Responsive site design means that varying experiences of a site's content are served up based on the device the site is being viewed on. Media Queries are at the heart of responsive site design. With Media Queries you can target specific devices, based on their screen size, and apply style sheet rules that modify the site design accordingly.

Today we are designing for mobile devices with the smallest screen size and then up-scaling our designs for larger displays. The \textit{min-width} property enables us to specify the smallest screen size at which certain rules will be activated. In the first example below, rules will not become active until the browser window is at least 640 pixels wide; in the second example, rules will not become active until the browser window is at least 930 pixels wide.

\begin{verbatim}
@media all and (min-width: 640px) {
}
@media all and (min-width: 930px) {
}
\end{verbatim}

Notice how these pixel dimensions do not correspond directly to the screen dimensions of the devices listed below. The site would initially be designed for the \textit{Mobile Portrait} setting and all rules prior to the Media Queries would be applicable. The design would look good also at the \textit{Mobile Landscape} setting and the \textit{Small Tablet Portrait} setting. However (according to the Media Queries above) the design starts to break apart at width of around 630 pixels and so certain style sheet rules are adjusted so that the site displays well in the \textit{Small Tablet Landscape} and \textit{Tablet Portrait} settings. The design has more issues at sizes of greater than 930 pixels so certain rules are again modified to enable to site to display well at larger screen sizes.

Mobile portrait (320x480)
Mobile landscape (480x320)
Small tablet portrait (600x800)
Small tablet landscape (800x600)
Tablet portrait (768x1024)
Tablet landscape (1024x768)