

Goals:

As follow on to the launch of the new BruceGreySimcoe website Seventyeight was engaged to create a mobile version that provided for access to content and associated functionality optimized for cross device compatibility and designed to accommodate key mobile constraints including reduced bandwidth, reduced complexity and mobile user behaviour patterns.

Our recommendation was to develop a web app designed for multi-device compatibility as opposed to separate native apps for each platform (i.e. iPhone, Android, BlackBerry) as this approach has many advantages from initial build-out to ongoing maintenance including:

- Cost effectiveness – Why build several applications to accommodate multiple devices (iPhone, BlackBerry, Android) when you can build and maintain one?
- Instant updates – Content and functional updates to the BruceGreySimcoe's website will be instantly available to users. Compare this to dedicated applications, which require a user to receive updates through their app stores.
- Bypass App Stores – Each app store has its own rules and regulations that delay application launch and the launch of future upgrades.
- Access – Users can access the web app just by visiting the BruceGreySimcoe's primary web site.
- Easier to Share – Users can share the web app by simply sending a link to their friends.

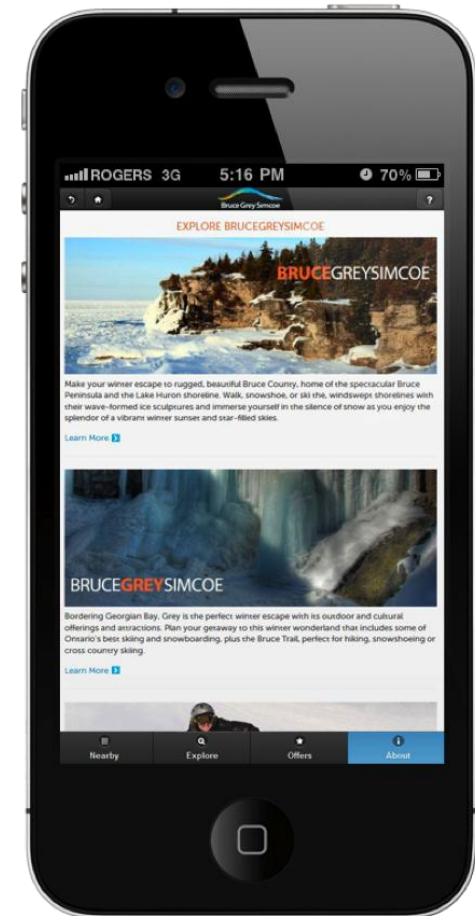
Key technical requirements included:

- All content presented in the web app should come from the consumer website CMS and be optimized for presentation in mobile devices.
- Images should be resampled and "crunched" to produce the smallest file sizes possible while maintaining on-screen quality.
- All interaction should be controlled using JavaScript (utilizing jQuery Mobile) - no plugins required.
- All animations and transitions should be generated using modern CSS3 methods.

- "Lazy loading" should be utilized wherever possible to ensure wait times are always minimized.

Important functionality requirements included:

- What's Nearby? - Utilizing the users mobile device built-in location aware technology listings of key information, businesses and information centres closest to the users current location.
- Explore the Region – Provide the mobile visitor with the ability to search the vast BruceGreySimcoe business and information centre database via keyword, category and town. By exploring the region on their mobile phone the visitor can perform tasks like finding contact information of a nearby business, ask a nearby information centre what the best Italian food restaurant is nearby, find driving directions to the nearest ski hill...
- Special Offers - Provide mobile visitors with the ability to see coupons, and deals from businesses in the region.

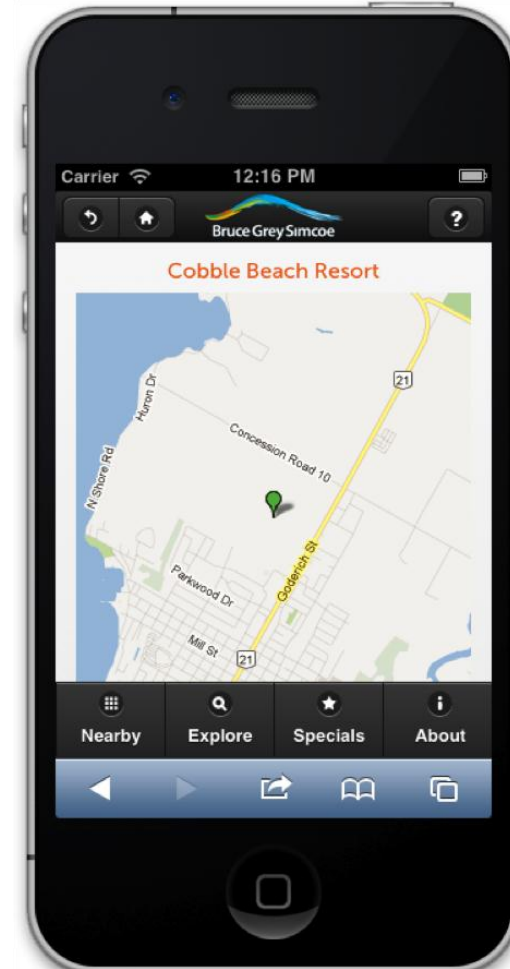
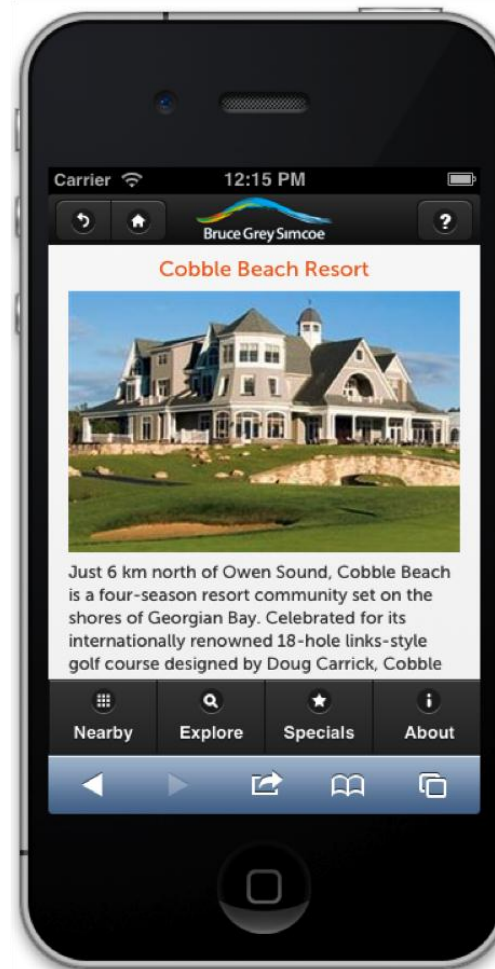


Challenges:

The mobile web app was developed to overcome key challenges and achieve the following:

- The mobile site must be optimized for today's smart phones and accommodate mobile constraints including reduced bandwidth, reduced complexity, mobile user behaviour patterns, and best practices.
- The mobile site must be easily navigable and optimized for touch screen.
- Content and custom document types created for the main consumer website must be easily managed within the Kentico CMS, and presented in a mobile friendly manor to the mobile visitor.
- Each content piece must be leveraged and optimized for viewing across all devices (desktop, tablet and mobile).

Users must be given information that is relevant to them based on their current location.



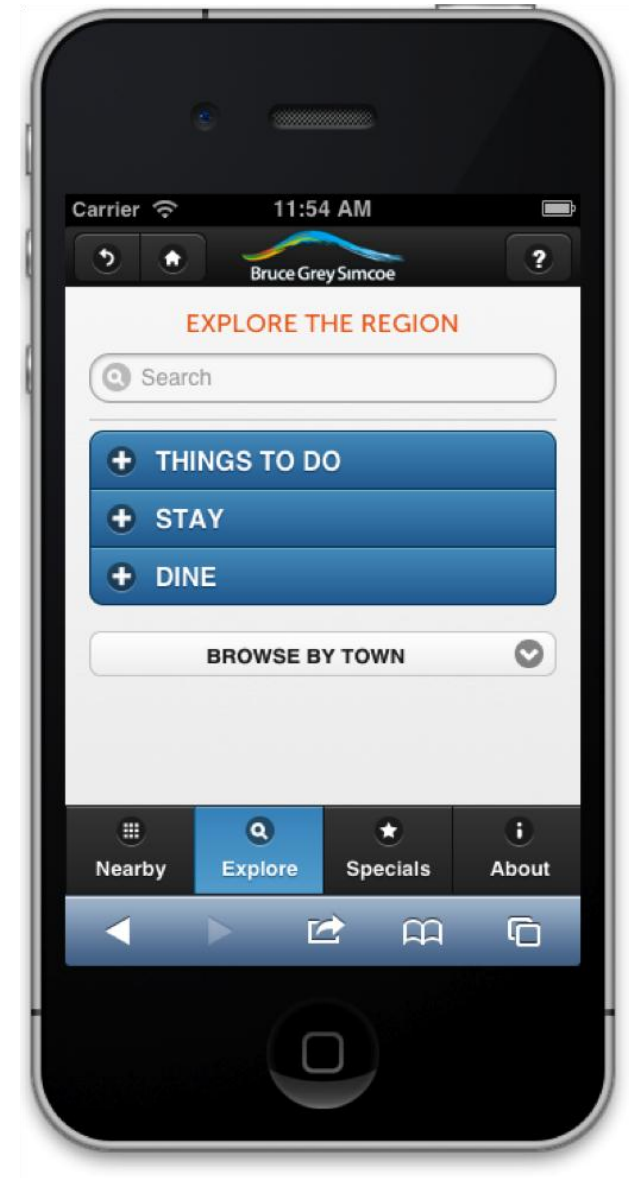
Solution:

Producing a modern Mobile Website app optimized required more than merely providing a different style sheet for mobile devices. Optimization of the weight of pages, the type of content to display and a complete rethinking of the IA were deemed necessary for success. Because of this, a front end jQuery based mobile framework called jQuery Mobile was used for the front end. This provides mobile UI elements and behaviours such as animated page transitions common in high end HTML5 mobile web apps. At the same time creating a separate website to hold the content was not an option as long term sustainability and ongoing maintenance would be too costly. A compromise was made, through a creative integration strategy, which provides an optimized mobile experience while retaining centralized control of content in Kentico.

We leveraged Seventyeight's Mobile Proxy Service with the Kentico CMS API to produce a very sophisticated and optimized HTML5 Mobile Web App. The mobile website utilizes AJAX patterns to retrieve the content of each page. The content is produced through a custom proxy page that queries the Kentico Database returning only the mobile web part's content. The content received via this database call is cached to optimize performance. The proxy returns only the html for the mobile site – no other content (i.e. view state, Kentico generated client files, various JavaScript and CSS files, or the PortalTemplate.aspx structure itself) is returned. This results in very fast load times (important on mobile) and provides complete control over the look and behaviour of the html.

In addition to several other functions Mobile Proxy automated the following processes:

- Images were resampled and "crunched" to produce the smallest file sizes possible while maintaining on-screen quality.
- All interaction is controlled using Javascript - no plugins required.
- All animations and transitions generated using modern CSS3 methods.
- "Lazy loading" was utilized wherever possible to ensure wait times are always minimized.

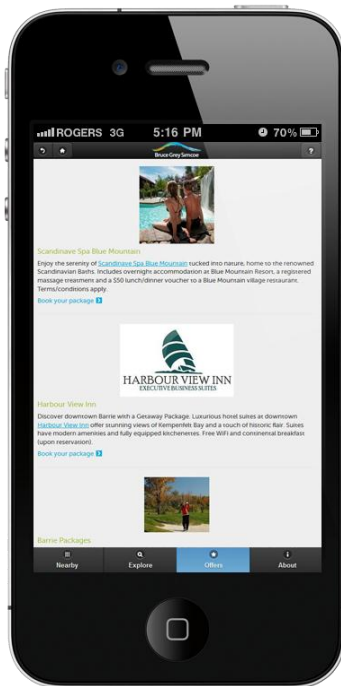


Key Criteria For Choosing Kentico CMS:

Kentico CMS was the obvious choice for this activation given our past experience creating exceptional mobile web apps using Kentico CMS in combination with Seventyeight's Mobile Proxy.

Kentico CMS provides the following key benefits:

- Ability to easily integrate Seventyeight's Mobile Proxy custom component
- Ease and flexibility of programmatic customization
- Ability to handle enterprise requirements related to collaborative access to large data sources
- Social media integration capabilities
- Strength and flexibility of workflow configuration
- Ease of use for non-technical users
- Powerful data migration tools



About Seventyeight Digital:

Seventyeight Digital is an award winning strategic technology development and interactive design firm focused exclusively on the Internet space. Our solutions engage and benefit users, generate brand recognition, provide relevant and actionable data, stimulate thought and communication, inspire people to take action, capitalize on business efficiencies, and offer significant ROI.

The Seventyeight team is comprised of highly accomplished and talented folks specializing in digital strategy, data management, technical development, and creative design - providing the competencies, agility and technical bandwidth to manage complex deliverables.

We can offer time to market, competitive rates and a level of responsiveness that traditional firms can't touch. We believe there is an effective solution to meet most budgets and can help you navigate the strategic & technical complexities to achieve your key business objectives.

Seventyeight Digital is a Kentico Gold Certified Solution Partner and a Certified Kentico Hosting Partner offering a full range of interactive design, development, hosting and support services. Contact us for a free Kentico CMS consultation at info@78digital.com or visit us at www.78digital.com.

