

Mobility, Accessibility, Searchability, Usability

Dr. Andy Chun

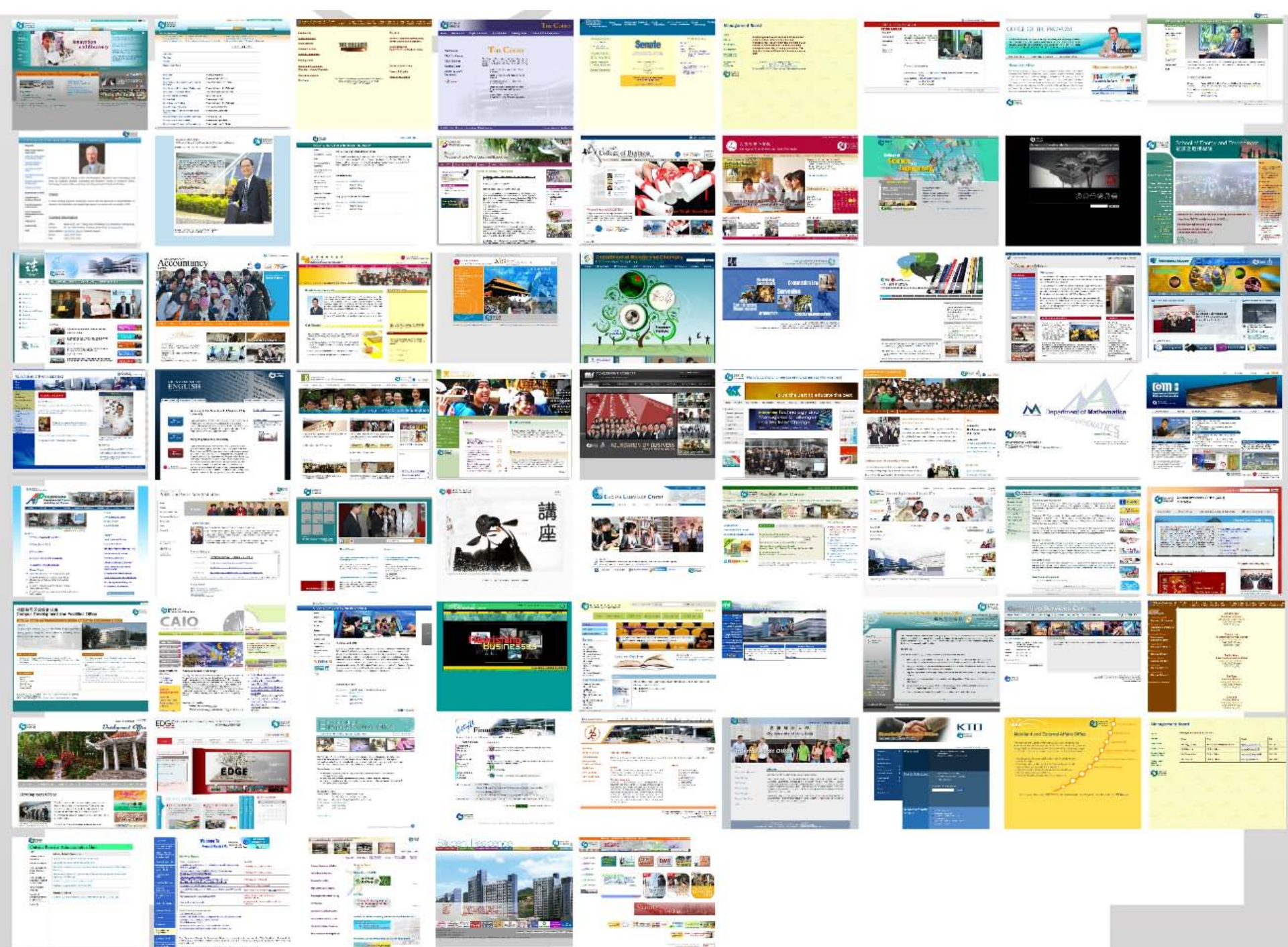
Chief Information Officer

City University of Hong Kong





CityU Web Redesign Project



Our Pains (2011):

- 100 websites
 - ~500,000 pages
- Not accessible
- No SEO
- Not user friendly
- Inconsistent info architecture
- No mobile support

#1 objective

- Support all popular browsers



#2 objective

- Support all popular devices



Image copyright Apple

#3 objective

- Support everyone



#4 objective

- Make sure it is searchable

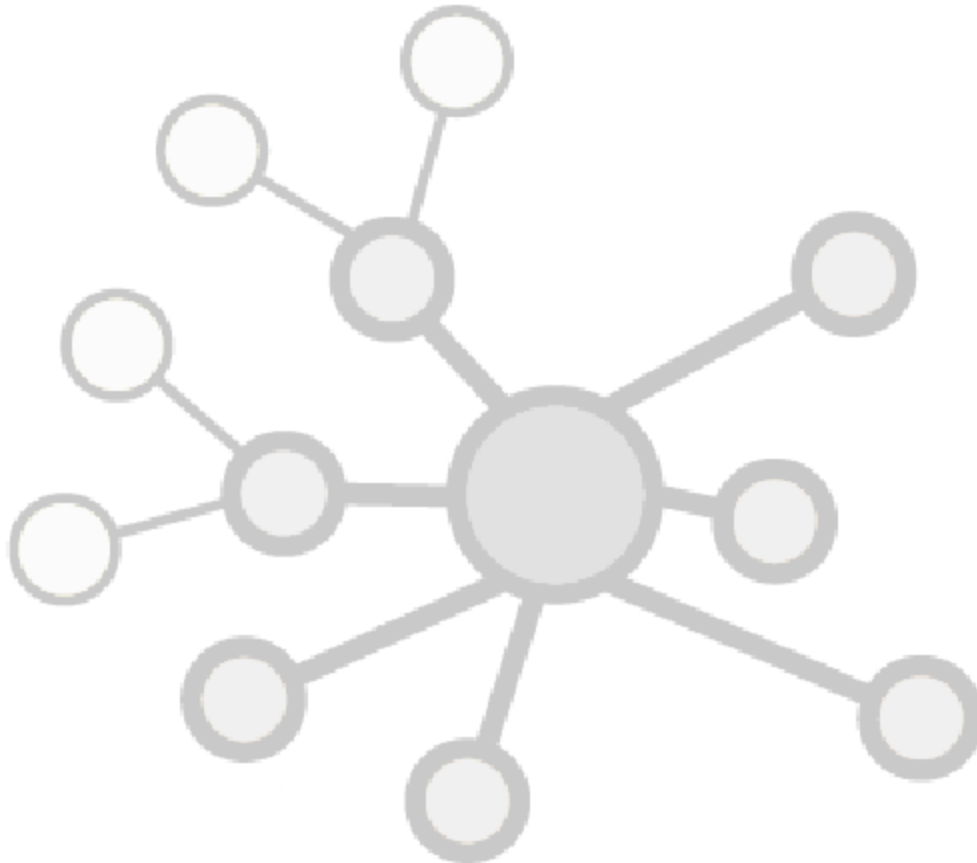
The Google logo is displayed in its characteristic multi-colored font, with 'G' in blue, 'o' in red, 'o' in yellow, 'g' in blue, 'l' in green, and 'e' in red.A search input field with a microphone icon on the right side.

Google Search

I'm Feeling Lucky

#5 objective

- Make info easy to find



#6 objective

- Make it user-friendly



#7 objective

- Strengthen brand



香港城市大學
City University
of Hong Kong



人文社會科學院
College of Liberal Arts and Social Sciences



SCHOOL OF
CREATIVE MEDIA
創意媒體學院

School of Energy and Environment



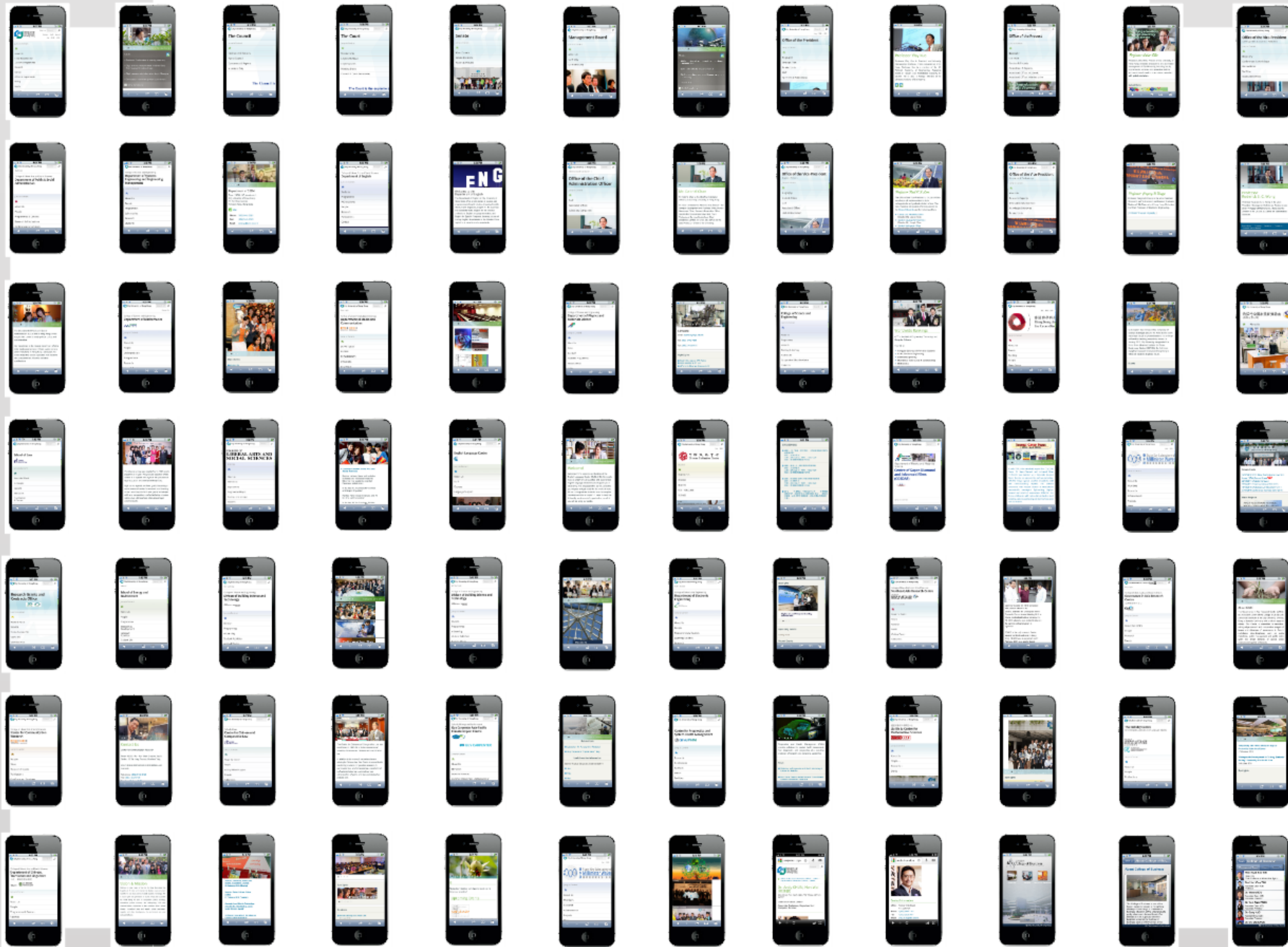
法律學院
School of Law



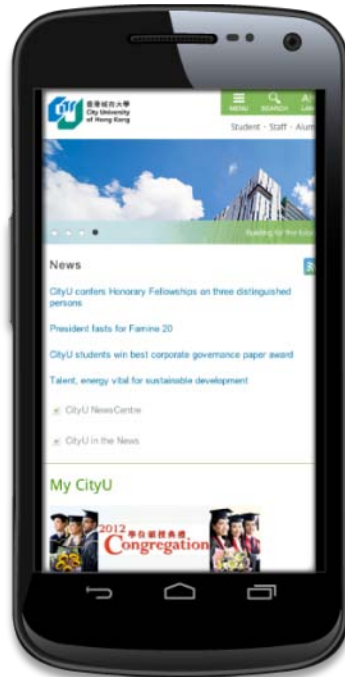
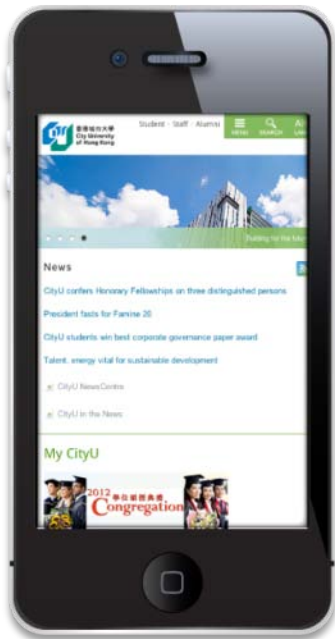


Oct 2011





Works on All Popular Devices





WAVE has detected no accessibility errors

...but you must still check your page to ensure it is actually accessible.

The following are present in the head section or apply to this page in general:



香港城市大學
City University
of Hong Kong



City University of Hong Kong

Student · Staff · Alumni

City

id="cityu-search-type"



Search

id="cityu-search-text"

Eng · 繁體 · 简体

disable styles



About Us



Social
Responsibility

Academic
Programmes

Research

Library



Offices &
Departments

Giving

Media

Careers



title

Team spirit on campus

YU*

Top Academicians at CityU



RSS

News

→ CityU NewsCentre

→ CityU in the News

Check Accessibility By:

Web Page URL | **HTML File Upload** | **Paste HTML Markup**

Address:

Check It

► [Options](#)

Take 8 essential actions
to get started with
business analytics.



CLICK FOR
WHITE PAPER

 sas


THE
POWER
TO KNOW.

Accessibility Review

Export Format: Report to Export:

Accessibility Review (Guidelines: [WCAG 2.0 \(Level AA\)](#))

Known Problems(0) | **Likely Problems (0)** | **Potential Problems (485)** | **HTML Validation** | **CSS Validation**

 **Congratulations! No known problems.**





university cio



cshwchun...

0

+ Share



Search

About 34,600,000 results (0.15 seconds)



Web

[Office of the University CIO](#) ✓

www.purdue.edu/cio/index.cfm - Cached

The **University CIO** is responsible for the management of all IT resources at the West Lafayette campus including administrative systems, enterprise applications, ...

Images

Maps

Videos

News

Shopping

More

[Home | Office of the CIO | Ohio State - The Ohio State University](#) ✓

cio.osu.edu/ - Cached

The Office of the **CIO** (OCIO) has developed an SMTP relay service as a part of the **University** E-mail Service that provides improved security, redundancy, and ...

[Software](#) ✓ - [Help and Support](#) ✓ - [About OCIO](#) ✓ - [Staff](#) ✓

[The Canadian University Council of CIOs \(CUCCIO\)](#) ?

www.cuccio-cdpiuc.ca/ - Cached

CUCCIO-CDPIUC. English · Français.

Show search tools

[Welcome to HUIT | Harvard University Information Technology](#) ✓

huit.harvard.edu/ - Cached

Find People · IT Help for FAS · IT Help for CA, HDS, HAM and RIAS · External Strategic IT Research and Analysis Services · External Technical IT Research and ...

[Office of the CIO | Office of the CIO - University of Guelph](#) ✓

www.uoguelph.ca/cio/ - Cached

The Office of the **Chief Information Officer** (CIO) is all about collaboration, communication and open dialogue. In order for the **University's** Information Systems, ...

[University CIO | Yale ITS](#) ✓

www.yale.edu/its/about/cio/index.html - Cached

26 May 2011 – Office of the Director and **University Chief Information Officer**.

[Office of the Chief Information Officer - City University of Hong Kong](#) ✓

www.cityu.edu.hk/cio/ - Cached

This is the homepage for the Office of the **Chief Information Officer** (OCIO), City **University** of Hong Kong (CityU). It also contains the bio of our current **CIO** - Dr ...

[Chief Information Officer \(CIO\) - University of California, Berkeley](#) ✓

cio.berkeley.edu/ - Cached

UC Berkeley's Interim Associate Vice Chancellor for Information Technology and **Chief**

What is SEO



What is SEO?

- Search Engine Optimization
搜索引擎優化
- SEO is the process of optimizing website ranking in “organic” (un-paid) search

Top 2 SEO Tasks

- Make sure search spider can:
 1. Read your site
 2. Truly understand the content structure



“The most important
blind visitor to your
website is **Google!**”

Jim Byrne

Founder of Guild of Accessible Web Designers

Our Approach



Based on Web Standards

- WCAG 2.0 (AA)
- HTML5
- CSS3
- JavaScript



Responsive Web Design

香港城市大學
City University
of Hong Kong

Student · Staff · Alumni CityU Search Eng · 繁體 · 簡體

About Us Social Responsibility Academic Programmes Research Library Offices & Departments Giving Media Careers

News

- CityU confers Honorary Fellowships on three distinguished persons
- President fasts for Famine 20
- CityU students win best corporate governance paper award
- Talent, energy vital for sustain development

CityU NewsCentre
CityU in the News

Building for the future

My CityU

Prospective Students

Hong Kong PhD Fellowship 2012-13 (Apply Now)

Events & Seminars

Research Seminar Series - "L Evolution, and the Brain" by Prof. William S-Y. Wang 11 Sep 2012 - 27 Nov 2012

(Reminder) Research Seminar "Unexpected, But Reasonable Relevance and Humor in Anime Comic Strips" by Prof. Chauncey on 24 Oct 2012 24 Oct 2012 5:00 pm - 6:30 pm

(Reminder) CSC Forum - Are Mobile Devices Secured? 25 Oct 2012 4:00 pm - 5:00 pm

Useful Links:

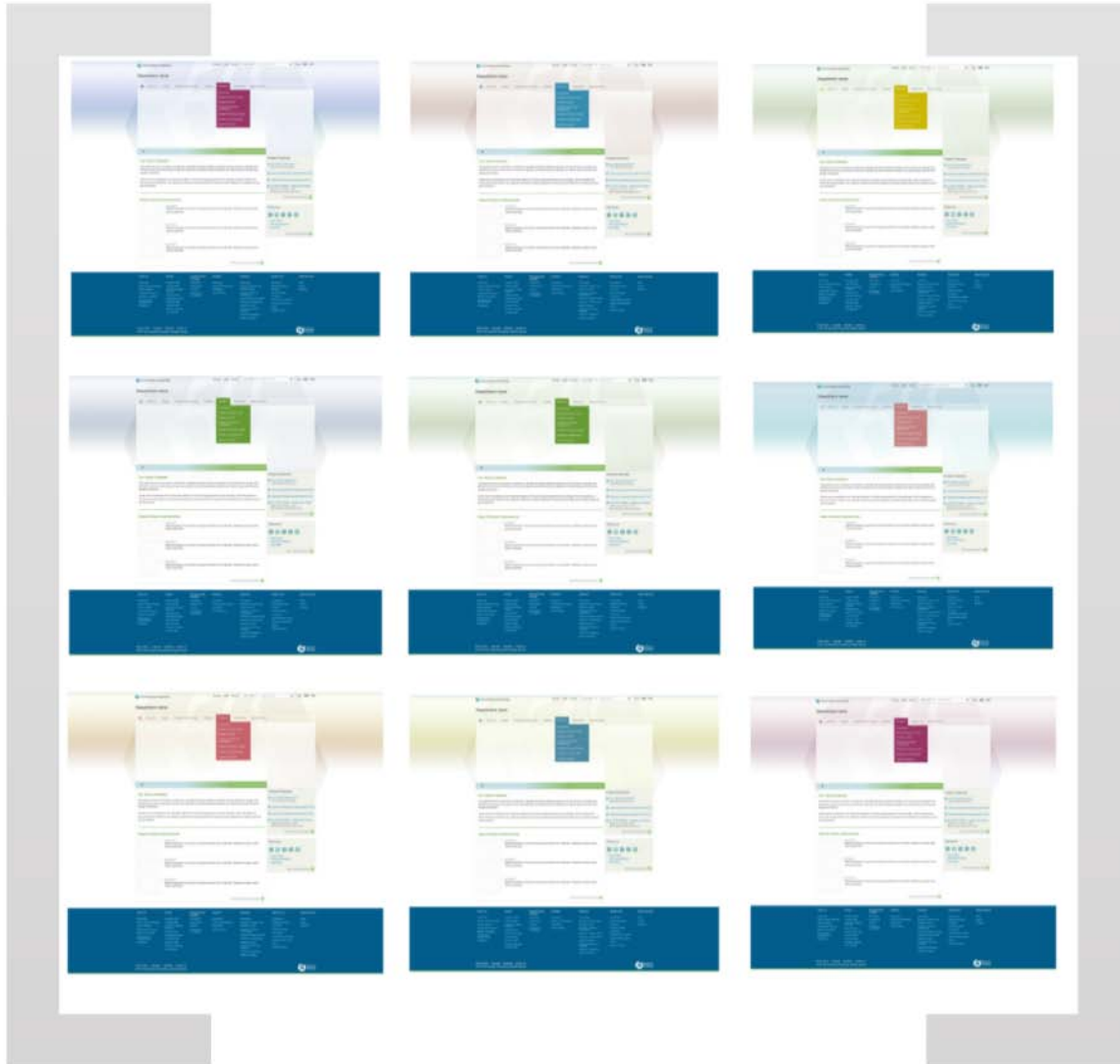
- Academic Calendar
- From the President's Desk
- President's Blog - Way to Kuo
- The President's Lecture Series
- Creating a Harmonious Campus



Styling

- Branding Hierarchy
- Style Guide
- Standardize Nomenclature

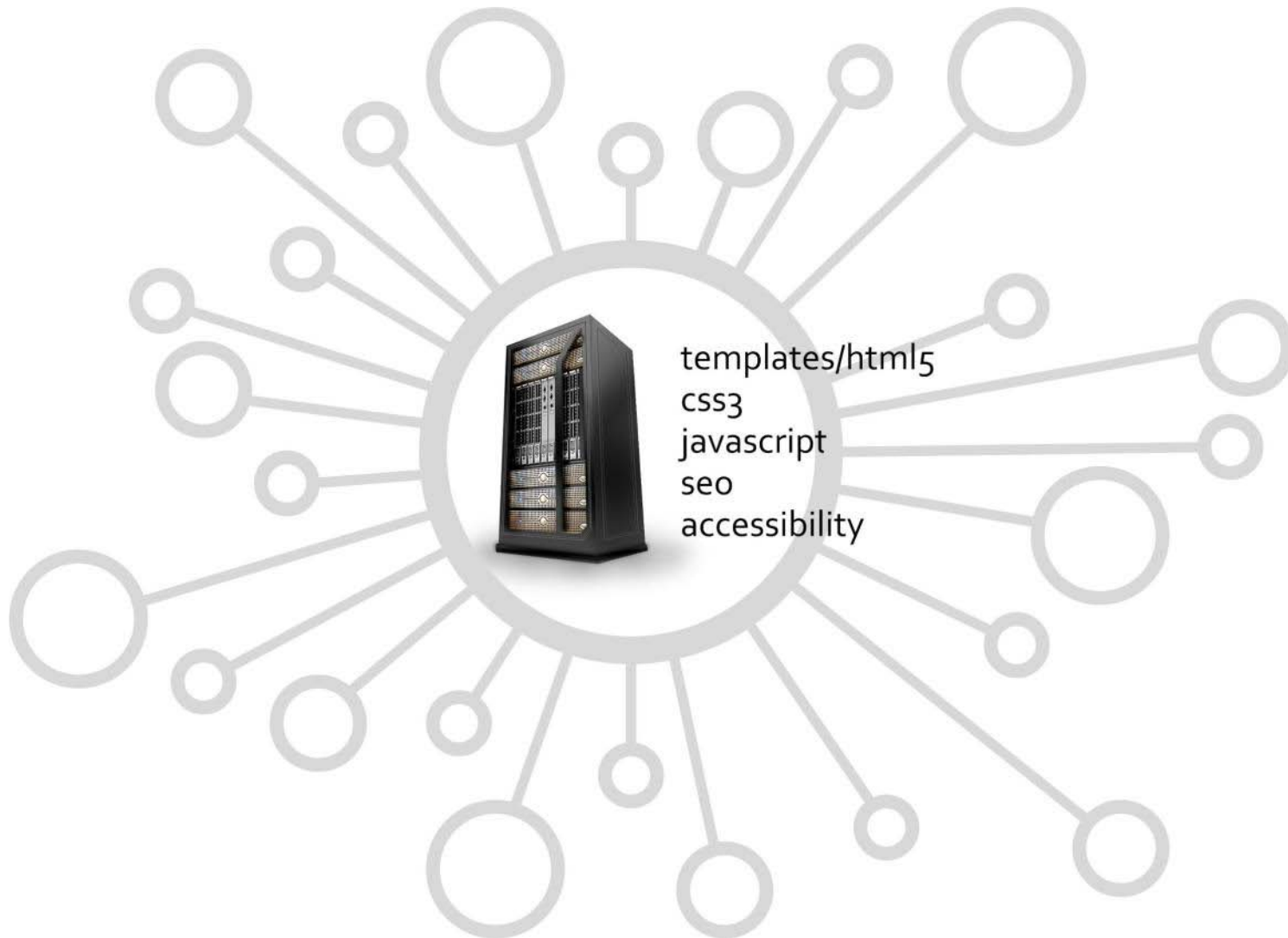
Template-Driven



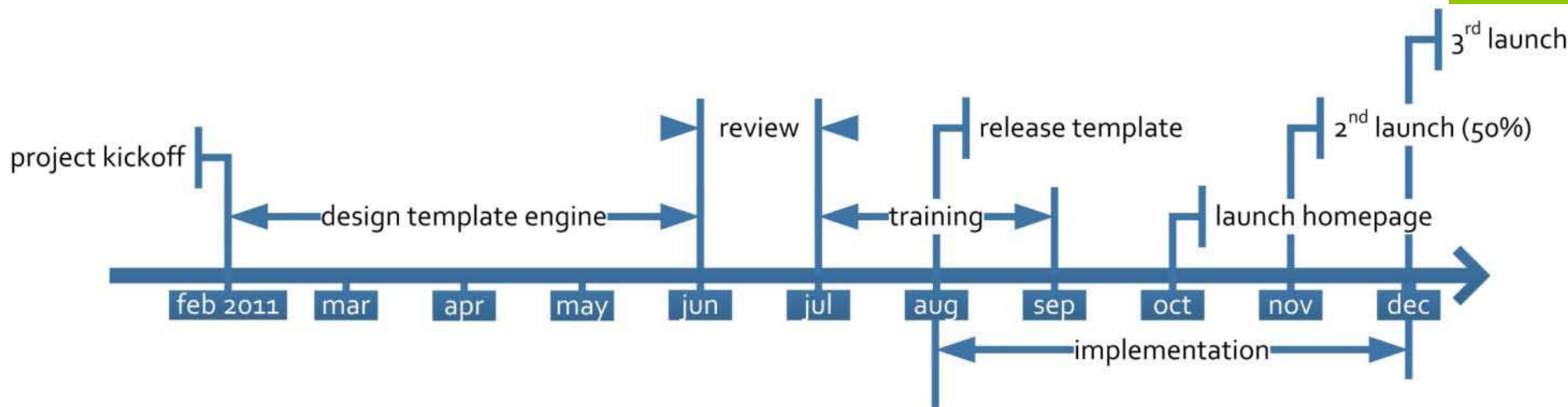
Our Project



Template-Engine



Project Timeline



Template Design

Every websites are made accessible out of the box

- Predefined heading hierarchy <h1> <h2>
- Predefined theme with sufficient color contrast
- Predefined skip links
- Support keyboard navigation
- Tested with some popular screen readers
- Validated against WCAG2.0 (AA)

Template Design

... with added features, many of which overlaps with web accessibility:

- SEO
- Mobile web
- Browser compatibility
- Printer friendly
- Corporate branding
- Consistent layout
- Standardize nomenclat
- **Web standard compliance**



Implementation

Web developers fill in content and information like:

- Meta tags of individual website
- Alt text for images
- Meaningful hyperlinks

... and avoid accessibility traps:

- Avoid JavaScript, Flash, ActiveX, Applet, etc. for important functionality
- No Frames
- No Pop-ups

Quality Assurance

- Guidelines
- Documentations
- Demos
- Workshops
- Reviews
- Validations
- Etc.



Achievements



First!

- 1st University in the world with mobile support for all websites
- One of few universities in the world to support HTML5/CSS3
- Plus accessibility + SEO
- Follow usability guidelines

Innovations

- Technology platform
- Project management approach



Awards!

- 2012 Computerworld Honors Laureates (Washington DC)
- 2012 CIO Award (CIO Asia – Singapore)
- 2012 FutureGov Awards – Winner of “Digital Inclusion” (Chiang Mai)

Conclusion



Accessibility + SEO

- For a new website, implementing Web accessibility does not take a lot more time
- Getting accessibility right is a great start for SEO
- Accessibility and SEO share similar techniques



Questions ?