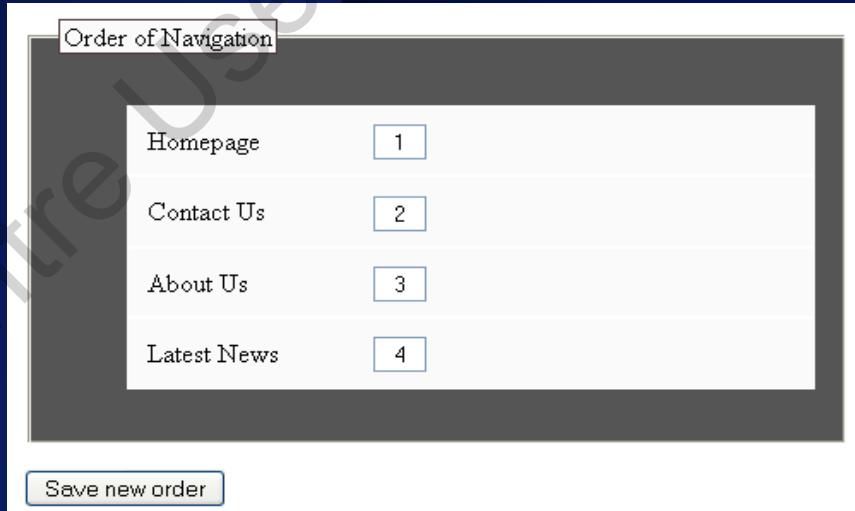
The second layer is added to give the form a bit of visual elegance.

```
name="code">
<style type="text/css">
form {width: 50%;margin: 0 auto;}
fieldset {background: #555555;padding: 1em;}
legend {border:1px #513939 solid;background: #FAFAFA;}
label {position: absolute;margin-left: -999em;}
ol {list-style: none;position: relative;}
body {font: 100% serif;}
ol li {border: 1px #FFF solid;background: #FAFAFA;padding: 0.7em;}
olli:hover {border: 1px #513939 solid;}
input[type='text'] {width: 2em;text-align: center;position: absolute;left: 40%;}
</style>
```

Order of Navigation

Homepage	1
Contact Us	2
About Us	3
Latest News	4

Save new order



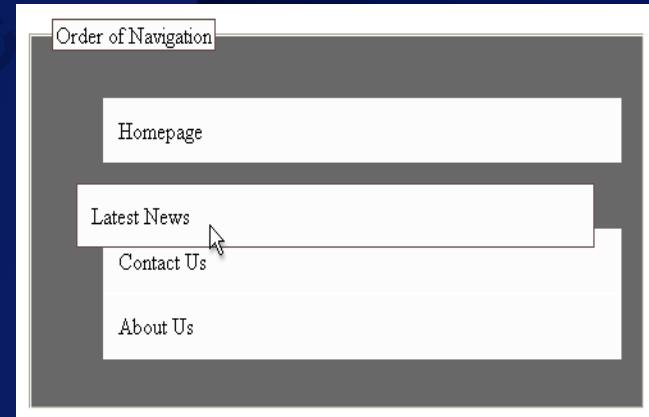
navigation-2.html



Practical Example - Third Layer - JavaScript

- JavaScript layer is added that allows user to simply drag-and-drop navigation items according to the way they require. Use jQuery to make the process as painless as possible.

```
<script type="text/javascript">
$(document).ready(function(){
$('input').hide();
$('ol').sortable({items: 'li',
update: function(event, ui) {
var new_order=$('#ol').sortable('toArray');
$.each(new_order, function(i, element) {
$('input[name='+element+']').attr('value', i+1);
});$.post("record.php", {
'new_order': $('form').serialize()
})
}
});
});
</script>
```



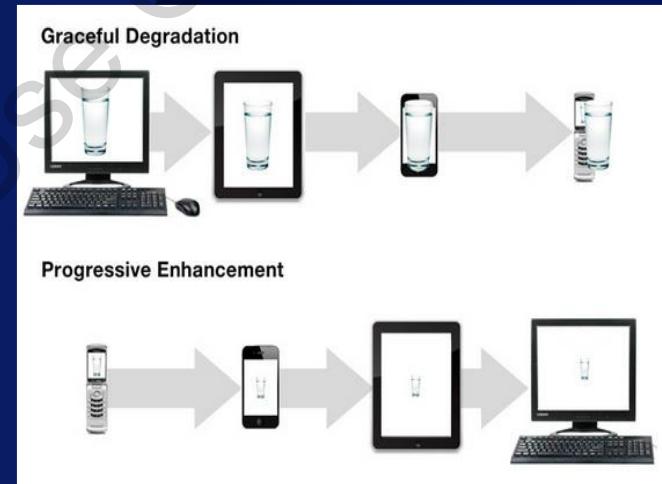
navigation-3.html



Difference Between Graceful Degradation and Progressive Enhancement

Graceful Degradation is used in fields other than Web design, such as fault tolerant, mechanical, and electrical system.

- The basis for Graceful Degradation is to first build for the latest device and then, for less capable devices.
 - Example: A universal drop-down or fly-out menu.
- Progressive Enhancement starts with the basic version and then adds enhancements for those browsers which can handle them.
- Example: An unobtrusive script is avoided by user agents that do not support it, but is applied by modern and adequate devices.



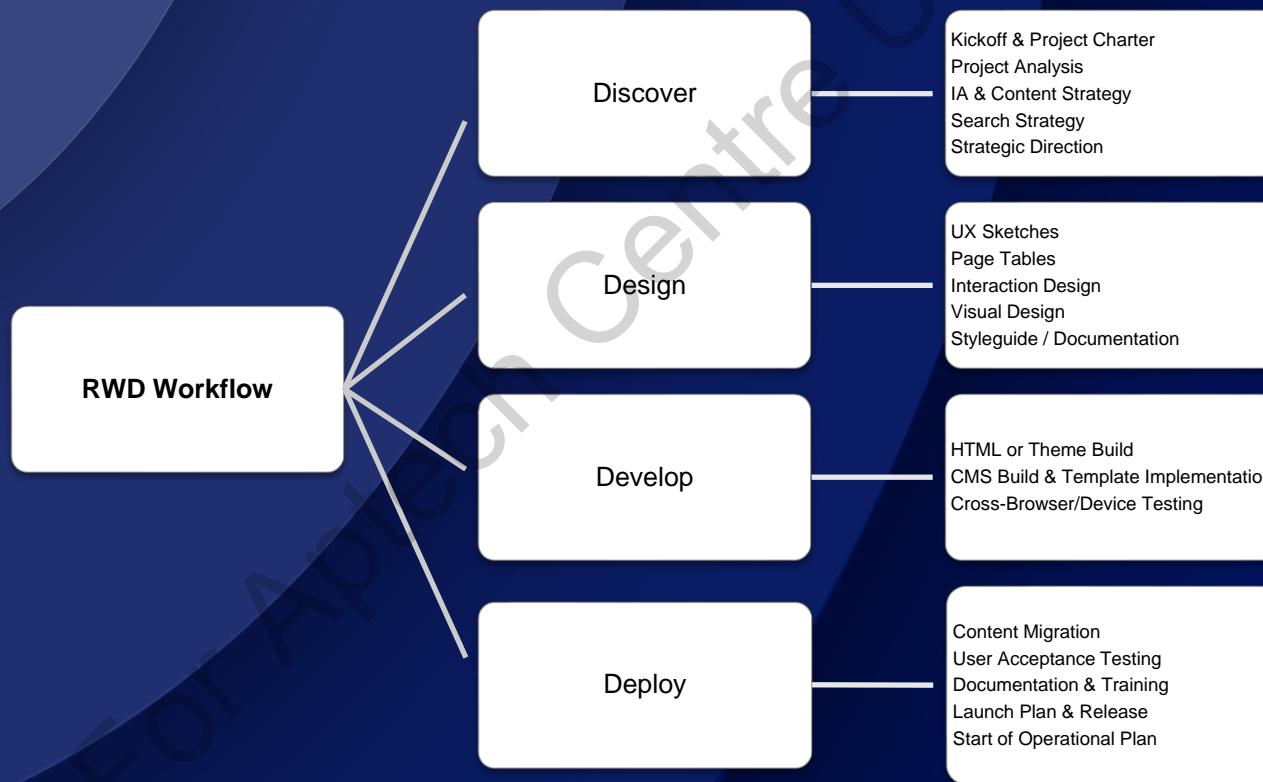
Difference Between Graceful Degradation and Progressive Enhancement

*Image Courtesy:
<http://bradfrost.com/blog/web/mobile-first-responsive-web-design/>*



Responsive Work Design Workflow

Responsive Work Design workflow consists of four main processes: Discover, Design, Develop, and Deploy.



RWD Workflow - Discover

Kick-off and Project Charter

- Helps in establishing communication protocols, milestones, and timelines, deliverables and scope, and roles and expectations.

Project Analysis

- Helps in determining the requirements of the project, from a technical, creative, and organizational perspective.

Content and Search Strategy

- Helps in creating a site map for a project and show where everything belongs. It also helps to develop a document summarizing best practices for Search Engine Optimization.

Strategic Direction and Planning

- Helps all of the information found during the discovery phase compiled into a concise document that outlines the search, content, technical, and creative strategies.



RWD Workflow - Design

UX Planning and Design

Helps in working through a constant process to create rough wireframes, or UX sketches, for key views.

Page Table:

Keep content independent from design or presentation, analyze each content area in priority order, and identify the most important messages to communicate in each area.

Interaction Design:

Helps in creating rough greybox HTML prototypes to demonstrate responsive interaction patterns.

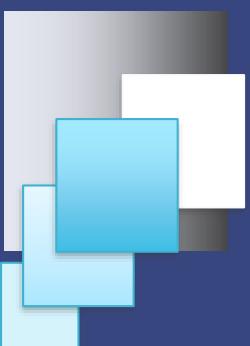
Visual Design:

Helps to create static visual mock-ups, browser-based prototypes, color palettes, and typography that give each site a unique look and feel.

Guidelines and Documentation:

Helps in creating a style guide that will document the design system so that they can be properly implemented.





RWD Workflow - Develop

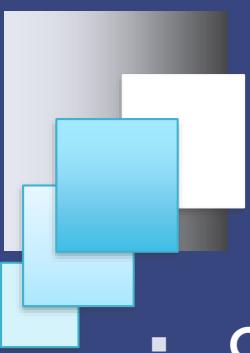
HTML or Theme Build

Creates HTML/CSS/JavaScript themes that are functional, browser-tested, and HTML pages are ready for testing to make sure all content is governed by CSS and meets W3C standards.

Cross-Browser/Device Testing

Helps in testing and demonstrating how page templates render in major Web browsers and mobile devices.





RWD Workflow - Deploy

- **Content Migration:** Helps clients to create and maintain useful and usable content.
- **User Acceptance Testing:** Helps to confirm that a new site meets the objectives and requirements as defined early in the project.
- **Documentation and Training:** Helps to prepare text and video documentation to help understand and use new CMS and site.
- **Launch Plan and Release:** Helps in creating a launch plan to archive the current Website and release the new Website to the public and also quality checklist to make sure that all project requirements are met.
- **Start of Operational Plan:** Helps in achieving a milestone of changing a Website when a development is required.



Significance of RWD

- Web designers are required to keep the same look and feel of their Websites in various computer browsers before the reproduction of mobile devices with advanced Web-browsing capability.
- RWD is highly significant in regard with:
 - Time and Money
 - Pervasion of Mobile Devices
 - User Experience
 - Device Agnostic
 - Way Ahead



Summary

- Responsive Websites has changed the entire outlook of Web industry. It offers significant benefits to Web designers and online businesses.
- Responsive Web Design involves using CSS and HTML to resize, hide, shrink, enlarge, or move the content to make it look good on any screen.
- Using CSS makes it easy to develop sites that can be viewed in a device of any size, such as desktop, laptop, tablet, or smartphone.
- Progressive Enhancement (PE) is the principle of starting with a strong foundation and then adding enhancements to it if you know certain visiting user-agents can handle the improved experience.
- The concept of Progressive Enhancement is applied by breaking different layers to improve the experience of interacting with the Website.
- The concept of Graceful Degradation and Progressive Enhancement are applied in order to make a Website available to any user agent.
- Using responsive design will help create a Website that will not only look good and work efficiently on the devices that are on the market now, but are also likely to do the same on any devices that may be available in the future.

Session 4

Understanding Strategies for Responsive Web Design



Learning Objectives

- Explain the strategies for RWD in mobile phones, Android based devices, and laptops
- Describe necessity for content strategy in RWD
- Describe importance of content audit
- Explain performance optimization for a mobile-friendly site
- Explain differences between responsive and adaptive Website designs
- Understand concept of Web accessibility
- Use design best practices for Web accessibility



Strategies for RWD in Various Devices

Identifying breakpoints

Lowering page load time

Optimizing image size

Mobile First

Research First



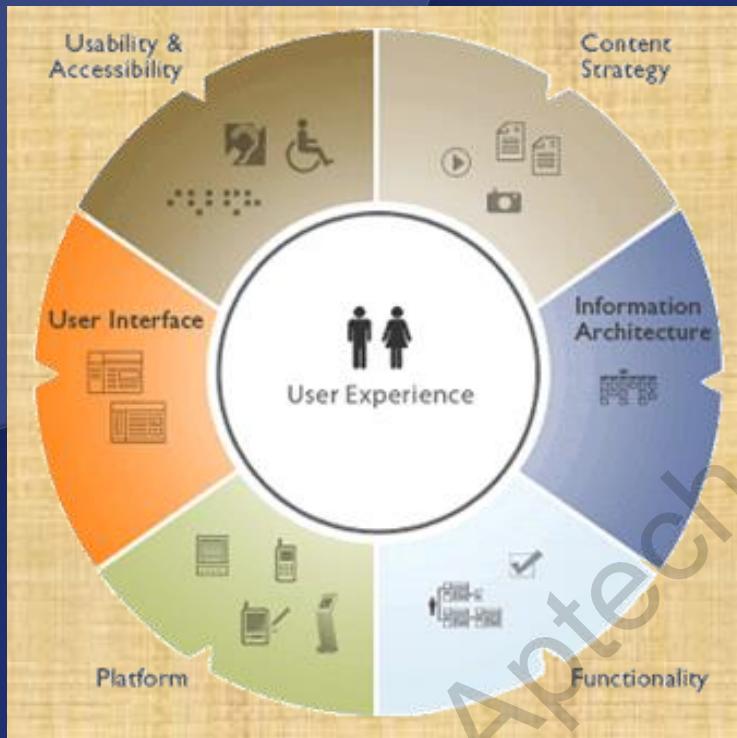
What is Content Strategy?



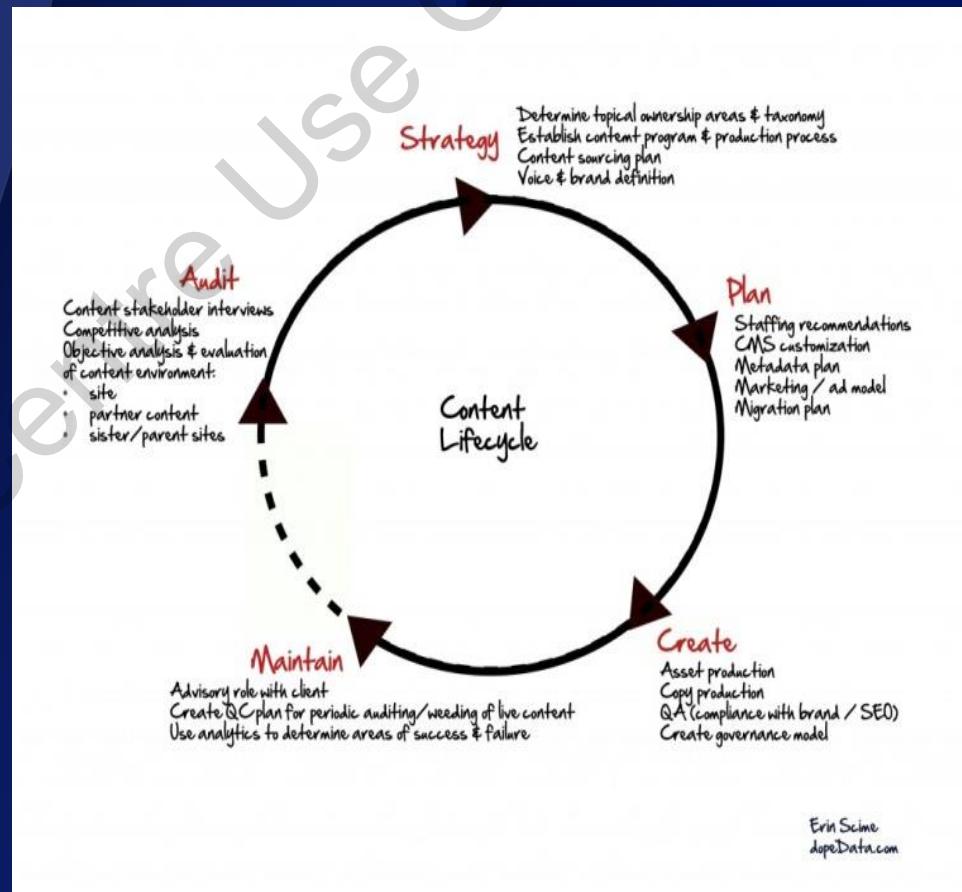
Core Strategy at Brain Traffic



How Does Content Strategy Relate to UX Design?



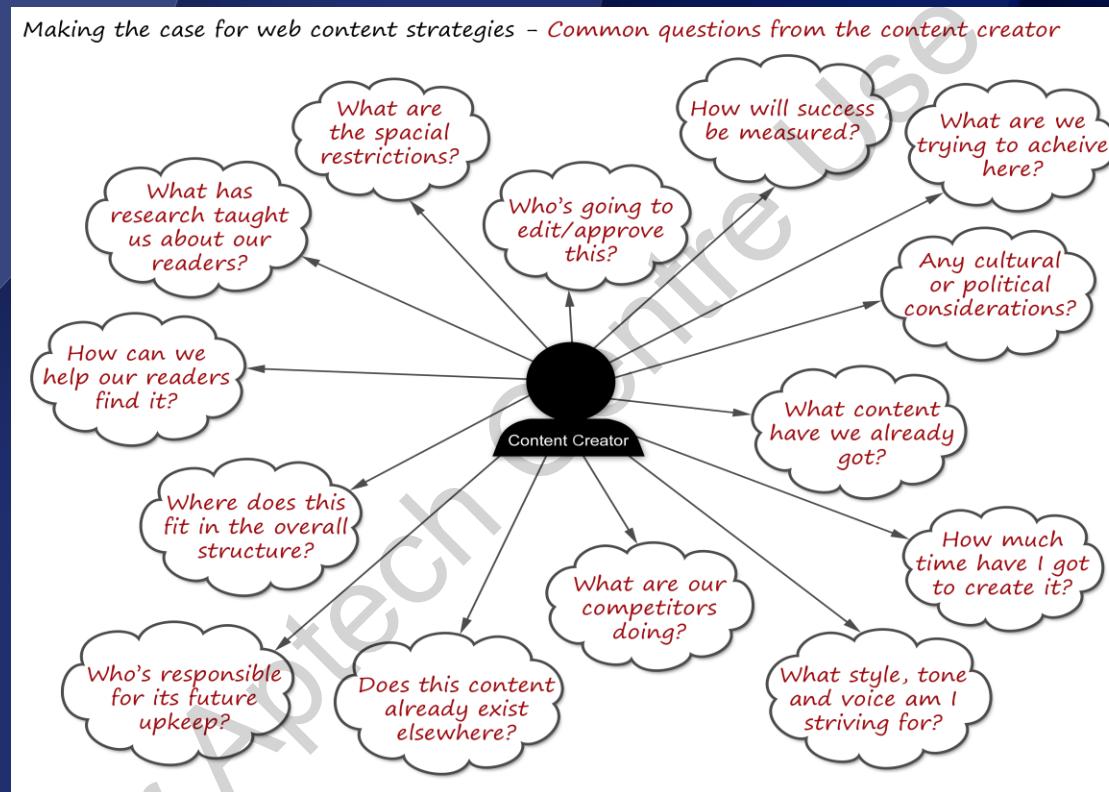
Client Facing Solutions



Content Lifecycle



How Does Content Strategy Relate to UX Design?



Richard Ingram of Ingserv

Image Courtesy: <https://uxmag.com/sites/default/files/uploads/halvorson-cs/ingramcontentcreator.png>



What is Content Audit?

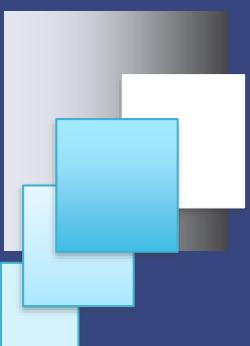
Content Audit -
location where
Website content
is verified and
compiled.

**Full Content
Inventory:** List of
each content item
on site.

**Partial Content
Inventory:** List of a
subset on site.

**Content
Sample:** Collection
of example content
from site.





What Does a Content Audit Include?

1-2

Navigation Title

Page Name

URL

Comments

Content Hierarchy



What Does a Content Audit Include?

Content Type

- Is it an essential or minor page?

Topic, Tags or Category

- Metadata for articles.

Author

- Who wrote the content?

Owner

- Who is responsible for the content?

Date Last Updated

- When was the content updated?

Attached files

- Number of files attached and types of documents.

Related

- What data is connected from sidebars?

Availability

- Is the content compatible?



How to Perform the Content Audit?

	A	B	C	D	E	F
1	ID	Navigation	Page title	URL	Comments	
2	0.0	Home	UX Mastery	http://uxmastery.com/		
3	1.0	About				
4	2.0	Newsletter				
5	3.0	Resources				
6	4.0	Archives				
7	5.0	Write for us				
8	6.0	Contact				
9						
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18						

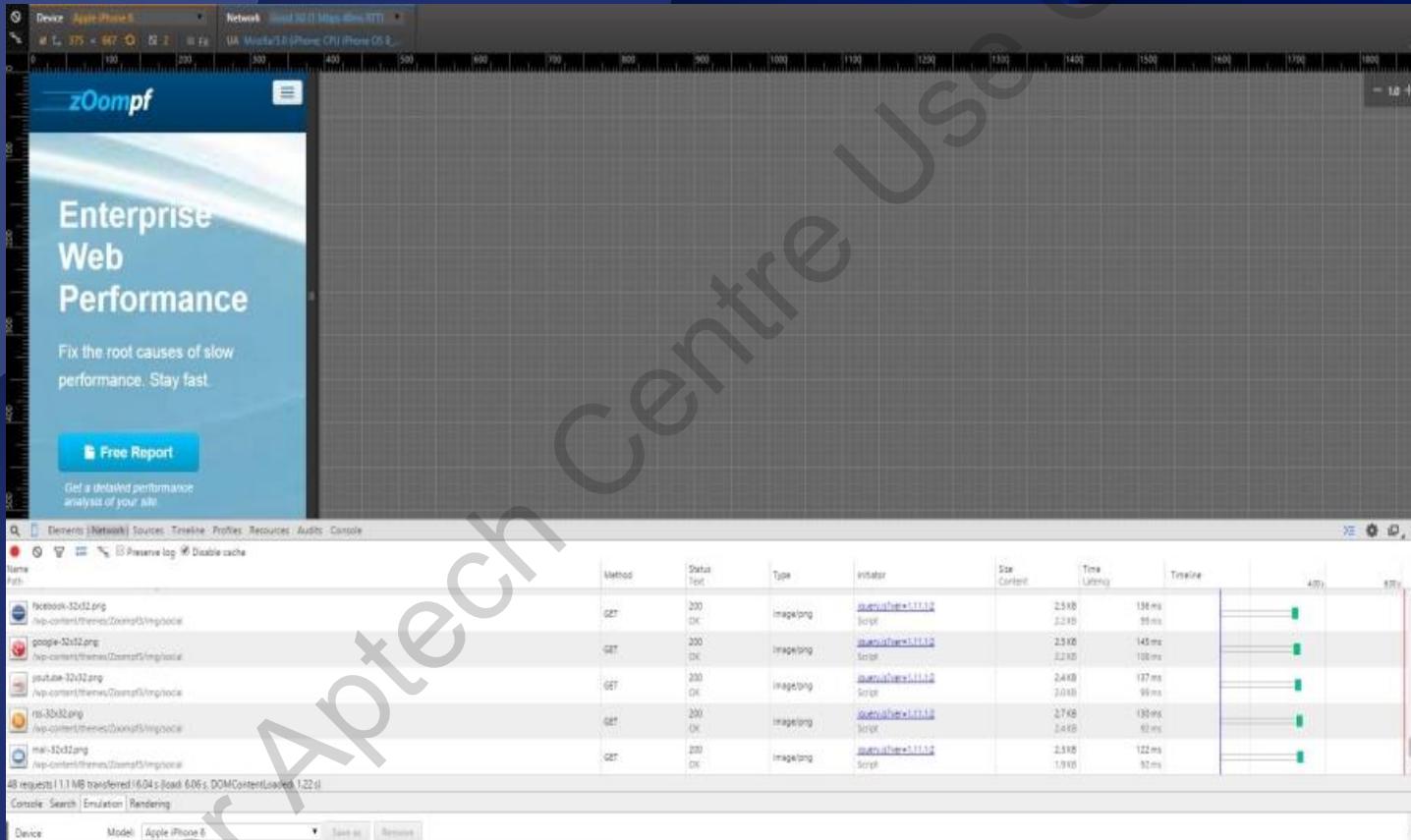
Sample of Substance Review Spreadsheet

C	D	E
		Comments
	http://uxmastery.com/	
	http://uxmastery.com/about/	About Luke and Matt
	http://uxmastery.com/resources/	
		Page is missing a link b
	http://uxmastery.com/how-to-get-started-in-ux-design/	
	http://uxmastery.com/resources/tools/	Single article
	http://uxmastery.com/resources/books/	Long list of tools, with :
	http://uxmastery.com/resources/ux-courses/	Single page
	http://uxmastery.com/resources/process/	Courses have free & pa
	http://uxmastery.com/resources/techniques/	Links to techniques, filt
		Filterable list. Most link

Next Page of Substance Review Spreadsheet

B	C	D	E	F	G	H	I	J	K	L	M
	Comments		Sidebar	Date	Author	Main category	Tags				
	About Luke and Matt										
			Search								
			Ad								
			RSS feed								
			Newsletter								
			Links to pages in this section								
			Looking for a UX course								
			Comments								
			Some plus:								
			Categories								
			Recent posts								
			Latest topics								
			Latest topics								
			Same plus:								
			Categories								
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Performance Optimization for a Mobile-Friendly Site



Example of zoompf_iphone6 Showing the Waterfall Diagram View





Difference Between Responsive and Adaptive Website Designs

Responsive Design

- Outline is fluid.
- Uses CSS3 media queries.
- Adaptable matrix.

Adaptive Design

- Uses static designs with breakpoints.
- Less spending plan.



Tips for Designers on Deciding the Best Approach

Invite developers for discussion.

Determine the differences and similarities between page components.

Use normal screen widths.

Be accessible for QA.



Tips for Coders on Deciding the Best Approach

Use a JavaScript polyfill to support media inquiries.

Use ems or percentages.

Do not use settled widths.

Use max-width: 100% to make pictures adaptable.

Communicate regularly with the designer.



Summary

- The elements that make responsive sites be responsive always start with the basic tactics that are applied in Responsive Web Design.
- The main concept behind Mobile First is to minimize the amount of content and navigation to make a design useful.
- A good responsive configuration procedure will comprehend what to do with every picture, while a poor one will drive the team to manage problematic results and moderate generation times.
- Core technique in content strategy characterizes how your substance (content) will assist in meeting business objectives.
- The main principle of a content audit is producing a listing of the site's content, usually in a big spreadsheet.



Session 5

Using Common RWD Patterns in Mobile Designs



Learning Objectives

- Define Breakpoints
- Describe Navigation Drawers
- Describe Stacked Pagination
- Explain Fluid Images
- Define Bottom Bar
- Describe Top Bar
- Define Front Action Calls
- Describe Short and Simple Menus



Breakpoints

- Are portal widths that have a media query declaration to change layout once the browser is within declared range.
- Can be placed depending on common screen sizes in a responsive design.
- Every responsive site has a minimum of two breakpoints designed for tablet and mobile devices.



Breakpoints

- Two types of breakpoints:

Major breakpoints

- Are conditions when met result in major changes in design. Example: The whole layout changes from two columns to four columns.

Minor breakpoints

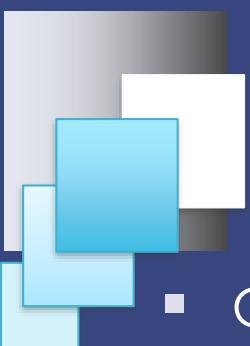
- Are conditions when met result in small changes in design. Example: Moving form labels from above text fields to the left of those fields, while the rest of the design remains unchanged.

- There is no thumb rule on deciding number of breakpoints in RWD. The idea is to ensure that design and content flow seamlessly on any landscape.



Three layouts with 3-columns, 2-columns, and single column layout





Customization of Breakpoints in RWD

- Creating a custom breakpoint is a very logical process and only requires a familiarity with media queries to create.
- Following rules need to be adhered while creating a custom breakpoint:

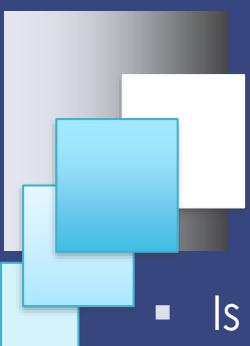
Choosing Right Browser Extension

- Resize Window for Chrome is an optimal choice as the current dimensions are shown in the bottom right corner on shrinking the browser.

Explore Between Standard Breakpoints

- Inconsistencies in appearance normally occur between standard breakpoints. Extension such as Resize Window identifies the areas which need correction after looking at every pixel width.





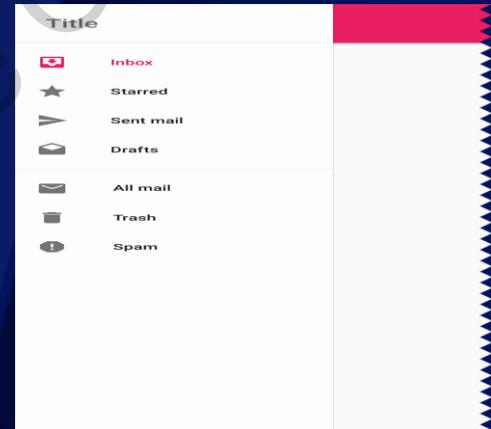
What is a Navigation Drawer?

- Is used for top-level navigation in an application to swiftly navigate between different parts of the application.
- Is required where the user can take multiple paths to navigate which leads to different, independent parts of an application without one dedicated start screen on which everything else depends.
- Is required in a user interface that has more than three top-level views and the action bar is too small to be used.
- Drawer design template is almost similar when utilized for iOS and Android, therefore, providing a single design that works flawlessly and enjoys a good level of understanding in both platforms.

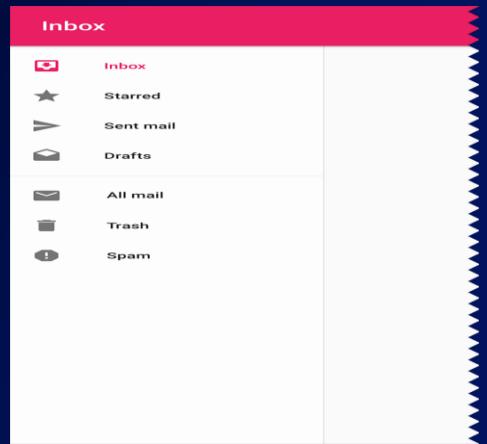


Types of Permanent Navigation Drawers

- **Full-height Navigation Drawer:** These are applications focused on information consumption that uses a left-to-right hierarchy.
- **Navigation Drawer Clipped under the Application Bar:** These are applications focused on productivity that requires balance across the screen.



Left-to-Right hierarchy

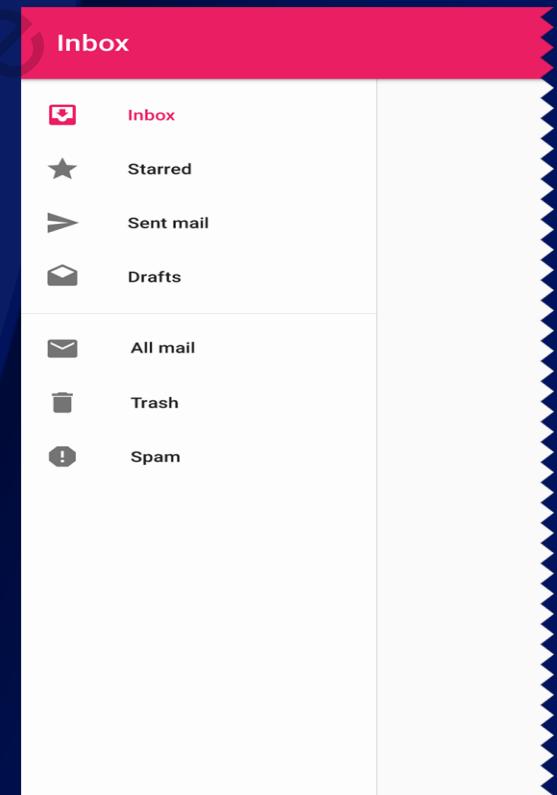


Clipped Navigation Drawer



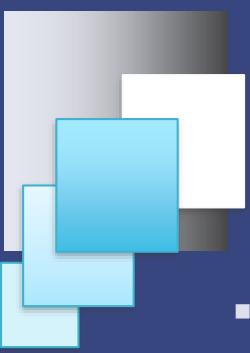
Types of Permanent Navigation Drawers

- **Floating Navigation Drawer:** These are applications that require less hierarchy use floating navigation drawer.



Floating Navigation Drawer





Stacked Pagination

- What is Stacking?
 - A Stacking refers to positioning of content elements on top of each other. It is highly effective for small screen where there is an inadequate space to display the content. Stacking results in reducing page width and increasing page length. It is the frequently used responsive action.
- How does Stack work?
 - Responsive frameworks operate space classes to apply a column width to an element. Different widths can be applied depending on the width of the display in a device.
- What is Pagination?
 - Pagination is the process of dividing a document into discrete pages, either electronic pages or printed pages. Pagination comprises rules and algorithms for deciding where page that breaks will fall and which depend partly on cultural applications about which content exist on the same page.



What is Fluid Image?

- Fluid image is a responsive configuration based picture stack. This stack permits the picture to develop and contract in size with the site.
- Fluid image permits the resizing of a picture in relative units instead of outright pixel measurements.



Example of Fluid Image



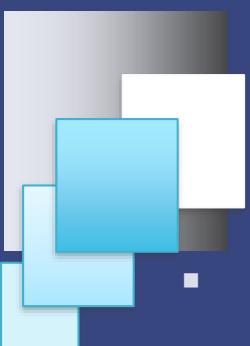
Creating Fluid Image

- Fluid image is created by quantifying the width of image as a percentage of the overall width of the page.
- Example: A picture with measurements of 500px × 300px in a 1200px wide. Below 1200px, the record will be fluid. The calculation of percentage that the image takes up of the document is easy:
 $(500 / 1200) \times 100 = 41.66\%$
- When we create fluid image then, the image will consistently remain in scale with the rest of the text.



Fluid Image with % of total width of the page





Navigation Menus

- Navigation menus are the responsive menus whose treatment and behavior are altered on different devices with different screen widths.
- Different elements of navigation menu for a Responsive Web Design:

Bottom Bar:

It is one of the most delicate parts to be responsified on a Website, which is '**the Navigation**' for the Website accessibility.

Tab Bar:

A tab bar is a navigation that provides access to different views in an application.

Call to Actions:

It refers to use of elements in a Web page that requires an action from the user. Example: Actionable buttons such as 'Buy' or 'Sell' button.

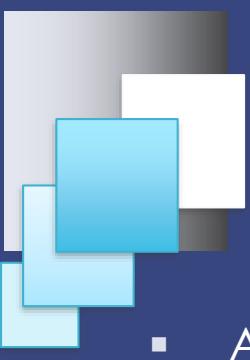
Short and Simple Menu:

They help to craft navigation systems that function flawlessly for small screens and larger screens. Different types of menus are as follows:

Slide Down

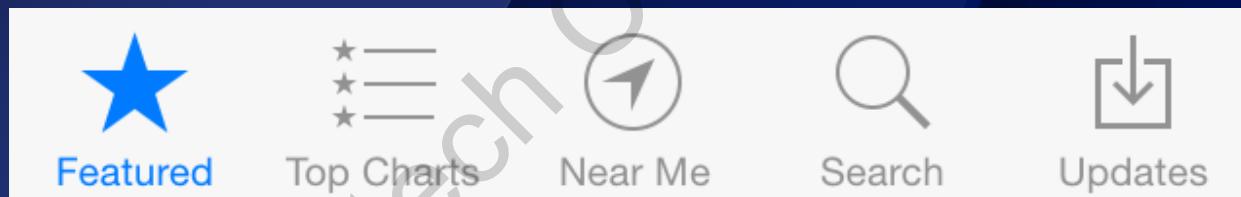
Slide In





What is a Tab Bar?

- A tab bar is a navigation that provides access to different views in an application.
- It can be used as a standalone object in any application. It allows to:
 - Navigate instantly within an application
 - Understand the application's layout



Tab Bar



Tab Bar in Responsive Web Design

- A tab bar can be used as main navigation for a site. It provides the user sufficient visibility of the main sections of the site and easy way to identify their location within a Web application.
- The tab bar can be used to quickly control between the segments of a site.
- Tabs offer the user a steady place to go for navigation.



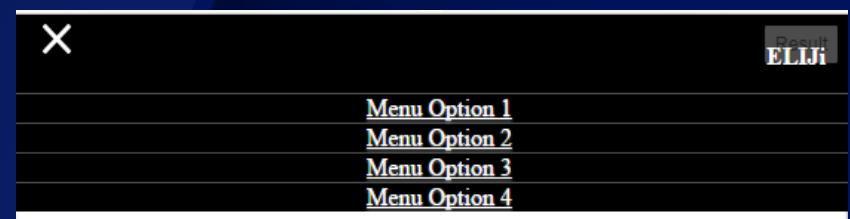
Tab Bar in Responsive Web Design



Slide Down Menu

- Slide Down menu is used to create mobile version of menu. It is an ideal choice if the Website has eight or fewer menu options.
- The basic HTML structure to set up a slide down menu is:

```
<div class="header">  
  <div class="menuIcon">  
    <a href="#menuExpand">Menu</a>  
  </div>  
  
  <div class="menu">  
    <ul>  
      <li><a href="#">Menu Option 1</a></li>  
      <li><a href="#">Menu Option 2</a></li>  
      <li><a href="#">Menu Option 3</a></li>  
      <li><a href="#">Menu Option 4</a></li>  
    </ul>  
  </div>  
</div>
```



HTML code for creating Slide Down menu



Slide In Menu

- Slide In menu is used to create mobile version of menu. It is used when the Website has a large list of menu options.
- Slide In menu takes a similar approach as Slide Down menu by collapsing into a hamburger menu icon and then, takes the screen over by sliding from the side and pushing the body of the Website over.
- The process of developing slide in menu starts with a media query to alter the CSS and jQuery toggle function to add and remove few classes.
- The basic HTML framework that varies for this technique as the mobile menu must be positioned outside of the main Website storage in order to push it to the side.

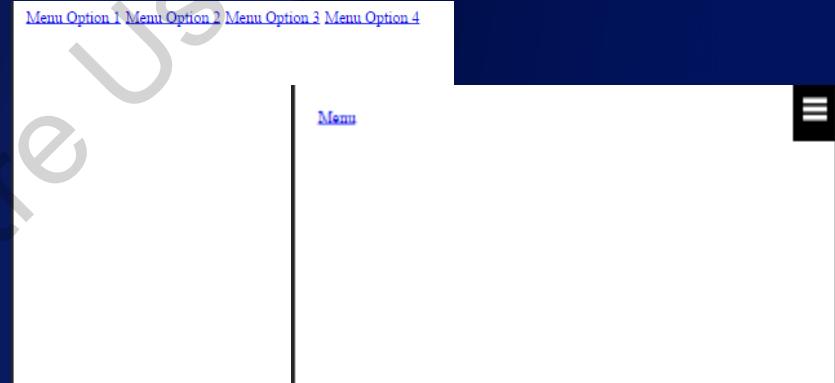


Slide In Menu

- The HTML framework to build a slide in menu is as follows:

```
<div class="mobileMenu">
<ul>
<li><a href="#">Menu Option 1</a></li>
<li><a href="#">Menu Option 2</a></li>
<li><a href="#">Menu Option 3</a></li>
<li><a href="#">Menu Option 4</a></li>
</ul></div>
<div class="mobileBodyWrapper">
<div class="mobileDimmer"></div>
<header class="header">
<div class="menuIcon">
<a href="#menuExpand">Menu</a>
</div>
<nav class="menu">
<ul>
<li><a href="#">Menu Option 1</a></li>
<li><a href="#">Menu Option 2</a></li>
<li><a href="#">Menu Option 3</a></li>
<li><a href="#">Menu Option 4</a></li>
</ul></nav></header></div>
```

Menu Option 1 Menu Option 2 Menu Option 3 Menu Option 4



HTML code for creating Slide In menu



Summary

- Responsive Web Design involves designing sites to provide an ideal view and interaction experience with ease of navigation across a wide range of devices.
- Breakpoints are browser widths that have a media question presentation to change the format once the program is inside of the pronounced extension.
- Navigation drawer allows swift navigation between different parts of an application.
- Stacking refers to positioning of content elements on top of each other that results in reducing page width and is ideally used for small devices with small screen width.
- Fluid images are crafted to resize the images in proportion to the width of a page.
- Navigation in a Website is responsified to meet the requirement of different devices with diverse screen size.

Session 6

Usability Studies in Responsive Web Design



Learning Objectives

- Describe usability studies
- Explain the importance of usability studies
- List the steps for testing in usability studies
- Describe usability studies for Responsive Web Design



What is Usability Study?

- Evaluating performance to enhance usability of a product or service while end users work on that particular product or service.
 - Involves observing and taking annotation, while users explore the product or service.
 - Determines and improves the product in terms of speed of the product, ease to use, remembering the functions, recovering from errors, and overall satisfaction of the end user.

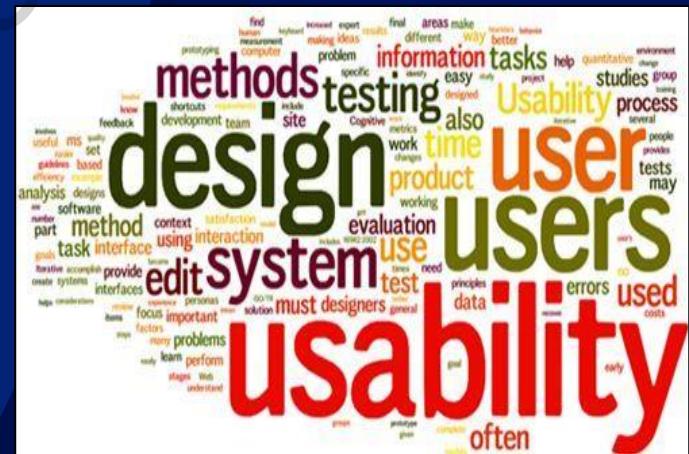


Image courtesy: <http://unbounce.com/a-b-testing/>

Usability Study - Black Box Technique

- Usability study is also known as Black Box testing technique.
- Black Box testing is a software testing method in which functionality of the Software Under Test (SUT) is examined without peering at the internal code structure, implementation details, and inside paths of the software.



Steps to Perform Black Box Testing

Observing initial requirements and specification of the system.

Selecting valid inputs to verify if the Software Under Test (SUT) processes them correctly. Invalid inputs are also selected to check that SUT is able to identify them.

Knowing expected output for all the inputs provided.

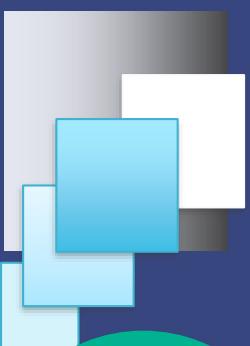
Creating test cases with the selected inputs.

Executing test cases.

Comparing actual output with the expected output.

Retesting fixed defects.





Key Components of Usability Testing

Learnability

Ease of completing basic tasks while using the product or the service.

Efficiency

Speed of completing basic tasks.

Memorability

Remembering how to use the product effectively even after a period of time.

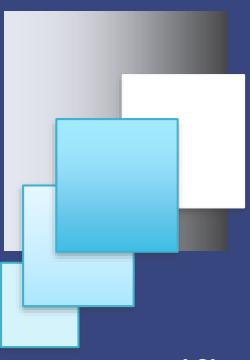
Errors

Detecting the frequency and the severity of errors.

Satisfaction

Feeling of contentment after using the system.





Considerations While Conducting Usability Testing

- Verifies if users can finish specified tasks successfully.
- Ascertain the time to finish the specified task.
- Validate the approval level of users with the Web function, Website, or other product.
- Categorize the changes necessary to progress the user performance and satisfaction.
- Evaluate the performance if it matches the usability goals.



Advantages of Using Usability Testing for an Organization

- Can be modified to perform other types of testing such as practical testing, structure integration testing, unit testing, and smoke testing.
- Enhances performance of the product by amending all the problems that user may face before the product is finally released.
- Determines possible mistakes, bugs, and potholes in the structure which are not evident to developers.
- Can be very economical, highly effective, and beneficial.



Benefits of Using Usability Testing for End Users

Benefits

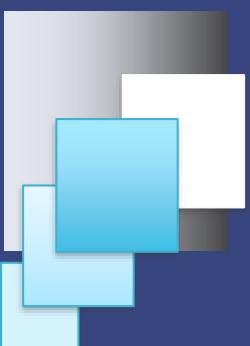
Improves the quality of software.

Easy to use software.

More readily accepted by the users.

Shortens the learning curve for new users.





Methods of Usability Studies

Laboratory Experiment:

Observed by usability experts by using the quantitative data.

Requires more time and is more expensive than other methods of usability testing.

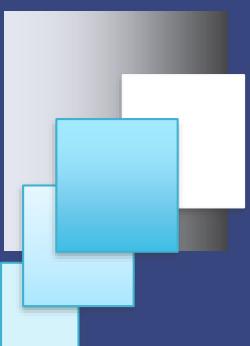
On-site Observation:

Testing is conducted on-site which enables the study of user's actual working environment.

Involves long observation period which helps to collect the real environment information.

Less expensive than other usability testing method.





Checklist of Usability Testing

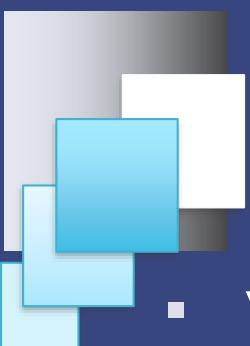
Usability Testing Checklist Categories

Accessibility

Navigation

Content

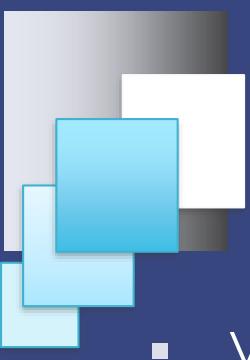




Checklist of Usability Studies - Accessibility

- Verifies the loading time of the Website.
- Verifies suitable Text-to-Background contrast.
- Verifies formatting of the text including font and spacing of the text.
- Verifies if Website has its 404 page or any custom designed Not Found page.
- Verifies addition of appropriate ALT tags for images.

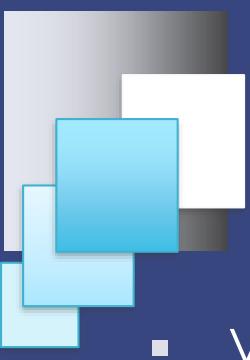




Checklist of Usability Studies - Navigation

- Verifies if user can easily identify the Website navigation.
- Verifies if navigation options are short and easy to understand.
- Verifies if number of buttons/links are realistic.
- Verifies if the logo of the company is linked to the home page.
- Verifies if links are consistent on all pages and are easy to understand.
- Verifies if site search is present on page and are easy to access.





Checklist of Usability Testing - Content

- Verifies if URLs have meanings and are user friendly.
- Verifies if HTML pages are meaningful.
- Verifies if important content is above the fold.
- Verifies if highlighting of the content is used cautiously.
- Verifies if original copy is concise and illustrative.
- Verifies if major headings are clear and meaningful.
- Verifies if styles and colors are consistent.



Steps to Perform Usability Testing

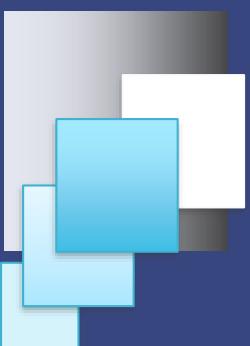
- Create a test plan:
 - Identifying objectives and elements that must be tested.
 - Specifying the features of the test group and identifies methods and measures to perform the test.
- Select a test environment:
 - Finalizing an environment consisting of required software and hardware where the testing team performs their tasks.
- Search and assign users:
 - Identifying users on which testing is to be performed depending on their usage.



Steps to Perform Usability Testing

- Schedule the test session:
 - Moderator performs actual testing.
 - Moderator is responsible for security and ease for users.
 - Moderator manages the testing team.
- Create test checklist or material:
 - Creating an interview questionnaire for the users to identify possible conditions for the testing scenario.
- Interrogate with users:
 - Take feedback from the users.
 - Attend the interrogation session with users so they can provide suggestions to the moderator.
- Analyze data and observation:
 - Finding the reason of the problem by analyzing data and observations.





Limitation of Usability Testing

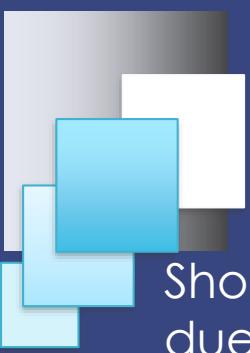
It is tedious and time consuming.

Conclusion derived is not 100% accurate as the scenarios of testing are different from actual environment.

It verifies testing for short period of time.

It is not possible to know response of user in long term.





Mobile Website Testing

Should be conducted on Mobile devices and not on static devices due to following reasons:

Roll-overs:

- Roll overs used for navigating or accessing content on static devices do not translate to mobile devices automatically.

Re-sizing:

- Display in static and mobile devices differ due to variation of screen size.

Overlays and Pop-ups:

- Some of the features such as light boxes and slide shows use overlays or pop-ups work accurately on the static devices but may lead users into navigational dead ends on mobile devices.

Environmental Factors:

- Websites created for mobile devices require verification for test designs, color choices, and textures in a variety of environmental light. Mobile devices are used in different environments whereas static devices are used in a particular environment.



Tools Used for Responsive Design Testing

Responsive Test:

Helps to know how a Web page will look on devices with different sizes of screen. Some devices supported with this tool are: iPhones, Blackberry and Samsung phones, and Dell laptops.

Responsinator:

Accepts a URL and gives output of sequences of device mock-ups by rendering the page. This gives an idea of how the users will experience the layout of Web page on different devices.

Responsive:

Provides some keyboard shortcuts. For example, when you press the 'T' key, you will get a tablet preview. This tool helps users to frequently switch between various device previews.

Am I Responsive?:

Renders preview of images and is helpful for presentational design meetings.



Tools Used for Responsive Design Testing

Viewport Resizer:

Allows resizing the browser into a specific dimension. Example: the dimension of an iPhone and Amazon Kindle Fire.

ResizeMyBrowser:

Allows to resize the browser in to 15 default sizes that matches almost all the popular devices like the MacBook's or iPads. It allows to create custom dimensions and allows to know the size of current window.

Screenfly:

Takes a URL and provides a preview of Web pages according to various screen dimensions.

Responsive Web Design Tool by Designmodo:

Helps in designing and debugging of responsive breakpoints.

Responsive Web Design Tool by pixeltuner.de:

Renders a URL in the several device mock-ups.



Summary

- Usability studies mean evaluating performance to enhance the usability of a product or service while the end users work on that particular product or service.
- Usability study is also known as Black Box technique.
- Black Box testing is a software testing method in which the functionality of the Software Under Test (SUT) is examined without peering at the internal code structure, implementation details and internal paths of the software.
- Usability testing identifies the problems in the design of the product before they are coded.
- There are two methods to perform the usability studies: Laboratory experiment and On-site observation.



Summary

- Usability testing checklist is categorized into three parts: Accessibility, Navigation, and Content.
- The most common elements of a GUI include Window, Menu, Icons, and a Pointer.
- Mobile Website testing should be conducted on mobile devices such as mobile phones and tablets.
- Various free tools used for Responsive Design Test, such as Responsive Test, Responsive, and Screenfly.



Session 7

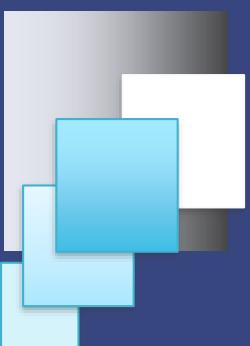
Understanding the Figma Tool



Learning Objectives

- Identify the usage of the Figma Tool
- List the steps to set up a Figma Account
- Explain the Figma interface
- Describe how to manage Figma Components
- Explain the process to create a first design in Figma





Introduction to Figma Tool

A UI and UX design application

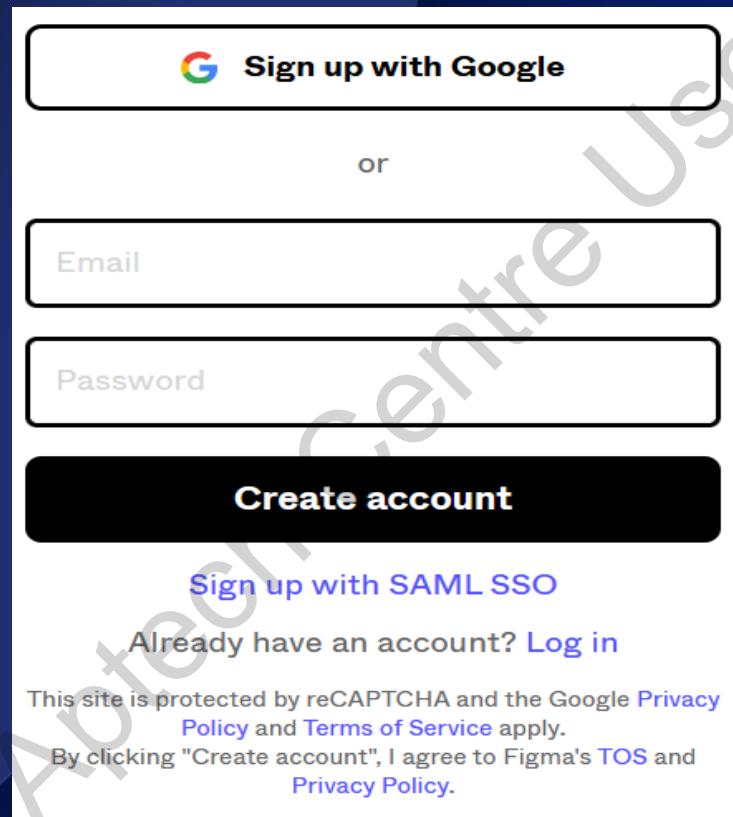
Compatible with most file formats

Figma editor includes design tools

Useful for designers to share files and collaborate on a design



Setting Up A Figma Account



The image shows a screenshot of the Figma account creation page. It features a "Sign up with Google" button at the top, followed by an "or" link, and input fields for "Email" and "Password". A large black "Create account" button is centered below the inputs. Below the button, there's a "Sign up with SAML SSO" link and a "Log in" link for existing users. At the bottom, there's a reCAPTCHA notice and a terms and conditions agreement.

Sign up with Google

or

Email

Password

Create account

[Sign up with SAML SSO](#)

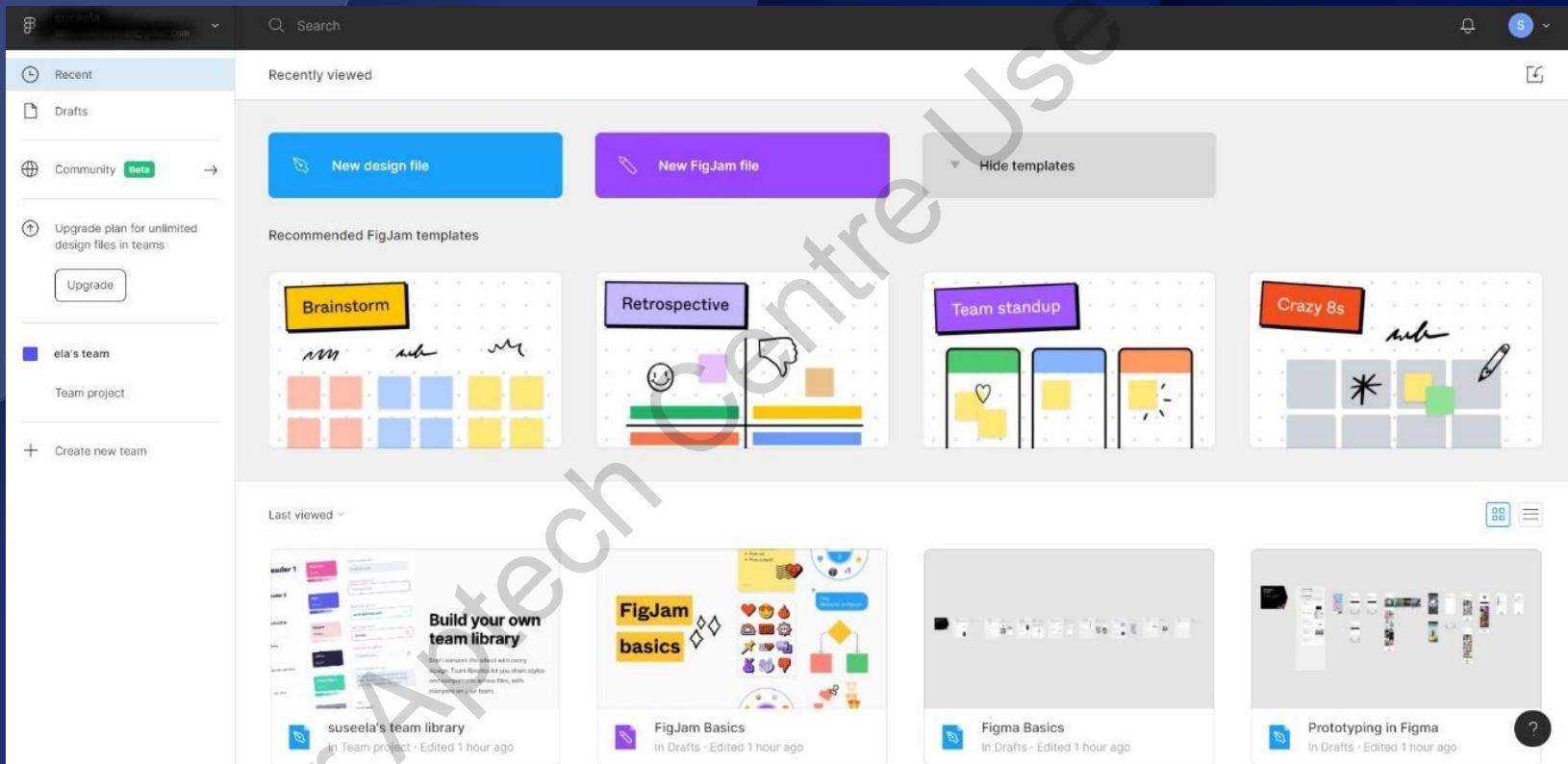
Already have an account? [Log in](#)

This site is protected by reCAPTCHA and the Google [Privacy Policy](#) and [Terms of Service](#) apply.
By clicking "Create account", I agree to Figma's [TOS](#) and [Privacy Policy](#).

Setting up an Account



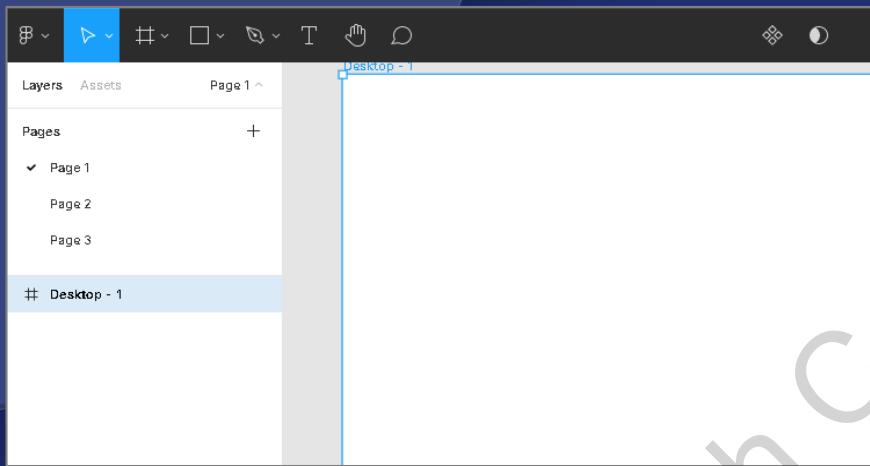
Understanding the Figma Interface



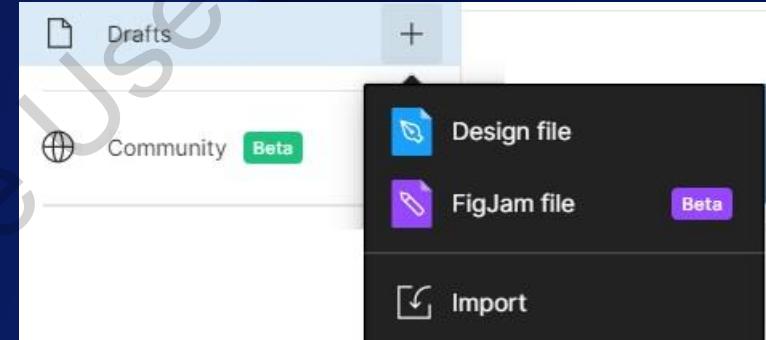
The Figma Dashboard



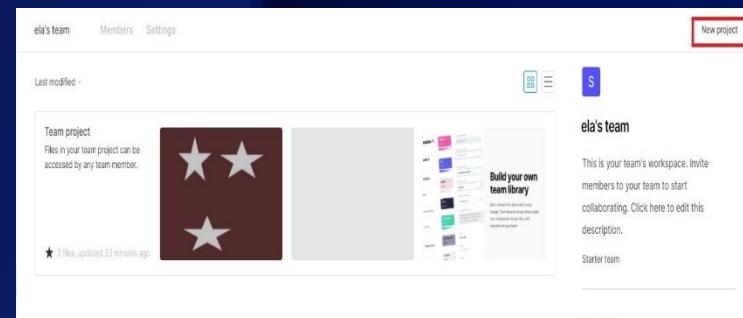
Understanding the Figma Interface



Pages



Files



Projects



Features of Figma

Managing Components

Adding Lists

Connecting with
other Figma
Accounts

Using the
Inspect Tab

Using the
Instance Swap
Menu

Viewing Figma
Community
Files and Plugin
Library

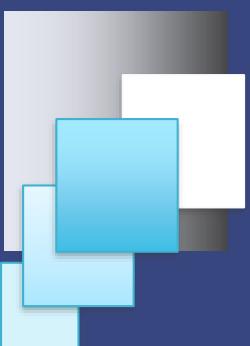
Integrating
Zeplin

Updating
Projects Real-
time

Intuitive
Prototyping

Sharing Design
Feedback





Managing Figma Components

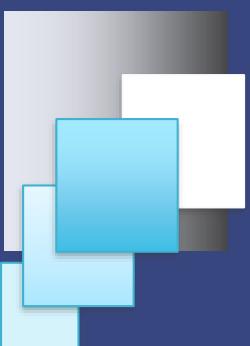
Components
- Elements
reused
across
designs

Create and
manage
consistent
designs across
projects

Update
components
across designs

Stored in
Assets tab





Creating a Design in Figma

1. Creating a Frame

Adding Grids

Adding Shapes

Adding Images

Adding Text

2. Labeling Elements

Avoids confusion due to overlapping frames and layers.

3. Creating Groups

Organizes designs.



Summary

- Figma is a cloud-based UI/UX design tool with capabilities to generate codes, support interactive prototyping, and create mockup.
- Figma is a browser-based tool, compatible with any OS, and is used to design vectors, applications, and screens.
- Figma supports the idea of teamwork and collaboration. It allows multiple team members to work on a single project in real-time.
- Figma follows a four-level file structure.
- Figma Editor is a modern design tool that provides options to customize designs as prototypes.
- Prototypes can be shared over real-time with team members and reviewed simultaneously. Draft files are saved automatically on the cloud for easy retrieval.
- The Layers and Properties Panel on either side of the frame help in customizing a design and viewing codes.
- Multiple pages can be created in Figma and collated into a bigger project.



Session 8

Designing Websites with Figma Tool

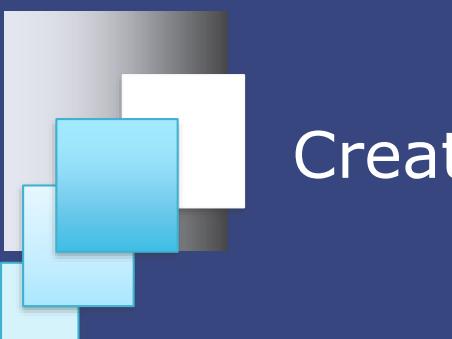
For Aptech Centre Use Only



Learning Objectives

- Identify the UI sections of a Website
- Describe the Figma Auto Layout feature
- Define dynamic content in Figma
- Identify and build the components of Website
- Explain how to use Figma with HTML plugin
- Explain prototypes





Creating a Website UI Section

Header

- Extensive strip across top of Website with heading, logo, and tagline.

Footer

- Strip running at bottom of page.

Navigation Bar

- Remains consistent in all pages with links to main sections in the site.

Sidebar

- Includes peripheral information that is secondary to Website.

Main Content

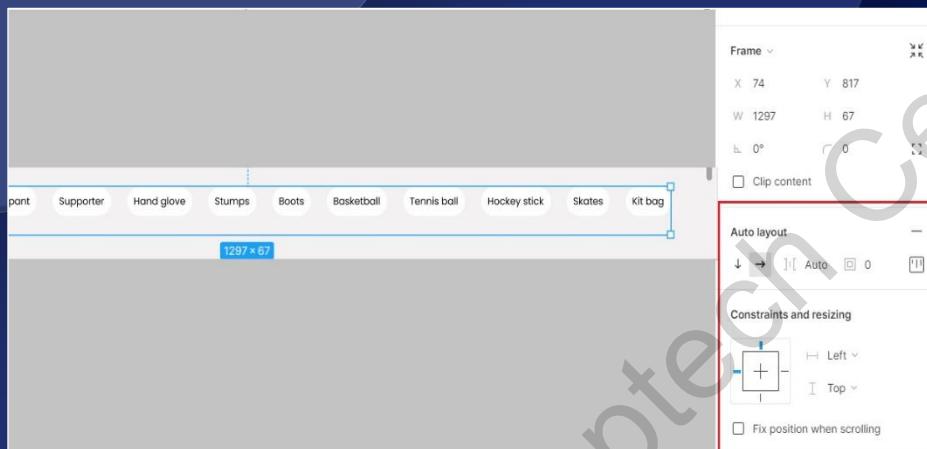
- Located at center of Web page with important content.



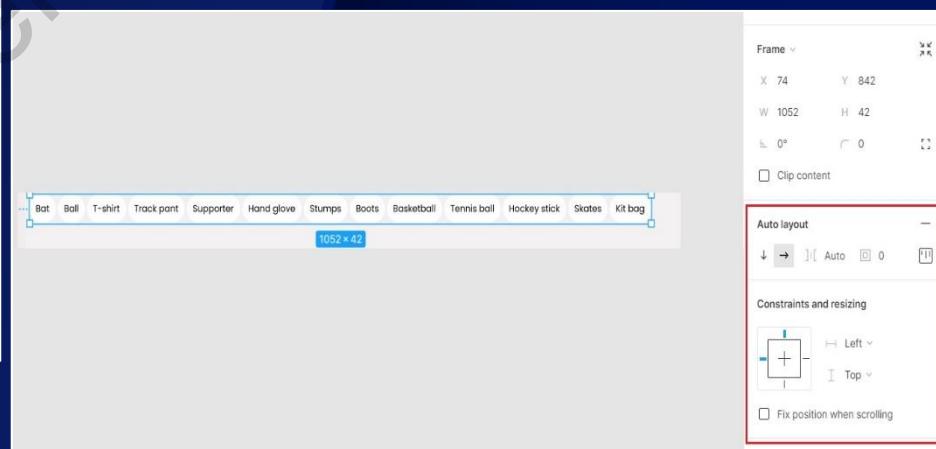
Using the Figma Auto Layout Feature

Figma Auto Layout

- A property that resizes the frame automatically if more content is added to the design at a later stage.



Before Resizing



After Resizing



Creating Dynamic Content in Figma

Figma Auto Layout - A powerful feature with options to resize and move sections automatically.

A simple plug-in that saves time through automation.

It can integrate a single data source file with a Figma document.



Creating Website Design

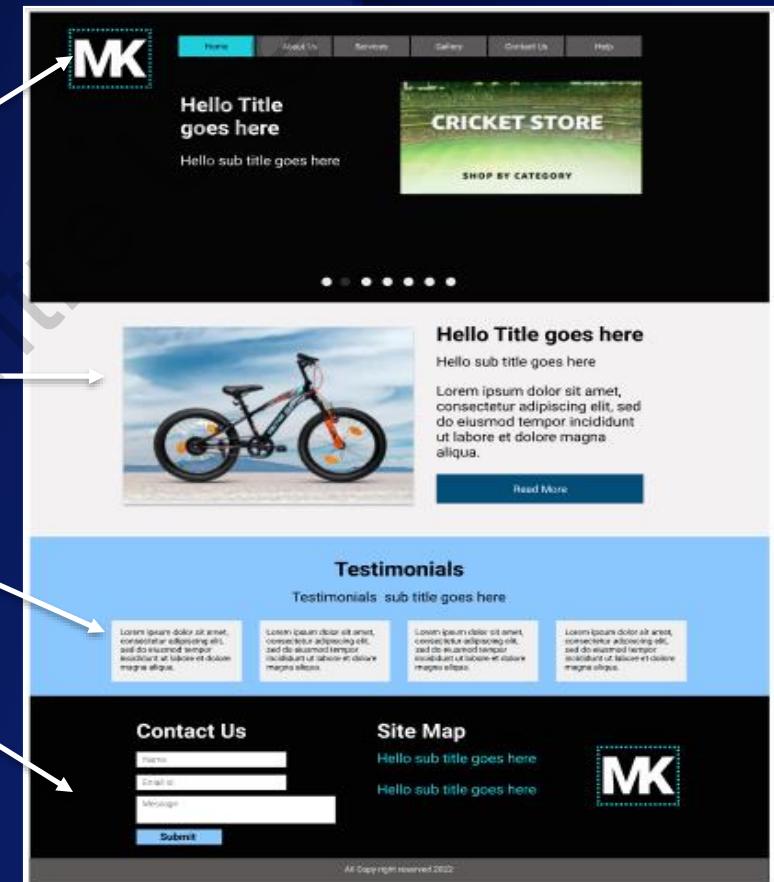
Steps:

1. Adding Logo

2. Adding Content

3. Adding Testimonials

4. Adding Footer



Using Figma to HTML Plugin

Designs for most operating systems can be created using Figma.

Figma files must be converted to HTML after designing the prototype.

Three methods:

Using Figma's Handoff Feature

Exporting Files Using Figma Plugins

Semi-Automatic Working



Creating Prototypes

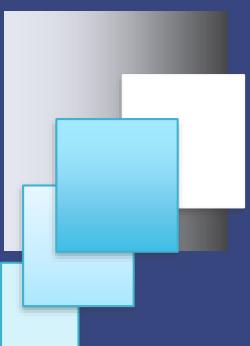
Definition: *Prototyping is the process of turning a static mockup into an interactive and dynamic mockup.*

The image displays three distinct prototypes or interface snippets:

- Left Panel:** A dropdown menu titled "Interactions" with a "+" icon. Below it is a list:
 - No scrolling (selected, indicated by a checked checkbox)
 - Horizontal scrolling (highlighted with a blue background)
 - Vertical scrolling
 - Horizontal and vertical scrolling
- Middle Panel:** A presentation slide header with buttons for "Design", "Prototype", and "Present" (which is currently active, highlighted in black). Below this is a "Device" dropdown set to "None". The main content area contains the text "Presenting the Prototype".
- Right Panel:** An "Interaction" editor window. It shows a scroll connection being added between two UI elements: a green "Hi there" button and a red rectangular area. The "Interaction details" panel shows options like "On click", "Overflow scrolling", and "Animation". A tooltip at the bottom right says "To delete a connection, click and drag on either end."

Scrolling Options





User Testing with Figma Prototype

Prototypes - Important for generating actual user experience.

Ideas are converted to real-world working model.

Reveals challenges in product.

Decisions regarding design are finalized.

Maze - Usability testing tool for Prototypes created in Figma.



Summary

- The Figma Auto Layout is a property that can be added to frames and components to resize and move sections automatically.
- The Google Sheets Sync plugin helps populate the repetitive component instances with unique dynamic content.
- Designs for Windows, iOS, Android, and most operating systems can be created using Figma.
- The interface of a Website must be simple. Use common UI elements that a user can identify. Consistency is key in design.
- Use page layout purposefully and color and texture strategically.
- Theme Builder is a Web application that helps in creating new themes or customizing the existing themes.
- Prototyping is the process of turning a static mockup into an interactive and dynamic mockup.
- Prototypes are important for generating actual user experience.
- Maze is a usability testing tool that uses clickable prototypes to provide an environment that is suitable for usability testing.

