USABILITY

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WHAT IS USABILITY?

- Usability: Capacity of a system to provide the tasks safely, effectively, and efficiently

- What is usability used for? Usability testing is a method used to evaluate how easy a website is to use. The tests take place with real users to measure how usable or intuitive a website is and how easy it is for users to reach their goal

EXAMPLES OF USABILITY

- Efficient: An interface that allows work to follow efficiently. If an employee has to submit the same form a hundred times a week, it may save them several hours a week if the form is densely packed on one screen as opposed to a workflow of twenty screens.

- Controllable: Experts are able to find the default controls they require

- Error tolerant: A system that is able to correct errors as opposed to giving up and displaying an error message

- Informative: Steps and controls are clearly explained so that a user isn't left wondering.

- Cause and effect: It is clear what a control does

EXAMPLES CONTINUED

- Accessibility: Interfaces that are designed to the edges with easy to read text

- Information Density: Information is presented at a density that is appropriate to its purpose. For example large amounts of information might be presented at a book like density.

IMPORTANCE OF USABILITY

- It's ALL about customer service
- Has a significant impact on a department's ability to achieve its mission, boost returns on any investments, and customer service
- Impacts any efforts to attract, retain, and satisfy customers or a certain population of people
- If a website is difficult to use, people don't use it, they leave
- It is a staple in our daily lives
- Empowers and enables us to thrive intelligently
- For the web, it is a necessary condition for survival

PROPERTIES AND REQUIREMENTS OF USABILITY

- Accessibility: Can everyone us he website equally?

- Responsiveness: Does the website work on devices that customers prefer to use?

- Search Engine Optimization (SEO): Can customers find the website in search results?

- Content & Messaging: If users have specific questions, does the site offer clear answers?

- Layout & Navigation: Can people find what they're looking for in the site?

- Errors & Effectiveness: How effective is the website for its visitors?

- Task time & Expectations: How efficiently can people use the website?

GOALS

- The goal of usability is to enable guests to find information or resources that they need as quickly and economically as possible without wasting time or effort. It also aims to answer questions, provide necessary resources, and satisfy the needs of customers.

- Bonus: How effective, efficient, and satisfying a site is contributing to the usability of the website.

WHAT IS IT USED FOR?

- The whole point of usability is to create a way for its user to get to his or her goals using the technology meaning it has to do its job well

- It gives users an interface that they become familiar with and can use it out of habit instead of have to need help every single time they use it

- Consumers that can show a products usability can help show producers what exactly the people are interested in

  - This would help either by putting more of the same product out there for more people or by giving diversity to the market (they want to spark interest but don't want to be like everyone else

HISTORY OF USABILITY

- Usability started out as a "non-user friendly"

- People have tried since early civilization to create systems for easier usability.
  - A man from the 1st Century named Marcus Vitruvius Pollio or Vitruvius came up with three principles for design they were Firmitas, Utilitas, Venustas.. He even inspired Leonardo De Vinci when he designed his Vitruvian Man.

- Firmitas
  - The design needs to be strong and durable- people will remember it

- Utilitas
  - The design should be useful for its users- if you don't do it with users in mind it won't work

- Venustas
  - The design should have some beauty in it- make an effort for it to look its best

HISTORY CONTINUED

- Usability now focuses on today's computers, phones, cars, and other technology we use almost everyday
    - In the 80's they had computers that were hard to use and most users only had simple knowledge of it and they couldn't use its full potential, thus the need for usability
    - And with focus on technology comes the focus on the apps for the phones, websites, and other programs
- Eventually usability started becoming important enough to producers to begin carrying out studies and tests for their products
    - The three principles of design from Vitruvius are still essentially used today and have helped pioneer today's consumer-producer relationship
- If you can't use something easily, don't like its looks, or don't even remember it you won't buy it or use it again.

USABILITY TESTING

- Usability testing is a technique used in user-centered interaction design to evaluate a product by testing it on users. This can be seen as an irreplaceable usability practice, since it gives direct input on how real users use the system.

- The benefits of usability testing include:

  - Finding out if users are able to complete the tasks at hand successfully without any issues

  - The amount of time it takes to complete specified tasks the site intends for you to complete will be revealed

  - Satisfaction scale of users with your website

  - Find changes that may need to be implemented to improve user performance and enjoyment

  - Evaluate the performance to see if it meets your usability goals

PROBLEMS AVOIDED BY TESTING

- Some common problems avoided with usability testing are:
  - Links that are broken
  - Site errors on the page
  - Grammar and spelling errors within the content
  - Inconsistent branding message
  - Poor design layout
  - Potential user errors

Usability Testing

- Real users, doing real tasks
- Prototypes or live products
- Observed, not guided

TYPES OF USABILITY TESTING

- There are five types of usability tests:
  - Problem Discovery
  - Benchmark
  - Competitive
  - Eye- Tracking
  - Learnability
- All of these tests work with the three test methods of moderated in person (with a proxy), moderated remote (proxied but by yourself), and unmoderated remote (no proxy you just do it by yourself)

PROBLEM DISCOVERY

- A moderated method is most commonly used

- This type of test uses simple scenarios to test potential users with the goal to see how many issues there are with usability

- The producer has to not only find the issues but also be able to correct all of the issues found

- Example:

  - A user is using a website in the study but when they try to click on a certain tab the site will glitch→ Producer finds source of the glitch and fixes it for all users

BENCHMARK

- This test would occur after the problem discovery test because its objective is to decide if after they fixed the problem did it really make it easier to use

- It is used to measure how usable something is

- Normally uses unmoderated remote method

- Example:

  - A standardized exam that middle schoolers take to track and see how much information they have actually retained with their school's curriculum

COMPETITIVE

- It is a comparative form of test, essentially it has to compare your benchmark tests against one another

- With just one benchmark you can only assume results from that one test but with the competitive test method it allows to see if the same results occurs multiple times

- Mostly it uses an unmoderated remote approach because you won't have to dedicate as much time

- Example:

  - You do a benchmark test and results show that the website was easy to navigate but then a second benchmark is done and it shows that this group didn't respond as well therefore, the website would need to find another medium between the two
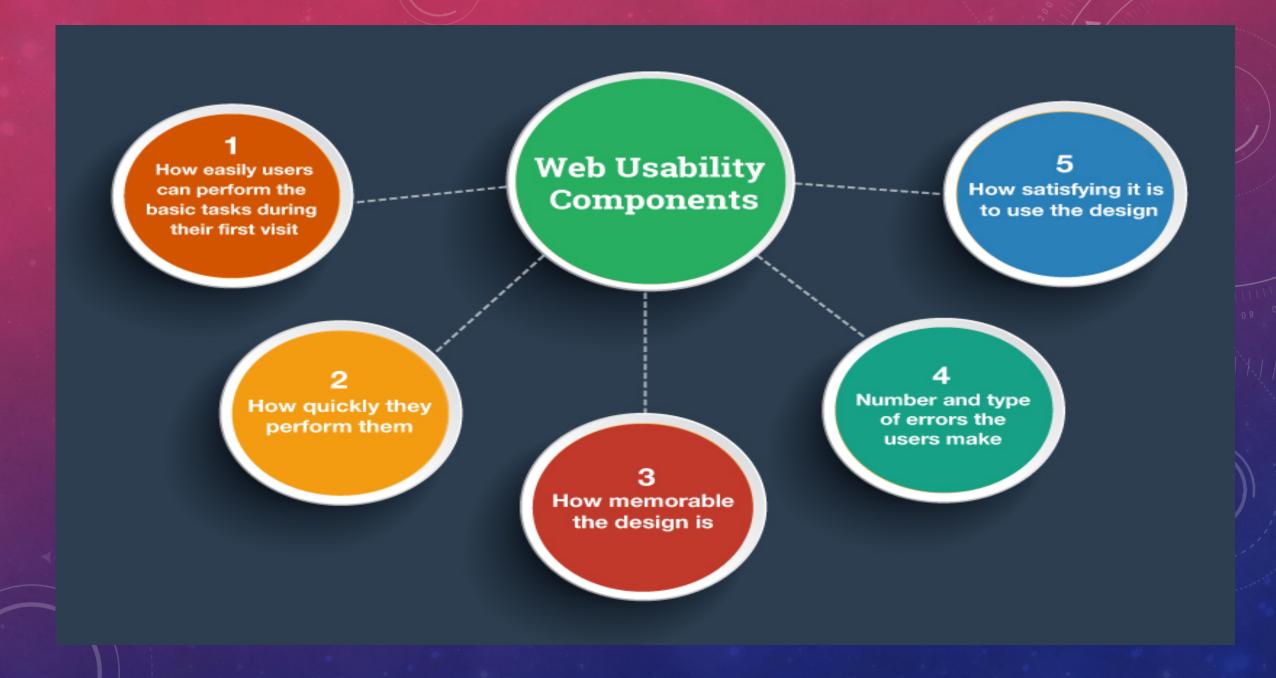
EYE TRACKING

- This type of usability test is mostly to help produce an effective layout of something

- The way a design is made should go with the users eye not against it otherwise they will not choose your product

- They are time consuming tests but important to see how a majority of the users will be expecting the design to be

- Example:

  - You conduct a study for an app but the users eye tracking study shows that where they thought it would be it was in a whole different positition

LEARNABILITY

- The learnability test uses repetition to see where its users are with the task they are given

- It focuses more on the amount time it would take someone to do the task than figuring out if the product has problems

- It uses the moderated in-person and unmoderated remote method

- Example:

  - This test measures how fast it takes the user to match memory cards and does it multiple times to see if time improves

WEBSITE USABILITY

- Website usability: The ease with which visitors are able to use a Web site information

- Web site usability is not just about making sure everything on the **site** works, but how quickly and easily visitors are able to make use of the site.

WEBSITE USABILITY IMPORTANCE

- website usability is important because it's about customer service. The goal of any organization or business professional is to meet their customer's expectations and needs, as quickly and dependably as possible

- Often times things like surveys are used for customers to rate the overall experience they had on the website. Businesses take that information and use it to make their web page easier for people to use.

- Businesses want their websites to be navigated easily so that users will continue to return to their site.

FACTORS OF WEBSITE USABILITY

•Accessibility: Web accessibility here means that people with disabilities can perceive, understand, navigate, and interact with the website. This includes benefiting from its information, resources, etc.

   •Can everyone use the website, equally?

•Responsiveness: Responsive web design is an approach to web design.

   •Does the website work on the customers preferred device

 Search Engine Optimization (SEO): "The process of affecting the visibility of a website or a web page through a search engine's free (e.g. natural, organic) results,"

   • Can customers find the website in search results?

FACTORS CONTINUED

- Content and Messaging: Users often arrive at sites in search of answers to a specific question. Therefore, its text should be designed in a manner that is noticeable, easy to read, and understandable.

  If users have specific questions, does the site offer clear answers?

- Layout & Navigation: How quickly and easily a visitor can find what they're looking for through tools such as a navigation bar, breadcrumbs, menus, buttons, etc. that are designed to help guide them to their goals or answer specific questions.

  - Can people find what they're looking for in the website?

FACTORS PT. 3

- Errors & Effectiveness: This may be a measurement of how many errors users encounter when using the website, how many mistakes they make in pursuit of goals or answers, and how many of them exit the site without completing their goal in comparison to those who do so successfully.

  - How effective is the website for its visitors

- Task Time & Expectations: A measurement of the amount of time it takes for a visitor to complete their goals via the website in comparison to their expectations (e.g. too long, faster than expected) of that time.

  - How efficiently can people use the website?

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