



St. Christopher's  
Hospital for Children



# SPINNING YOUR WEB: CREATING AN EFFECTIVE EDUCATIONAL WEBSITE

Association of Pediatric Program Directors Meeting

May 1, 2009

Baltimore, MD



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# Disclosures

- Drs. Matz, McInnes, Blair, and Spector have no conflicts of interest to disclose

# Goals

- Understand the process of purchasing a domain name and website
- Review website design and construction
- Create a sample web site
- Understand the process of receiving academic credit for internet projects

# Web Site

- Advantages
  - Can be housed within an institution or on internet
  - Allows for a very user-friendly way to provide documents and instructions
  - Allows for easy additions of documents
    - New documents can be easily highlighted
  - Allows for addition of entire new sections

# Web Site

- Disadvantages

- Not free

- Time, as well as monetary costs

- New skills required

- Security

- Concerns of hospital administration

# St. Chris Residency Web Site

- Links to sub-sites for each department
  - Articles and lectures
  - Goals and Objectives
  - Evaluations
- Schedules
- Evidence-Based Medicine

# St. Chris Residency Web Site

- New sections added
  - 360° evaluations
    - Numerous background files
      - Types of questions
      - Scales (Pass-Fail, Likert, etc..)
  - Individualized Learning Plans
    - Background files
    - PowerPoint presentations
    - ILP worksheets

# St. Chris General Pediatrics Site

- Continuity clinic curriculum
  - 78 topics over 3 years, including a repeated “core” curriculum
  - Modules designed to guide speakers
  - Binder in clinics contain copies of the modules
    - Frequently missing

# St. Chris General Peds Web Site

- Residents now have 24/7 access to the modules
  - Preparing talks at 2 am?
- Patient handouts
- Commonly used forms
  - School forms, lists of referrals

# St. Chris General Peds Expanded Web Site

- Office policies
  - How to handle uncommon occurrences
    - Hearing impaired, unaccompanied minor, etc...
- Clinical programs
  - Child protection team
- Business of medicine curriculum
  - Modules
  - Virtual practices

# St. Chris Tech Support

- Our employer is a larger, nationwide hospital corporation
- Tech support overwhelmed by day-to-day responsibilities
- Nobody had any idea what we were talking about
- Tremendous resistance to anything new

# St. Chris Concerns for Hospital Administration

- Work ownership
- Little experience in developing educational web sites
- Desire for no risk
- Very nervous about what “outsiders” see

# Act First.....

- Since nobody knew what we wanted, we just did it
- Password protected site for security
- “A picture is worth a thousand words”

# St. Chris Experience

- Need for centralized document collection
- Other options not user-friendly
- Web sites
  - Versatile tool for displaying documents, educational tools
  - Easily and instantly-accessible
  - Allow for easy additions of new materials
    - Innovative modules, educational tools

# Objectives

- Compare web site hosting options
- Register a domain name
- Explain HTML and other tech terms
- Describe web site construction
- Construct a sample website

# What is a Web Site?

- A collection of linked files, stored on a computer drive, readable by a browser
- Web address points browser to files
- Able to display variety of content to visitors
  - Text
  - Images
  - Multimedia
  - Animation

# Web Hosting

- Numerous options
  - Hospital intranet
  - Hospital owned server
  - University owned server
  - Private web hosting provider

# Hospital Intranet

- Private web site hosted on an internal computer
- Advantages
  - Free, usually
  - IS/Tech support help on site (day only)
- Disadvantages
  - Not accessible from outside the institution
  - Structure and space may be confining
  - May not be able to restrict user access

# Hospital Owned Server

- An internet-accessible web site that is housed on a hospital computer
- Advantages
  - Free, usually
  - IS/Tech support help on site (day only)
  - Internet accessible

# Hospital Owned Server

- Disadvantages
  - Companies VERY particular about what outsiders see
  - Style often constrained, every page identical
  - May need to get content approval from administrator
  - May not be able to restrict access easily
    - You don't want your hard work too accessible to the world

# Hospital Owned Server

- Disadvantages
  - Need tech support to be available and knowledgeable
    - Most hospital websites are designed for the public, not to have hidden corners for employees
  - Will likely have an unwieldy name
    - [www.hospital.com/~internal/Pediatrics/competency.html](http://www.hospital.com/~internal/Pediatrics/competency.html)

# University Owned Server

- Universities more likely to allow use of their servers
  - May have more academic freedom
  - Most allow personal web pages
- Advantages
  - Probably free
  - IS/Tech support easily available

# University Owned Server

- Disadvantages
  - Again, any “official” university site may be constraining
  - Anything with University name/logo tightly controlled
  - Personal pages may have limited space

# Private Web Hosting

- Private providers offer leased computer space where you can store your webpage
- Your materials are housed on their computers
  - Privacy/security concerns

# Private Web Hosting

- Advantages

- Complete freedom (sort of)

- Logos, names, pictures ????

- Creative freedom

- Service

- Tech support may be available 24 hrs/day

# Private Web Hosting

- Disadvantages

- Price

- Not free

- Security

- Documents no longer stored locally
    - Internet not always a safe place
    - Administrators very wary about putting “internal” documents on line
    - Less risk if password-protected
    - Data backup

# Domain Names

- Domain names are addresses of web sites on the World Wide Web
- Domain extensions are the final letters at the end of a web address. (aka top level domains)
  - .com – Commercial Operations
  - .net – Internet Service Providers
  - .org – Nonprofit Organizations
  - .edu – Educational Institutions
  - .mil – U.S. Military



Unrestricted

# Domain Names

- Anything you want (that someone else doesn't already own)
- Short and memorable
- [www.ourhospital'susefulclinicalwebsitewithlotsousefulforms.com](http://www.ourhospital'susefulclinicalwebsitewithlotsousefulforms.com)
- Think of several variations, just in case

# Registering Your Domain Name

- After you have decided on your possible Domain Names you need to see if it's available and register it
  - [www.hostway.com](http://www.hostway.com)
  - [www.whois.net](http://www.whois.net)
  - [www.networksolutions.com](http://www.networksolutions.com)
  - [www.godaddy.com](http://www.godaddy.com)

# Domain Names

- All these sites will search to see if your name is available
- If not, they will either suggest, or allow you to suggest, variations
  - Different extension, different name
- Costs \$2-\$35/year to register

# Hosting Options

- Size
  - How much memory will you need on your virtual server
  - 300 MB, 10 GB
- Bandwidth
  - How much downloading will occur each month
  - Downloading a 10 MB file 10 times =100 MB bandwidth

# Hosting Options

- Software
  - A common choice is to run your virtual server on Windows or Linux
  - This is invisible to you
  - Can still use Microsoft programs to edit site
  - Linux may be cheaper
    - Don't be scared

# Building Your Web Site

- So, you're now the proud owner of [www.excellentpediatrics.com](http://www.excellentpediatrics.com)
- Now we have to put something there...
  - Designing and building the site
  - DIY or hire someone
    - ~\$10,000-\$20,000

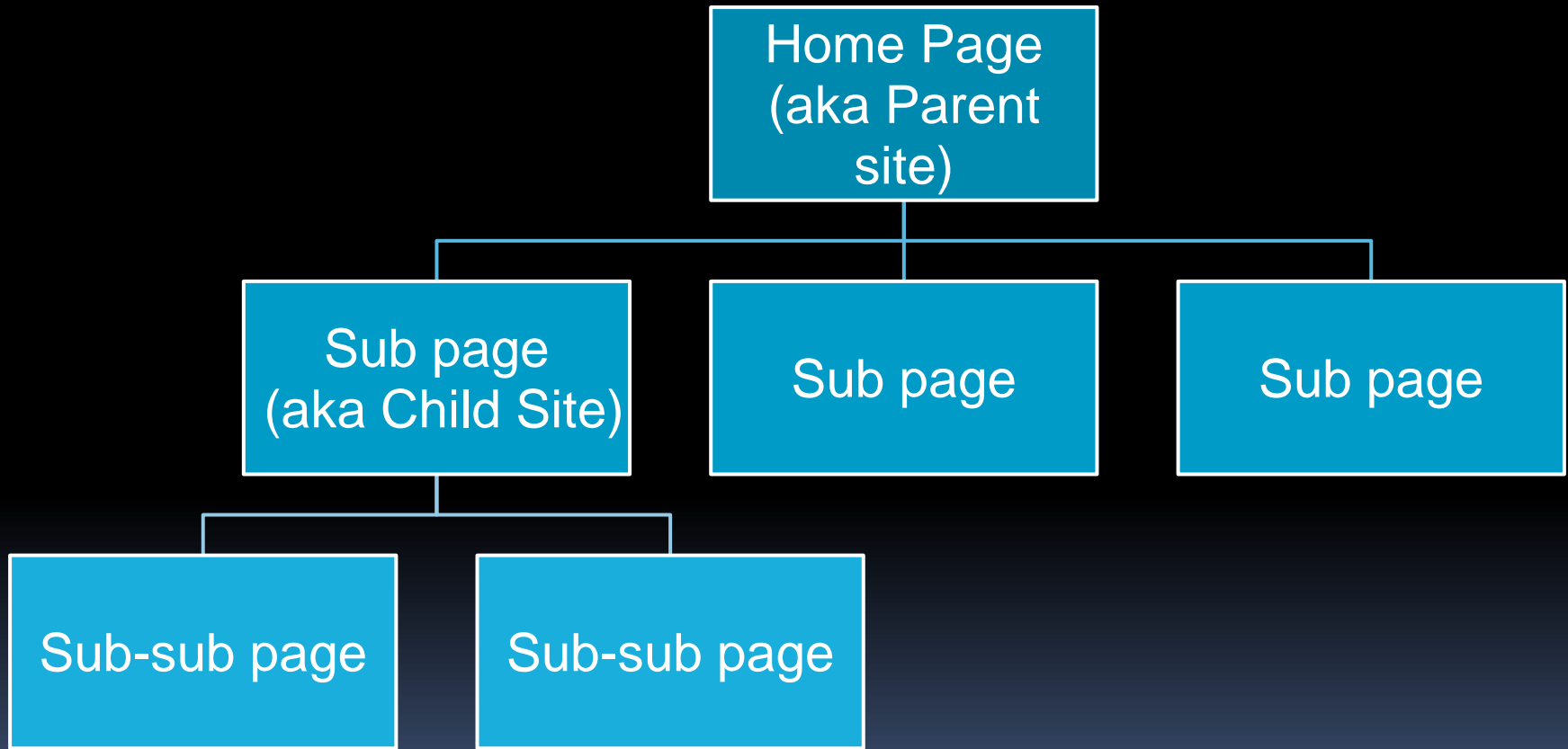
# Building Your Web Site

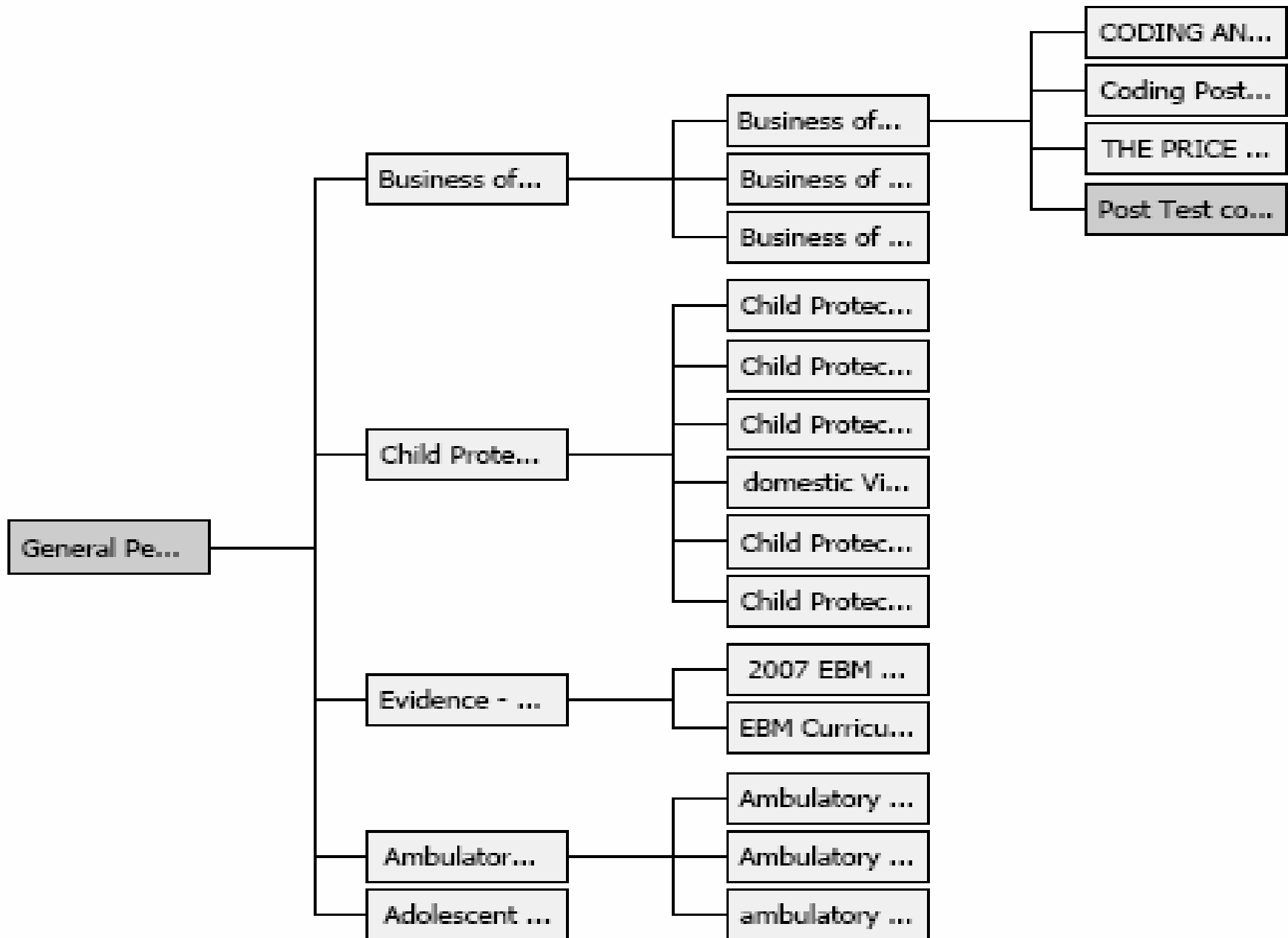
- Web sites are just a series of folders and documents (.html files, mostly)
- The “root” folder is usually named after the website’s name
- Within that folder, you will eventually create more subfolders to better organize your site

# Site Structure

- There are two sides to a site
  - The visible pages
    - What your audience will see
    - Should look professional
  - “Backstage”
    - The file system only you will see
    - Needs to be only as organized as you need it to be

# Site Structure- Visible Pages


































# Site Structure- Background

- A folder hierarchy
  - Just like your desktop computer
- Ideally, organized, so you can find pages and documents quickly
- Try to keep sub-pages (child sites) in subordinate folders
  - Makes it easy to see your connections at a glance

## Folder List

- +  Ambulatory Pediatrics
- +  Business of Medicine
- +  Child Protection
- +  Curriculum Modules
-  EBM
  - +  CATs
  - +  Journal Club
  -  2007\_ebm\_workshop\_for\_pas.htm
  -  card\_left\_new.gif
  -  EBM curriculum goals.htm
  -  EBM\_eval.pdf
  -  EBMworkshoparticles.zip
  -  evidence\_\_based\_medicine.htm
  -  Morrison\_bmj.pdf
  -  Musick.pdf
  -  Pico.htm
  -  therapy module.ppt
  -  therapy module 1.ppt
  -  Wilkes\_bmj.pdf
- +  images
- +  Patient Handouts
- +  Primary Pediatrics
- +  St Chris Care
  -  button 1.jpg
  -  button 13.jpg
  -  button 14.jpg
  -  button 15.jpg
  -  button 17.jpg
  -  button 18.jpg
  -  button 19.idg

# Site Structure

- Plan ahead – Draw out on paper
- Audience
  - Faculty
  - Residents
  - Site Directors
- Focus
  - Administrative
  - Educational
  - Clinical

# Definitions

- Servers
  - The actual physical computer where your website is saved
  - Owned by the hosting company
- HTML
  - Hypertext Markup Language
  - Tells a browser how to display content

# Web Page Construction

- Web building software allows you to create a web page in HTML
  - **You will never NEED to know HTML**
  - The computer does the programming in the background

# Web Building Software

- Microsoft Front Page/Expressions or Adobe Dreamweaver
  - Allows you to remotely access your page and work directly on the server
- Microsoft Word, Excel, etc...
  - After creating a page, you'll need to upload it to your site
- Proprietary software from hosting company

# Home Page

- The home page is called “index.html”
  - e.g., `www.mysite.com/index.html`
- This is the first page visitors will see when they enter your web site address
- Most hosting companies will start you off with a generic page

# Home Page

- Site title
- Brief welcome
- Explain site's mission
- Links to sub-pages
  - Usually designed as a menu of buttons or links

# Sub-Pages

- Page title
- Content
- Links to sub-sub-pages
- Link back to home page

# Site Structure

- Simple text pages
  - Announcements, instructions, etc...
- Document lists
  - Policies, forms
  - Patient information (CSHCN)
- Picture database
- Links page

# Site Structure

- Simple text page
  - Easiest site to construct
  - The only hyperlinks might be “Next page”
- Document lists
  - Each document name on the page must be linked to a document
    - Can be tedious

# Site Structure: Photograph List

- May be minimal text (photo descriptions)
- Have to link photo name or thumbnail to original photo
  - Making a page with 100 full size pictures would take forever to load in a browser
  - Have to create thumbnails for each photo

# Site Structure

- Once you have the basic tools, possibilities are limitless
- You can always add entire new sections (sub-pages and their links)
- Site maintenance also important

# Local Web Site

- Build your site and simply save it to a hard drive (personal or shared)
- It will work exactly like a web site except
  - Only accessible from wherever that drive is
  - Will not have an internet address
  - Open a browser, then Choose File...Open... and open the Home Page

# Style

- Make it easy and interesting to read
  - Incorporate links into text
  - Minimize steps to reach any one file/page
- Color scheme
  - Not too abrasive
  - Not too boring

# Small Group Activity

- Break into groups
- Design website
  - Name, audience
  - Paper and pen, first
- Begin to create website in MS Word

# First Steps

- Open Microsoft Word
  - Create a New Document
- Click 'File' -> 'Save as....'
  - In the "Save as Type" line, choose ".htm, .html" from the list
  - Name the file "index.html"

# First Steps

- Repeat that twice more
  - Name these pages anything you like
- From within Word, re-open "Index.html"
- Type a line of text.....
  - "Link to page 2"
  - Select it
- Insert menu-> "Insert Hyperlink....."



# Maintenance

- Check any links when you make changes
- Design site up front to minimize work
  - Link sub sites to parent sites
  - Link bars

# Maintenance

- Microsoft Front Page makes this much easier
- Hosting company's proprietary software also usually easy
  - Lots of design templates, too
- MS Word quickest to learn, hardest to use for serious use

# Tracking

- Most hosting companies allow you to track hits to your site
- Some allow you to track time spent/page
  - May be useful for teaching module
- Google Analytics is a free tracking service

# Security

- Depends on your needs
- Most hosting companies allow you to password protect your site
- HIPPA security?
  - Most tech companies not HIPPA secure
  - Internet sites not appropriate for patient info
- Resident security
  - Posting schedules
- Assume anything on the internet can be public

# Security

- Always remain aware of whom can access your site
  - Faculty
  - Residents
  - Students
  - Applicants
  - Whole world

# Search Engines

- Google, et al. has computer programs surfing the web following any link they see
- **They will find your site**
  - They found ours
- Password protection can reduce this risk
- Periodically search for your site
- Most search engines allow you to remove a site from the registry

# Academic Credit

- Work → Scholarly Activity
- Workshops
  - Hospital, regional, national
- MedEd Portal at AAMC
- APPD Share Warehouse
- Journal article describing the process
- Log hours spent
  - Computer work always takes more time than you realize

# Academic Credit

- Tracking
  - Keep track of site visitors, aka “hits”
  - Allows you to document use of your site
- Feedback
  - Allow visitors to leave feedback
    - Many hosting companies allow this
    - Can use this feedback in portfolio
- Include links on CV
  - Especially if you send it electronically

# Summary

- Web sites are useful tools to disseminate information within a group
- Few simple steps to get up and running
- Know your audience
- Keep organized
- Make work count toward promotion

# Sample Website

- [www.appdworkshop.com](http://www.appdworkshop.com)
- Follow the directions to download the files and practice the skills you've learned

# Contact Information

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